

THE HISTORICAL DEVELOPMENT OF GEOGRAPHY AS A  
SUBJECT IN THE SCHOOLS OF THE CAPE PROVINCE.  
(1772-1951)

By

J. C. Knox, B.A. Hons, B.Ed.

A THESIS SUBMITTED FOR THE DEGREE OF M.Ed. AT  
RHODES UNIVERSITY.

A P P E N D I C E S

THE HISTORICAL DEVELOPMENT OF GEOGRAPHY AS A  
SUBJECT IN THE SCHOOLS OF THE CAPE PROVINCE.  
(1772-1951)

By  
J. C. Knox, B.A. Hons, B.Ed.

A THESIS SUBMITTED FOR THE DEGREE OF M.Ed. AT  
RHODES UNIVERSITY.

C O N T E N T S

	PAGE
APPENDIX 1 - Summary of the contents of "Outlines of Geography, for the use of the Edinburgh Academy. Part II. - Ancient Geography". By T. A. Gibson, Master of Cauvin's Hospital, and G. M. Gibson, Southampton.....	1
APPENDIX 2 - Geography questions set by Rose-Innes during his inspection tours of 1852 & 1853.....	4
APPENDIX 3 - Specimen of examination paper for the Second-Class qualification.....	5
APPENDIX 4 - Second-class examination set by the Board of Examiners on 15th March, 1850.....	7
APPENDIX 5 - Preface and summary of the contents of "Nelson's School Series. Geography for Junior Classes", by Robert Anderson.....	10
APPENDIX 6 - Summary of the contents of: "Geography of South Africa for the use of Higher Classes in Schools", by A. Wilmot.....	17
APPENDIX 7 - Foreword, summary of contents, and textual specimens of: "Schets van de Aardrijkskunde van Zuid-Africa voor Schoolgebruik", by A. Wilmot.....	22
APPENDIX 8 - The School Elementary Examination papers of the University of the Cape of Good Hope for the years: 1875, 1879, 1883, 1887, 1890.....	24
APPENDIX 9 - The examination papers of the Board of Public Examiners in Literature and Science for the Public Service Certificate.....	30
APPENDIX 10 - Examination papers of the Board of Public Examiners in Literature and Science for the Third Class Certificate, 1865-1868.....	34

APPENDIX 11 - Matriculation paper of the University of the Cape of Good Hope, 1874.....	37
APPENDIX 12 - The geography questions which were set by the University of the Cape of Good Hope in the mixed geography and history papers for Matriculation, 1876, 1877, 1878, 1879 & 1883.....	38
APPENDIX 13 - The examination papers of the University of the Cape of Good Hope for the School Examination for Honours, 1880, 1882, 1883, 1885, 1886.....	41
APPENDIX 14 - The examination papers of the University of the Cape of Good Hope for the School Higher Examination, 1887, 1889, 1890, 1891.....	44
APPENDIX 15 - Reports submitted by school inspectors on geography teaching during the period of Langham Dale.....	47
APPENDIX 16 - The examination papers of the University of the Cape of Good Hope for the School Higher Examination, 1895, 1897, 1898, 1900, 1901.....	52
APPENDIX 17 - Inspectors' reports on geography teaching for the Muir period.....	57
APPENDIX 18 - Model syllabus in geography issued by the Royal Geographical Society.....	96
APPENDIX 19 - Model syllabus in geography submitted by A. Ritter of the George High School for Boys.....	114
APPENDIX 20 - List of the contents of the first two volumes of the "Geographical Teacher".....	116
APPENDIX 21 - Geography syllabus for primary standards, 1919.....	118

APPENDIX 22 - Primary School Course for use in European Single- and Two-Teacher Schools.....	120
APPENDIX 23 - Syllabus in geography for primary classes, 1937.....	125
APPENDIX 24 - Broadcast talks of a geographical nature which were given to Cape Departmental Schools during the period 1940-1951 inclusive.....	128
APPENDIX 25 - Three specimens of the types of broadcast notes which were given in the Education Gazette during 1940-1951 inclusive.....	152
APPENDIX 26 - The suggested functions and constitution of the National Film Institute which was proposed by the Sub-Committee appointed in 1935 by the Committee of the League of Nations for Intellectual Co-operation.....	154
APPENDIX 27 - Junior Certificate syllabus in geography, published in The Education Gazette of 17th December, 1921.....	156
APPENDIX 28 - The geography syllabus for Junior Certificate which was published in The Education Gazette of 13th February, 1930.....	157
APPENDIX 29 - Junior Certificate syllabus in geography which was first published in The Education Gazette of 1st November, 1945.....	158
APPENDIX 30 - Five examination papers set on the J.C. geography syllabus published in The Education Gazette of 17th December, 1921.....	160
APPENDIX 31 - Five examination papers set on the J.C. geography syllabus published in The Education Gazette of 13th February, 1930.....	168

	PAGE
APPENDIX 32 - Five examination papers set on the J.C. geography syllabus published in The Education Gazette of 1st November, 1945.....	184
APPENDIX 33 - Geography syllabus for the University Junior Certificate, 1918.....	198
APPENDIX 34 - Syllabus in geography for the University J.C. which came into force from Dec., 1936.....	199
APPENDIX 35 - Geography syllabus which came into effect after 1948 for the University J.C.....	200
APPENDIX 36 - Four examination papers set on the 1918 geography syllabus for the University J.C.....	203
APPENDIX 37 - One paper set on the University J.C. syllabus in geography which came into force in December, 1936.....	208
APPENDIX 38 - Four papers set on the University J.C. syllabus in geography which came into effect after 1948.....	211
APPENDIX 39 - Senior Certificate Geography syllabus, published in The Education Gazette, 17th Dec., 1921...	221
APPENDIX 40 - Senior Certificate syllabus in Commercial Geography and History, published in The Education Gazette, 17th Dec., 1921.....	222
APPENDIX 41 - Senior Certificate syllabus in Historical Geography as suggested in The Education Gazette, 8th June, 1922.....	223
APPENDIX 42 - The Senior Certificate syllabus in geography which came into force at the S.C. examination, 1935.....	226
APPENDIX 43 - The Senior Certificate syllabus in geography which was first published in The Education Gazette, 30th Nov., 1944.....	227
APPENDIX 44 - Five examination papers which were set on the S.C. syllabus published in 1921.....	232

APPENDIX 45 - Five examination papers which were set on the S.C. syllabus in Commercial Geography and History.....	238
APPENDIX 46 - Five examination papers in geography set on the S.C. syllabus which came into force at the December examinations, 1935.....	246
APPENDIX 47 - Five examination papers which were set on the S.C. syllabus in geography which was first published in The Education Gazette, 30th November, 1944.....	256
APPENDIX 48 - The Matriculation syllabus in geography which came into force in Dec., 1920.....	266
APPENDIX 49 - The Matriculation syllabus in geography and history which came into effect in December, 1920.....	267
APPENDIX 50 - The Matriculation syllabus in geography which came into force at the examination of December, 1928.....	268
APPENDIX 51 - The Matriculation syllabus in geography which came into force at the examination of November, 1947.....	269
APPENDIX 52 - Five examination papers in Matriculation geography set on the syllabus which came into effect in 1920.....	273
APPENDIX 53 - Five examination papers in Matriculation geography and history set on the syllabus which came into effect at the examination of 1920.....	280
APPENDIX 54 - Five examination papers set on the Matriculation syllabus in geography which came into force at the examination of Dec., 1928.....	286

APPENDIX 55 - Five examination papers set on the Matriculation syllabus in geography which came into force at the examination of Nov., 1947.....	292
APPENDIX 56 - Subjects for the Departmental J.C. examination as given in "Secondary School Courses. Junior and Senior Certificate Handbook, for the years 1925, 1932 and 1946.....	304
APPENDIX 57 - Subjects for the University J.C. examination as given in the Handbooks for 1918, 1937 and 1949.....	307
APPENDIX 58 - Subjects for the Departmental S.C. examination as given in "Secondary School Courses. Junior and Senior Certificate Handbooks" for 1925, 1936 and 1946.....	310
APPENDIX 59 - Subjects for the Matriculation examination as given in the relevant handbooks for 1920, 1928 and 1948.....	312
APPENDIX 60 - Excerpts taken from the Departmental Examiners' reports on the J.C. geography papers, and referring specifically to the nature of the candidates' answers to mathematical-geography questions.....	325
APPENDIX 61 - Excerpts taken from the Departmental examiners' reports on the S.C. geography papers, and referring to the nature of the candidates' answers to geomorphological questions and to questions on physical geography in general.....	328
APPENDIX 62 - Excerpts taken from the Departmental examiners' reports, and referring to the nature of the candidates' answers to climatic questions set in the geography examinations for J.C.....	329

APPENDIX 63 - Excerpts taken from the Departmental examiners' reports and referring to the nature of the candidates' answers to climate questions in the geography examinations for S.C..... 333

APPENDIX 64 - Excerpts taken from the Departmental examiners' reports, and referring to the nature of the candidates' answers to cartographical questions in the geography examinations for J.C..... 336

APPENDIX 65 - Excerpts taken from the Departmental examiners' reports, and referring to the nature of the candidates' answers to cartographical questions in the geography examinations for S.C..... 337

APPENDIX 66 - Excerpts taken from the Departmental examiners' reports concerning the nature of the candidates' answers to questions on natural vegetation in the geography examinations for the Junior and Senior Certificates..... 339

APPENDIX 67 - Excerpts taken from the departmental examiners' reports about the nature of candidates' answers to questions on regional and economic geography in the Junior and Senior Certificate..... 340

APPENDIX 68 - Excerpts taken from the Departmental examiners' reports concerning the nature of candidates' answers to questions which demand sketch maps or the insertion of geographic distributions on outline maps..... 351

---

A P P E N D I X 1

SUMMARY OF THE CONTENTS OF "OUTLINES OF GEOGRAPHY, FOR THE USE OF THE EDINBURGH ACADEMY. PART 11. - ANCIENT GEOGRAPHY".  
 BY T. A. GIBSON, MASTER OF CAUVIN'S HOSPITAL AND G. M. GIBSON, SOUTHAMPTON.

General outline. This consists of a list of the countries of Europe, Asia, and Africa, and of such features as islands, seas, gulfs. The treatment is purely factual.

Hispania, Spain and Portugal. 1. Names of rivers. In some cases we are told the sources and outlets of rivers, details about the confluence and direction of flow of their tributaries, and the meaning and derivation of river names. 2. Names of mountains and where they are situated. 3. Definition of boundaries. 4. Names of the capes and promontories. In some cases the situations of such are given and other odd comments added. 5. The divisions which existed during Classical times are named, and their boundaries defined. 6. The principal tribes are named, and their territory indicated. In some cases characteristics of tribes, and a few historical details about them are given. 7. Towns and their situations are given, and in certain cases a few details are given about the origin and history of the towns. 8. Islands are named, and their situation described.

The other countries which are dealt with are treated in a manner closely similar to that of the section on Hispania, Spain, and Portugal; and hence it will suffice to indicate the scope of the remaining parts of the book by naming the various headings under which the subject matter is set out.

Gallia Transalpina (Comprising France, Belgium, and West Switzerland). 1. Boundaries. 2. Rivers. 3. Lakes. 4. Mountains. 5. Divisions. 6. Tribes. 7. Towns.

Britannia or Albion (Great Britain). 1. Capes. 2. Rivers. 3. Tribes. 4. Divisions and towns. 5. Islands.

Germany. 1. Boundaries. 2. Rivers. 3. Chief tribes.

Vindelicia, Rhaetia, Noricum, Pannonia, Illyricum (Part of Batavia and Austria). 1. Vindelicia: (i) Situation, and extent in Classical times and in modern times. (ii) Tribes. 2. Rhaetia: (i) Situation, and comparison of extent in Classical times with that in modern times. (ii) Rivers. (iii) Tribes. 3. Noricum: (i) Situation, and comparison of boundaries in Classical times with those in modern times. (ii) Divisions. (iii) Towns. 4. Pannonia: (i) Situation, and boundaries in Classical and in modern

2.

times. (ii) Divisions and what modern countries were involved in Classical times. (iii) Towns. 5. Illyricum: (i) Situation, Classical and modern boundaries.

Italy. 1. Boundaries. 2. Divisions and tribes. 3. Gulfs. 4. Capes. 5. Mountains. 6. Lakes. 7. Rivers. 8. Towns. 9. Public ways linking towns. 10. Islands.

Sicily. 1. Capes. 2. Mountains. 3. Rivers. 4. Towns. 5. Islands.

Graecia, or Hellas. In a short introductory passage Greece is dealt with generally under the headings: (B) Boundaries, General Divisions, and Gulfs. The country is then divided into the Peloponnesus, Graecia Propria, Thessalia, and Epirus. Each of these is dealt with under the following sub-headings:- Situation and Boundaries, Divisions, Capes, Mountains, Rivers and Towns.

Macedonia. 1. Boundaries. 2. Principal Divisions. 3. Gulfs. 4. Mountains. 5. Rivers. 6. Towns.

Thracia. 1. Boundaries. 2. Tribes. 3. Gulfs. 4. Mountains. 5. Rivers. 6. Towns.

Grecian Islands. These are classified under seven divisions. A few historical and other details are given.

Moesia (Servia and Bulgaria). 1. Boundaries. 2. Divisions. 3. Rivers. 4. Towns.

Dacia and Sarmatia - countries beyond the Danube. 1. Boundaries. 2. Rivers. 3. Tribes. 4. Towns.

The following parts of Asia are dealt with under the following headings:-

Countries between the Euxine and Caspian Seas. 1. Sarmatia Asiatica: (i) Situation and boundaries. (ii) Chief rivers and towns. 2. Colchis: (i) Situation and boundaries. (ii) Chief rivers. 4. Albania: Situation.

Armenia Major. 1. Boundaries. 2. Rivers. 3. Tribes. 4. Mountains. 5. Towns.

Anatolia, Caramania, and Roum. 1. Boundaries. 2. Divisions. 3. Bays. 4. Capes. 5. Mountains. 6. Rivers. 7. Towns.

Syria. 1. Boundaries. 2. Divisions. 3. Mountains. 4. Rivers. 5. Towns. Palestine is treated in more detail under the headings: Divisions, Tribes, and Towns.

Arabia. 1. Boundaries. 2. Gulfs. 3. Towns. 4. Tribes.

Mesopotamia, Assyria, and Babylonia. 1. Situation and boundaries. 2. Divisions. 3. Rivers. 4. Towns.

Media and Persia. 1. Situation and boundaries. 2.

3.

Divisions. 3. Tribes. 4. Towns. 5. Rivers.

The remaining countries of Asia are dealt with very briefly. The names and situations of the various territories are given, and a few details are added about the towns, rivers and mountains. Here and there a few historical comments are made.

Africa is treated very briefly under the following headings:- 1. Aegyptus, Egypt: (i) Boundaries. (ii) Divisions. (iii) River Nile. (iv) Lakes. (v) Towns. 2. Coasts of Africa: (i) Divisions (countries and their sub-divisions). (ii) Towns. (iii) Islands.

---

A P P E N D I X 2

GEOGRAPHY QUESTIONS SET BY ROSE-INNES DURING HIS INSPECTION TOURS OF 1852 & 1853. (Taken from the "Report of Public Education for 1953, pp. 21 & 22.)

1. Describe the relative situations of the different oceans, in respect to the continents between which, or near to which, they lie. What oceans meet at the southern extremity of Africa?
  2. What are the chief mountain ranges of Asia and America? What are the highest points in these elevated regions? Name the principal rivers that take their rise there; the direction in which they flow, and the countries through which they pass? Which is the largest of these rivers?
  3. Whether is the ocean level nearest to the earth's centre at the equator or at the pole? How is this explained?
  4. Explain briefly your views of the cause and course of the trade winds.
  5. In what direction does the longest line lie that can be drawn across the African continent? Through what countries would it pass?
  6. Name the principal island group in the Pacific Ocean, distinguishing those situated south of the equator from those to the north. Where are the Cape Verde Islands, Madagascar, and Cuba?
  7. Great Britain and New Zealand are antipodes to each other: what would you infer from this, generally, in regard to their climate?
  8. There is a constant current in the Straits of Gibraltar; does it flow into or from the Mediterranean Sea? How do you account for it?
  9. Where are Calcutta, Rio de Janeiro, Washington, Madeira, Morocco, Antioch, Bassorah, Rome, and Mexico, situated? Name the countries to which they belong.
-

A P P E N D I X 3SPECIMEN OF EXAMINATION PAPER FOR THE SECOND-CLASS

QUALIFICATION (Government Notice of 27th February, 1850, The Blue Book for 1851, pp. 278-279)

1. What extent of the earth's surface is occupied by the ocean? What point on the earth's surface would you select in order to be surrounded with the greatest extent of water? Does the northern or southern hemisphere present the largest quantity of land?
2. Can you account for the fact that the western coast of South America has no rivers of any magnitude, whilst its eastern exhibits the largest in the world? What mountain range runs the length of that continent? Which is the highest point in that range, and what city near to it has the highest elevation of any in the world?
3. Mention the region of volcanoes, hurricanes, and monsoons? What are the trade winds, and how can you account for the direction in which they blow, viz., from the north east and south east?
4. What occurs to you as characteristic of the physical geography of the colony? To what winds are its roadsteads and harbours most exposed? Why should a north-west gale bring down the barometer? How do you account for the phenomenon of the "Table Cloth" during a south-east gale?
5. What is meant by the meridian of a place? What is common to all places having the same meridian? By what simple process may its direction be determined? Express in degrees those arcs of a meridian which are intercepted between each of the poles and the polar circle, between those circles and the tropics, and again between the tropics and the equator.
6. It has been ascertained that the waters of the Red Sea are higher than those of the Mediterranean by  $32\frac{1}{2}$  feet, - so also are the waters of the Gulf of Mexico upwards of 20 feet higher than those of the Pacific; - again, there is a current constantly flowing from the Atlantic into the Mediterranean. How are these phenomena accounted for?
7. What are the principal currents of the ocean, and in what direction do they flow? What are the leading causes of

6.

- oceanic currents? Are their directions influenced in any way by the diurnal motion of the earth?
8. If within the tropics the mean elevation of the line of perpetual snow is 15,000 feet above the level of the sea, what mountains of the torrid zone have their tops constantly snow-clad?
9. Name the British colonies, their principal towns, staple productions, and the races by which they are inhabited.
10. What was the Star Chamber, and what the character and extent of its jurisdiction? With whom did it originate, and when was it abolished?
11. Who was the first and last of the Sovereigns of the Tudor line? By what dynasty were they succeeded? Name the most remarkable events that occurred during its rule.
12. What are the personal and social rights guaranteed by the Magna Charta, the Bill of Rights, and the Habeas Corpus Act? When were these respectively secured?
13. From what period do we date the independence of British judges? In whose reign was the practice of fining juries for acquittals against the judge's direction declared illegal, and the right established of returning a general verdict?
14. Give an account of the interview between James the First and the Puritans at Hampton Court. By what political party was Sacheverell tried, on what grounds, and what was the consequence of its failure? What important constitutional right was involved in the trial of Hampden?
15. What battle decided the fate of James the Second? By what name is the treaty known that was subsequently entered into with his followers?
16. What period of British history is identified with the names of Dryden and Milton? What celebrated philosophers and historians belong to the same age? To whom is Dryden supposed to refer in the following lines:-
- "A man so various that he seemed to be  
Not one, but all mankind's epitome:  
Stiff in opinions, always in the wrong;  
Was everything by starts, but nothing long"?
17. What is the subject of Milton's most celebrated poem? Who is the hero of this epic? What passages occur to you

7.

remarkable for their sublimity? By whom is the following spoken, and to whom addressed:-

"Brightest Seraph! tell  
In which of all these shining orbs hath man  
His fixed seat, or fixed seat hath none,  
But all these shining orbs his choice to dwell"?

18. Mention the most distinguished of the writings both of the philosophers and historians referred to in question 16.

---

A P P E N D I X 4

SECOND-CLASS EXAMINATION SET BY THE BOARD OF EXAMINERS ON  
15th MARCH, 1850

1. What can you adduce in proof of the following:- That the Earth is a round body? That its precise form is that of an oblate spheroid? That it has a diurnal motion on its axis and an annual motion in space?
2. What is Twilight - where is it of shortest duration and why? Is it of equal duration at any one place at all seasons?
3. Mention the gulfs, principal bays and inland seas connected with the Atlantic Ocean. Where do the eastern coast of South America and the western coast of Africa approach the nearest to each other?
4. Can you account for the singular fact that while a current flows continually into the Mediterranean from the Atlantic, a current flows continually out of the Baltic into the North Sea?
5. Where have the following rivers their sources:- the Euphrates - the Indus - the Ganges - the Nile - the Orinoco (spelling given) and the Niger? Mention those rivers known to you as having deltas, cataracts or as being subject to periodical inundations.

8.

6. Why does the torrid zone receive a larger amount of heat annually than either the temperate or frigid zones - seeing that in the latter there are seasons when the Sun does not set for weeks and even months?
7. By whom was the Feudal System introduced into England - Give an outline of that form of government.
8. By what treaty did the King of France bind himself to recognize the Sovereign placed on the throne of England by the Revolution of 1688 and to dismiss the claims of the House of Stuart?
9. What opinion have you formed of the character and reign of William the Third? What are the difficulties he had to contend with and what the blemishes that stain the history of his administration?
10. In whose reign was the treaty of Union between England and Scotland effected - What are its leading provisions?
11. In what reigns lived Sir Thomas More - Wolsey - Bolingbroke - Bacon - Jefferies - Hampden - Cecil? What opinion have you formed of them as public men and with what events are their names identified?
12. In what reign did the planting of English Colonies commence in North America - By what class of Colonists was New England chiefly colonized? What gave rise to the disputes between the Mother Country and her American Colonies - What European power countenanced and aided the Colonists in their resistance - What effect eventually had this policy on her own institutions and form of government - When was the independence of the American Colonies recognized by the Mother Country - Who then reigned?
13. In whose reign did the "Letters of Junius" appear? Is the author of these Letters known? What was the avowed object of the writer? What is their character as a literary production?
14. Who is the author of the "Vision of Mirza" - What is its object - in what serial publication did it appear - What generally was the character of that author's style of writing?

9.

15. Name the most distinguished writers of history in the English language and the histories they wrote.

16. What are the subjects of the following poems:- "The Lay of the Last Minstrel" - "The Lady of the Lake" - "Child Harold" - "The Shipwreck" - "The Canterbury Tales" - by whom were they written?

17. Who is the author of "A Tale of a Tub"? For what other satirical productions is he famous?

18. Name some of the most distinguished of the novelists and the most remarkable of their productions?

---

A P P E N D I X 5

PREFACE AND SUMMARY OF THE CONTENTS OF: "NELSON'S SCHOOL SERIES. GEOGRAPHY FOR JUNIOR CLASSES", BY ROBERT ANDERSON, HEAD MASTER, NORMAL INSTITUTION, EDINBURGH. NEW EDITION, CORRECTED TO 1867. LONDON: T. NELSON & SONS, PATERNOSTER ROW.

Foreword

"The reception of 'Anderson's Geography', issued in Nelson's School Series, has shown that it supplied a felt want. The present work is intended for younger classes, or more elementary schools.

"It has been too frequently the case, that the less advanced the class was, the more did the text-book consist of a bare and uninteresting list of names, and the more vague was the information given.

"In the present work, it is hoped that the information given has been so arranged as to be definite, and, at the same time, interesting and useful.

"In the first part of the Book is given a course of Physical Geography, which hitherto has either been reserved for senior classes, or more commonly omitted altogether, though none will question the advantage of such a course, either as a branch of useful knowledge or as a mental exercise.

"The former work was issued in the hope of making geography a more intellectual, and, at the same time, a more interesting study. The present work is issued in the same hope, and in furtherance of the same design.

"This second Edition has been carefully revised and corrected, but without more alterations than geographical discovery, and the change and progress of States have rendered necessary."

Summary of Contents

The main facts of mathematical geography are dealt with under the following headings:- Form of the Earth, Daily motion of the Earth, Yearly motion, The seasons, Size of the Earth, The Sun, The Moon, The Planets.

A section on physical geography and on other facts, some geographical, others not, follows, as summarized below.

Divisions of the Earth's surface

The author begins by stating the fractions of the Earth which are land and water, and then proceeds to define the various land and water features.

Land The following are defined:- continent, island, peninsula, isthmus, cape, shore or coast, mountain, volcano, plain, valley, desert and oasis.

Water Defines the following:- ocean, sea, archipelago, gulf or bay, lake, strait, channel, river.

Oceans After a few introductory facts about the oceans in general, he proceeds to describe in a few lines each of the world's oceans.

#### Artificial divisions of the Earth

Brief explanations are given of the following:- horizon, cardinal points, equator, two hemispheres, latitude, longitude and how longitude and time are related; tropics, polar circles, thermal zones of the earth.

#### Temperature

Temperature is dealt with in broad, general outline.

#### Ocean Currents

Under this heading he describes the situation and direction of flow of the following currents:- Gulf Stream, Atlantic Equatorial Current, Mozambique, Kuro Siwo, Pacific Equatorial Current, Kurile, Labrador, Benguella, Humboldt. Only the first two currents are named.

#### The winds or air currents

Under this he defines a wind, and gives a brief explanation of the situation of the planetary winds, their directions, and why they blow as they do. He then proceeds to deal very briefly with Sea and Land breezes, Monsoon winds, and Storms.

Rain A very general explanation is given.

Dew Explains its formation.

Frost, snow, and hail Their formation is explained.

Snow-line, glaciers, ice-bergs The treatment is confined to a very brief definition.

Plants or vegetation - in the different thermal zones.

He explains the relation of plant growth to the seasons, altitude, and to air and its constituents. Proceeds thence to a description of the plants useful to man, giving, in the case of each plant, a very brief description of the plant, places where grown, and human uses. The plants thus dealt with comprise the grains, fruits, vegetables, fibre plants, and a large number of trees and bushes including the following:- sugar cane, tea, coffee, cacao, mulberry, oil-palm, banana, plantain.

#### Animals

A very brief and general treatment is given.

Rocks

He briefly describes the origin and nature of sedimentary rocks. Under this heading fossils and the formation of coal are also dealt with.

Metals

He states very briefly where each of the following minerals are mined:- iron, copper, tin, zinc, lead, gold, silver, quicksilver, platinum and aluminium.

Varieties of the races of man

A very brief description is given of the physical features of Indo-Europeans, Mongolians, and Africans. The treatment is very general and unsystematic. This section concludes with a paragraph on the English, French and German languages.

States of society

A paragraph is devoted to each of the following:- the Hindu State, the shepherd or pastoral state, the agricultural state, and enlightened or refined nations.

Governments

Here he gives a very brief and general account of how the various states are governed.

Religions

A brief survey is given of the chief world religions, a few lines being devoted to each of the following:- Christian, Jewish, Mohammedan, and Pagan religions.

The remaining sections of the book are devoted to descriptive geography. The author starts off by giving the great divisions (continents) and their area. He next proceeds to describe the physical features of each continent, its population, and peoples. After this he describes the geography of the various countries of each continent. The first continent which is thus dealt with is Europe, and the following is a schematic representation of the treatment adopted.

Europe

In the introductory part the following are briefly described:- area, position, coastline, seas, bays, straits, islands around Europe, and peninsulas.

Physical Features

Situations of mountains, and sources, direction of flow, and outlets of rivers.

Climate

A very brief and general account.

People

The population and the different peoples.

Countries and capitals of Europe

Just a bare list is given.

The British Isles

Islands involved, and political divisions.

England and Wales

Physical features, list of counties and their capitals.

Scotland

Position and physical features. Counties and capitals.

Ireland

Position and physical features. Provinces and counties and their capitals.

N.B. Each county or province is merely named, but each town is briefly described - i.e. function, significance, and sometimes position.

Minerals, manufactures, and commerce of the British Isles

Where the mineral deposits are found.

Manufactures - the chief manufacturing towns, and the goods made at each.

Commerce. Value and nature of the exports, proportion of goods shipped from each of the ports, and where the goods are shipped to. Names of the chief raw materials imported, and places from where they are imported.

Towns of the British Isles

A list of the names of the chief towns, and their populations.

Norway and Sweden

Situation and physical features. Character of people, and religion. Names, situations, and population of chief towns.

Countries of the great plain

The following list is given, together with the area and capital of each country:- Russia, North German Bund, Prussia, Saxony, Hessen, Baden, Wurtemberg, Bavaria, Denmark, Holland, and Belgium. There follows a brief, general description of these, which is three-quarters of a page in length, and deals with: position, physical features, climate, minerals, manufactures, commerce, government, religion, towns, and populations. He next proceeds to deal with each briefly as follows:-

Russia

Position, a few historical facts, Britain's imports from Russia; towns and their populations and positions, and in some cases a few historical facts about them.

Germany

A few historical remarks of an introductory nature.

Prussia

Position, a few historical facts, character of people, British imports from Prussia, names of seaports and of exports, inland towns named and their positions and functions indicated.

Other states of the North German Bund

Names, few historical facts about each, names and populations of the towns of each.

Southern Germany

Names of each of the sub-divisions. The towns of each division are named, and their positions and populations given. In the case of a few towns one or two historical facts are given.

Denmark

Position, territories comprised, character of people and the chief occupations, and exports to Britain; chief towns with their positions and populations, and the Danish colonial possessions.

The Netherlands

Position, physical features, chief towns and their positions, populations and functions; a few facts about the history and colonial possessions of the Netherlands.

Belgium

A few historical facts, the chief towns and the goods made at each; population and position of Brussels.

Under the heading "Central Mountain Lands" he gives the following information about the three countries concerned, namely, France, Switzerland, and Austria:- position, area of each, size, population, average number of acres to each inhabitant, capital city, products, physical features, religion of people. He then proceeds to give the following, fuller account of each of these lands:-

France

Character of people, physical features of France, names of chief towns and ports; situation, population, and functions of Paris; situations of ports and chief inland trading towns; names of manufacturing towns; a few historical facts about certain towns.

Switzerland

Products, physical features, character of Swiss, names and positions of the chief towns.

Austria

Physical features, races living there, names, functions, positions, and in some cases populations of towns.

Next he names the "South Peninsular Countries", and

gives the following information about each:- area, population, number of acres to each person, capital city. He then proceeds to deal in more detail with these countries as follows:-

Portugal

Position, exports to Britain, names and situations of towns, exports of chief ports, and population of Lisbon.

Spain

Exports to Britain, names and positions of seaports, and exports of the chief ones; names and positions of chief towns, the population of Madrid, a few historical facts about the towns.

Italy

Physical features, a few historical facts; names of towns and ports; and positions, functions and products, and a few historical facts about certain towns and cities. Malta.

Greece

Position, physical features, a few historical details, names, positions, and functions of chief towns and ports. The Ionian Isles - their names and positions.

Turkey

Position, a few historical facts; names, positions, and functions of chief towns and seaports; exports to Britain. Countries under Turkish rule: Rumania - position, capital, population, names of other chief towns; Serbia - position, capital.

Other parts of the world are dealt with in a manner similar to that in which Europe is treated, but more briefly. The main headings and sub-headings are given below.

Asia

Position and physical features, climate; Japan, Chinese Empire, Turkestan, or Independent Tartary, Turkey in Asia, Arabia, Persia, Afghanistan, Beloochistan, India, or Hindostan.

Africa

Area and physical features, climate, products, animals, peoples, religions.

Northern Africa Barbary States, The Nile Region.

Middle Africa Senegambia, Upper Guinea and Lower Guinea, Soodan.

South Central Africa

Eastern Africa

Southern Africa Cape Colony, Natal, Kaffraria, People and history, North of the Orange River.

Islands of Africa

America

Area and size, a few historical facts, physical features, climate, plants, animals, people.

North America

British America, U.S.A., Mexico.

Central AmericaWest IndiesSouth America

North Tropical Countries - Guiana, Venezuela, New Granada;  
 South Tropical Countries - Ecuador, Peru, Bolivia, Brazil;  
 Countries South of the Tropics - the Plate Republics,  
 Uruguay, the Argentine Confederation, Paraguay, Chili,  
 Patagonia, Tierra Del Fuego, Falkland Islands.

Oceania

Malaysia Sunda Islands, Borneo, Celebes, Philippines.

Australasia Melanesia - Papua or New Guinea, New Britain,  
 New Ireland, Solomon Islands, New Hebrides, New Caledonia;  
 Australia, Tasmania, New Zealand, Polynesia.

---

A P P E N D I X 6

SUMMARY OF THE CONTENTS OF: "GEOGRAPHY OF SOUTH AFRICA FOR THE USE OF HIGHER CLASSES IN SCHOOLS", BY A. WILMOT, F.R.G.S. SECOND EDITION. CAPE TOWN: J. C. JUTA, 1880.

Table of Contents

1. The Cape Colony and Adjacent Territories.
2. Griqualand East.
3. Natal and Zululand.
4. Griqualand West.
5. The Transvaal.
6. The Orange Free State.
7. Bechuanaland, Kalahari Desert, Matabeleland.
8. Great Namaqualand.
9. Damaraland and Ovampoland.
10. Portuguese Settlements - East Coast.
11. Portuguese Settlements - West Coast.

Summary of ContentsIntroductory section on South AfricaBoundariesDivisionsSouth African Coastline

Bays - names, physical appearance.

Ports - names, situations, qualities as harbours; rivers, if any, flowing into harbours.

Capes - names.

Islands - names, situations, human uses.

Surface and mountains of South Africa

Coastal fringe and river basins.

Mountain ranges - names, situations, land features bounding mountains, height of highest peak.

South African river basins are described in tabular form as indicated in the following extract:-

Name of river	Probable length in miles	Nature of country	Remarks
Swakop	300	Sandy and barren near the sea. Flows in the upper position of its course over the high table land of Damaraland.	No affluents of consequence.
Buffels	100	Barren and rugged country of Namaqualand.	Copper deposits in upper portion.
Olifants	200	Karoo country & fertile region in Clanwilliam.	Used for irrigation in Clanwilliam.

Deserts, Karroos, Vleis, Lakes

Names of territories involved, and where situated; nature of soils and vegetation of Karroo for agriculture and pastoral farming; nature of rock structure; existing and potential water resources.

South African Zoology

Names of animals and where found.

Ornithology

Names of birds and where found, and a very few other facts.

Reptiles and insects

Names and where found, whether poisonous or otherwise harmful to man.

South African Ethnography

Names of chief races, and where found; original habitat, and a few details about the language, religion, customs and weapons, physical appearance and character of each race.

South African Climate

Very brief, general survey.

South African Geology

Brief general survey.

The Cape ColonyIntroductory section

Boundaries, area and population, education, religion, political divisions.

The Western Province

Brief historical account, human occupations and products, towns and cities.

Other regions of the Cape Province

The treatment of the other regions of the Cape Province is similar in scope to that indicated above for the Western Province. The other regions thus dealt with are: The North-Western Province, South-Western Province, Midland Province, South-Eastern Province, North-Eastern Province, Eastern Province.

Capes, islands, bays, mountain ranges

Little more than a bare list.

Rivers

Knysna Lake.

Climate

A very brief account.

Trade

Chief exports and their value, Bank statement of capital in Bank; railways - number of miles open, number of passengers

carried in a year, tonnage of goods, total receipts, working expenses; telegraphs - number of miles open, number of offices, number of messages, revenue; Post Office - revenue, expenditure, weight of diamond packets sent to Europe.

Government and Finance

Government defined; officials and bodies composing Parliament, and names of electoral divisions; number of members in house of assembly, and number of these retained by each of the electoral divisions; functions of house of Assembly; nature of franchise.

Revenue and expenditure

Bare statement of these.

Manufactures, mines, fisheries

Numbers of ploughs, harrows, reaping machines, thrashing machines in the Cape in 1878; corn mills, saw mills, wool-washing establishments, tanneries, breweries, distilleries, iron foundaries, iron and tin works, printing establishments, saddlery and harness manufactures; manganese mine in De Toit's Kloof and mine in Bushman's Vlei, Worcester; and unworked Galena mine on Orange River; coal and copper mines - situations, tonnage of ore mined at each and value of it, number of persons employed, communications to and from the mines.

Salt Pans

Position and yield of salt.

Mineral Springs

Names and situations, temperature, diseases for which they are beneficial.

Fisheries

Names of fish caught, fishing grounds, exports of fish.

Geology of Cape

Names and formation of rocks and deposits, a few details of geological history, fossils, minerals.

The treatment of the remaining sections of the book is closely similar, and is indicated by the following headings:-

British Basutoland

Boundaries

Defined.

Area and population

General Descriptive notes

Mountains and rivers

Ethnography

Products

Government

The Transkei

Area and population. Descriptive notes. Rivers.  
Climate. Productions. Ethnography.

Griqualand East

Boundaries. Descriptive notes. Rivers and lakes.  
Ethnography. Government.

Tembuland

Boundaries. Area and population. Descriptive notes.  
Mountains and rivers. Government.

Pondoland

Boundaries. Area and population. Mountains and rivers.

Natal

Boundaries. Area and population. Descriptive notes.  
Mountains and rivers. Climate. Products. Government and  
Finance. Geology. History.

Zululand

Boundaries. Area and population. Descriptive notes.

Capes. Mountains, lakes and rivers. Government.

Productions.

Griqualand West

Boundaries. Rivers. Government. Revenue and expenditure.

Productions. Rivers. Climate. Descriptive notes. Area.

Transvaal

Boundaries. Area and population. Divisions. Towns and  
villages. Mountain ranges. Rivers. Climate. Products.

History.

Orange Free State

Boundaries. Area and population. Divisions. Descriptive  
notes. Rivers. Climate. Products. Ethnography.

Government. Geology. History.

Bechuanaland

Boundaries. Population and ethnography. Descriptive notes.

Mountains and rivers. Climate. Productions.

The Kalahari Desert

Boundaries. Area and population. Mountains and rivers.

Products. Descriptive notes.

Matabeleland

Boundaries. Area and population. Mountains and rivers.

Productions. Descriptive notes.

Great Namaqualand

Boundaries. Area and population. Climate. Rivers and

Mountains. Products. Islands. Harbours. Capes.

Descriptive notes.

Damaraland and Ovampoland

Boundaries. Area and population. Rivers. Mountains.  
Bays and capes. Climate. Products. Descriptive notes.

Portuguese SettlementsProvince of Mozambique

Area and population. Climate. Capes. Islands.

Districts and chief towns of each. Rivers. Products.

History.

Province of Angola

Area and population. Capes and bays. Climate. Products.

Districts and chief towns.

---

A P P E N D I X 7

FOREWORD? SUMMARY OF CONTENTS, AND TEXTUAL SPECIMENS OF:  
"SCHETS VAN DE AARDRIJKSKUNDE VAN ZUID-AFRICA VOOR  
SCHOOLGEBRUIK", BY A. WILMOT, F.R.G.S. Tweede Vermeerderde  
 Druk. J. C. Juta & Co., Kaapstad, Johannesburg. 1891.

Foreword

"Dit Handboekje is oorspronkelijk bestemd ten dienste der lagere klassen in de Publieke en Zendingsscholen, verbonden met het Departement van Openbaar Onderwijs.

"De rangskikking van de leerstof en het algemeene plan, volgens hetwelk het Boekje ingericht is, zijn aan de hand gegeven door mannen van practische kennis in zake het onderwijs."

Summary of ContentsChapter 1

Verdeeling van de Kolonie en de Grenzen der Afdeelingen; De Rust; Bergketenen; Voornaamste Rivieren; Eilanden; Kapen; Baaien en Havens; Meren.

Chapter 2

Afdeelingen en voornaamste Steden van de Westelijke en de Oostelijke Districten; Wegen.

Chapter 3.

Bijzonderheden van de voornaamste Steden en Dorpen, alsook van de verschillende afdeelingen van de Kaapkolonie (Westelijke Districten)

Chapter 4

Bijzonderheden van de voor naamste Steden en Dorpen, alsook van de verschillende afdeelingen van de Kaapkolonie. (Oostelijke Districten), Griqualand West.

Chapter 5

Transkei; Tembuland; Griqualand-Oost; Pondoland; Matabeleland; Basutoland; Bechuanaland; Trans-Natalsch Kafferland; Groot Namaqualand; Damaraland; Ovampoland; De Kalihari Woestijn.

Chapter 6

Het Gouvernement en de Inrichtingen de Kaapkolonie.

Chapter 7

Natal; De Oranje Vrijstaat; De Transvaal.

Textual Specimens

The following two excerpts are typical of the mode of treatment:-

"Grahamstad (K.C.) - Eene bisschoppelijke stad. Er Zijn ver scheidene fraaie gebouwen onder welke geteld worden de kerkgebouwen, van verschillende gezindten. Het nieuwe stadhuis met den Jubilee-gedenktoren en de magazijnen van verschillende voornamen handelaren. Een Hoog Gerechtshof voor de Oostelijke districten houdt hier zijne zittingen. Grahamsstad, genoemd naar Kolonel Graham, werd aangelegd in 1812 en is 1,728 voet boven de oppervlakte der zee, nabij de bronnen van de Kowierivier, op een afstand van 585 mijlen van Kaapstad en 85 mijlen van Port Elizabeth, en drijft een grooten handel met de Oostelijke districten. Er zijn drie banken, en drie nieuwsbladen worden hier uitgegeven. Eene taklijn van den spoorweg verbindt het door de Noord-Oostelijke linie met Port Elizabeth - Junetie te Alicedale. Een spoorweg naar Port Alfred is door eene private maatschappij gebouwd. Bevolking, 8,000". P. 28.

"Colesberg. - Heeft een aanzienlijken handel met den Vrijstaat, is gelegen in eene vallei, 12 mijlen van de Oranjerivier. Gesticht in 1830. Aan den N.O. spoorweg naar Bloemfontein. Eene bank. Een nieuwsblad. Bevolking, 1,500.

"Hanover (C) - Zetel van een magistraatschap. Diamanten worden gezegd in de nabijheid van dit dorp gevonden te zijn.

"Middelburg C. - In het midden tusschen Graaff-Reinet en Colesberg. Eene bank. Een nieuwsblad. Bevolking, 1,400. Acht mijlen van Middelburg - weg statie." P. 32.

---

A P P E N D I X 8

THE SCHOOL ELEMENTARY EXAMINATION PAPERS OF THE UNIVERSITY OF THE CAPE OF GOOD HOPE FOR THE YEARS: 1875, 1879, 1883, 1887, 1890.

School Elementary Examination for 1875

Candidates are required to keep the answers in Descriptive Geography distinct from those in Physical Geography, and to enclose each set in a separate envelope.

Descriptive Geography

1. Give, as accurately as you can, the position of each of the following places;- Liverpool, Calcutta, Bloemfontein, Mecca, Hamburg, Adelaide, Valparaiso, Barbados, Exeter, Montreal, Benares, Geneva, Philadelphia, Melbourne, Agulhas.
2. Give the names of six counties on the South Coast of England, and two of the chief towns in each county.
3. The great cities of the world are usually built on the banks of large rivers. Give six examples from Europe, six from Asia, and six from North America.
4. Give the boundaries of Mexico, Egypt, Brazil, Natal, and Arabia.
5. Mention the names of the West Indian Islands, with the chief town in each island.
6. Trace the course of the Mississippi, marking in succession (a) the states through which it flows; (b) towns on its banks; (c) tributaries.

Physical Geography

1. Prove (a) that the Earth is round; (b) that it rotates on its axis daily; (c) that it revolves round the sun yearly.
2. What is the magnitude of the earth? Explain generally how this can be ascertained.
3. Explain the meaning of the following words:- Latitude, Longitude, Meridian, Ecliptic, Equinox, and Solstice.
4. Explain the cause of the deposition of dew.
5. Explain the cause of the fogs of Newfoundland.
6. Describe the limits and the directions of the trade winds in the Atlantic Ocean.

7. Give a sketch map of North America, showing its principal mountain ranges and river systems.

.....

School Elementary Examination for 1879

Descriptive Geography

1. Trace the course of the Thames from its rise to its mouth; mentioning the countries through which it flows, and 20 towns in the district drained by it or its tributaries.
2. Mention the foreign possessions of Britain, arranging them under the heads: European, Asiatic, African, American.
3. Name all the capital cities of Europe, and give the position of each.
4. Shew the situation of the following; and if you can mark on a sketch map the position of such of them as are in Europe:- Adrianople, Arnheim, Avignon, Batoun, Cabool, Candahar, Elsinore, Erzeroum, Herat, Kars, Khiva, Loango, Londonderry, Messina, Milwaukee, Oporto, Peshawur, Plevna, Plymouth, Presburg, Quiloa, Rio de Janeiro, Scutari, St Louis, Zaragoza.
5. Name the harbours and the principal mountain ranges of South Africa.

Physical Geography

1. What is meant by the terms ecliptic, tropics, longitude, antipodes, polar axis?

Give some simple proofs to shew that the general form of the earth is spherical.

2. Explain how and why an insular differs from a continental climate.
3. What is a river-basin? Describe the river system of the Indian Ocean.
4. Mention the Directions and limits of the trade winds of the Atlantic Ocean. Explain how these winds are caused.
5. Define the terms indigenous, exotic, representative species and habitat, as applied in Physical Geography.

What are the main conditions affecting the distribution of vegetable life on the Earth?

Mention some of the plants and animals characteristic of the tropics.

.....

School Elementary Examination for 1883Descriptive Geography

1. Draw a sketch map of Hindostan, shewing its principal mountains and rivers.
2. Describe carefully the courses of the Thames and of the Rhine, mentioning in order the chief towns on their banks.
3. State briefly what you know of the chief towns and natural features of Egypt.
4. Define the position of the following:- Ben Nevis, Brisbane, Damascus, Dundalk, Fort Beaufort, Helvellyn, Hull, Jamaica, Java, Mont aux Sources, Monte Video, Nagasaki, Ottawa, Palermo, Queenstown, Quito, Rangoon, Rotterdam, Tanganyika, Transvaal State.
5. Define the position and tell what you know of the commercial importance of the following:- Aden, Belfast, East London, Hamburg, Liverpool, Melbourne, Point de Calle, Valparaiso.
6. Name in order the bays, river-mouths, and coast-towns from the Orange River to the Tugela.

Physical Geography

1. Explain the following terms:- planet, axis, equator, rotation of the earth, revolution of the earth, tropics.
2. What is meant by evaporation and condensation? Explain the formation of cloud and mist. What instruments are used for measuring the pressure and temperature of the air?
3. State what you know about a spring, an ocean-current, a sea-wave, a spring-tide, a volcano, and an earthquake.
4. Describe a snow-mountain, a glacier, and an iceberg. In what parts of the world are they found?
5. Describe the chief physical features of the Cape Colony, with special reference to the illustration and explanation of the following terms:- watershed, mountain-range, peninsula, bay, river-system.

.....

School Elementary Examination for 1887Descriptive Geography

1. What is meant in Geography by the following terms? (a) Continent, (b) Island, (c) Peninsula, (d) Cape, (e) Isthmus,

(f) Ocean, (g) Sea, (h) Gulf, (i) Bay, (k) Lake, (l) Straits.  
Give one example of each.

2. Draw an outline map of the Cape Colony, with the surrounding countries, including Natal, the Free State, the South African Republic (Transvaal), Zululand and Bechuana-land. Mark the following rivers:- Orange, Vaal, Caledon, Olifant's, Great Berg, Breede, Gauritz, Camtoos, Sundays, Great Fish, Buffalo, Kei, St John's, Umzimkulu, and Tugela; and the following towns:- Cape Town, Port Elizabeth, Kimberley, Graham's Town, Bloemfontein, Durban, Maritzburg, Potchefstroom, and Pretoria.

Mark on the map some of the principal bays, capes and headlands along the coast.

3. Where are the following towns situated, and for what are they noted? Manchester, Liverpool, Oxford, Leeds, Glasgow, Dundee, Belfast, Cork, Lyons, Marseilles, Bordeaux, Florence, Naples, Barcelona, Oporto, Antwerp, Leyden, Gottenburg, Upsala, Dresden, Hamburg, Heidelberg, Berlin, Trieste, New York, New Orleans, Montreal, Winnipeg, Bombay, Delhi, Singapore, Canton, Shanghai, Tobolsk, Melbourne, Smyrna, Alexandria.

4. Give some account of the positions, shape, size, climate, inhabitants and productions of any four of the following islands: Ceylon, Sicily, Cuba, Madagascar, Borneo, Java, Iceland, New Zealand, Newfoundland.

#### Physical Geography

5. Give the size, shape, and principal motions of the earth. What is about the extent of its surface, and the proportion of land to water?

6. (a) What are the principal gases present in the atmosphere?

(b) What is the origin of vapour in the atmosphere?

(c) Why, as a general rule, is there a greater rainfall on the flank of a mountain range against which the winds habitually blow than on the opposite flank?

(d) Explain the formation of cloud, mist, rain and dew.

(e) Why does the Cape Peninsula get abundant winter rain, while the coast further north gets very little?

7. Explain how the average temperature of a place is dependent on (1) Latitude, (2) Sea Level, (3) Air Currents, (4) Ocean currents.

Why is the temperature on the North West coast of

Europe much higher than that of the opposite coast of America in the same latitude?

8. Describe the formation and motion of glaciers. What are moraines, and how are they found? What are icebergs and icefloes, and how are they accounted for?

.....

School Elementary Examination for 1890

Descriptive Geography

1. What subjects are treated of in Descriptive Geography, and what in Physical Geography?

2. Define the following terms, and give one example of each: (a) Mountain range. (b) Volcano. (c) Table Land. (d) Valley. (e) Watershed. (f) Ocean. (g) Sea. (h) Isthmus. (i) Strait.

3. Draw a map of the Atlantic Ocean and its principal islands, marking on the map the countries of Europe, Africa, and some of the principal bays, gulfs, and capes.

OR

Draw a map of the Cape Colony, Natal, and the Orange Free State, marking and naming some (say 10) principal rivers, the more important mountain ranges, capes and bays, and six of the more important towns.

N.B. Marks will be given for one map only.

4. A ship sails from London to Calcutta by way of the Suez Canal. Name in succession the seas and parts of the sea through which it will pass, and the countries which lie on the left and right hand during the voyage.

5. Name and describe the positions of the British Colonies in Australia and the Pacific Ocean, mentioning the capital of each, and their chief exports.

Physical Geography

6. Give some of the reasons from which it is concluded that the earth is round. What has been ascertained as to its size, shape, and principal motions?

7. Give the extent in latitude of the torrid zone, the temperate zones, and the polar regions. What are the peculiarities of each as to climate and seasons?

8. What is meant by saying that a place has an average annual rainfall of so many (say 20) inches?

State the causes of rain, and those circumstances which

29.

are favourable or the reverse to a large rainfall.

Illustrate as far as you can by reference to the rainfall in different parts of South Africa.

9. Mention some of those parts of the earth's surface which are most noted for earthquakes and active volcanoes; and describe some of the leading phenomena of a volcanic eruption.

10. Explain the causes of (a) Trade Winds, (b) Monsoons, (c) Land and Sea breezes. Where and when do they blow?

Sources of reference: These examination papers are taken respectively from the Calendars of the University of the Cape of Good Hope for the following years:- 1876, 1880, 1884, 1887-88, and 1890-91.

---

A P P E N D I X 9

THE EXAMINATION PAPERS OF THE BOARD OF PUBLIC EXAMINERS IN LITERATURE AND SCIENCE FOR THE PUBLIC SERVICE CERTIFICATE, JULY, 1860; JANUARY, 1861; JULY, 1862; JANUARY & JULY, 1863; & JANUARY, 1864.

Examination paper for the Public Service Certificate, July, 1860

1. Define a line of watershed. Describe the general line of watershed of North and South America; their river basins; the seas and oceans into which their waters are discharged; and the position and character of their several outlets.
2. What is the line of watershed which separates the northern drainage of Europe from the southern? Name the rivers fed by each, and the seas or oceans into which they flow.
3. State all you know respecting "hurricanes" under the following heads:
  - (a) Their relative motions in the two hemispheres.
  - (b) The path of any one hurricane, its velocity and extent.
4. Supposing the waters of the Mediterranean to be removed, describe some of the physical characteristics of its channel or basin.
5. State all you know of the tides and currents of the Mediterranean, and of the effects of the volcanic action to which its bed is occasionally subject.
6. What would you adduce to prove the great amount of evaporation which takes place over the surface of the Mediterranean? To what causes may this excessive evaporation be traced?

.....

Examination paper for the Public Service Certificate, January, 1861

1. State all you know of the extent, direction, and elevation of the great table-land of Central Asia, its influence on the general climate of that continent, and the extent to which it is connected with its river system.
2. Explain the following facts connected with the distribution of rain over the surface of the globe:
  1. Rain is most abundant in the equatorial regions, and

31.

the average of "annual fall" steadily decreases towards the pole.

2. The average of "annual fall" decreases in ascending from low to elevated plains.

3. The average of "annual fall" decreases as we recede from coasts to the interior of continents.

3. Name the most extensive of "the rainless districts" of the globe both in the Old and New World. Can the existence of such districts be in any way accounted for?

Explain the phenomenon of dew and hoar-frost, showing the circumstances most favourable to their formation.

4. Throughout the continent of America the mean annual temperature is lower than that of the Old World when compared in corresponding latitudes: to what is this to be ascribed?

Account, also, for the fact that the western districts of Europe have a higher temperature than the eastern.

5. To what influence do you ascribe the tides of the ocean? How do you account for the neap and spring tides? What are tide bores? Give instances in different parts of the world, and explain how they are accounted for.

6. Name the regions most subject to hurricanes or revolving storms. In what respect, as to rotatory motion, do the hurricanes of the northern hemisphere differ from those of the southern? What are the monsoons, and in what regions do they prevail?

.....

Examination Paper for the Public Service Certificate, July, 1862

1. Give an outline of the physical features of this colony, including its rivers, mountain ranges, and plateaus, the configuration of its shoreline, and the influence of the ocean upon its climate.

2. The Himalayas, in Asia, stretch from east to west; the Andes, in South America, from north to south. In what different way does each range, from its direction affect the climate of the region through which it extends.

3. State what you know of those laws of physical condition which pervade our earth and modify, in its different regions, the extremes of cold and heat, of moisture and dryness,

4. How do you explain the fact that, in the Indian Ocean, the trade winds pass into periodic winds, which blow in opposite directions? What are those winds called, in what directions do they blow, and during what periods?
5. From the calm-belts of Cancer and Capricorn, currents of air occasionally flow both north and south. Those that flow towards the equator are rainless, those towards the poles abound in moisture and are rain winds. Explain this.
6. Contrast the currents of the Pacific with those of the Atlantic; accounting, if you can, for the marked differences that occur. Trace the progress of the tidal wave, from its origin in the circumpolar seas of the south to the northern limits of the Atlantic.

.....

Examination Paper for the Public Service Certificate, July, 1863

1. Comparing the isotherms of the Northern with those of the Southern Hemisphere, how do you account for the marked dissimilarity in their bendings? In which zone does this prevail the most?
2. Does the waste of water from evaporation wholly account for the current which constantly flows into the Mediterranean? If not, what other cause can be assigned?
3. Were the earth wholly covered with water, in what direction would the tide wave flow? Describe its course through the several oceans, commencing with the Pacific.
4. What are the monsoons? Where do they prevail? In what months do they change? What relation have they to the trade winds? Do winds of a similar character prevail in any other parts of the world?
5. On which side of the Equator do we find its zone of calms? How is this accounted for? Are there zones of a similar character besides this? If so, name them.
6. In what direction do the mountain chains of Asia run? What effect does this produce on the climate of the different regions of that continent?

.....

Examination Paper for the Public Service Certificate, January, 1863

1. Give the source, course, river basin, tributaries, and estuary of the Amazon. State whatever is peculiar, in its physical characteristics.
2. How are the perennial currents both of the Ocean and Atmosphere compensated? In what respect do these currents modify the extremes of temperature in different countries?
3. Name the countries and their zones, which are the natural districts of the palm and banana; - of tree ferns and figs; - the cinnamon and cassia; - the cactus; the vine; - the sugar cane and maize.
4. What are the characteristics of the fauna of the following regions:- South Africa - Chili and Peru; - Australia; - South America East of the Cordilleras.
5. Describe the bendings peculiar to the Isothermal lines, as they cross the continents of the Old and New World, and also the Pacific and Atlantic Oceans; distinguishing those which are concave to the Equator from those which are convex to it. How are they accounted for?
6. What can you adduce in proof of the gradual upheaval of the bed of the Pacific? Name its island groups and the region where they most prevail. In what respect do these groups differ in their physical conformation from each other?

.....

Examination Paper for the Public Service Certificate,  
January, 1864

1. Explain the formation of the Tide Wave and its progress through the Ocean. In what respect does it differ from the Wind Wave? Give instances of its abrading effect on the bottom of the sea.
2. Where is the Saragossa Sea? What are its peculiarities, and how are they explained? Are there any other tracts of the ocean of a similar character?
3. Name the countries where the difference between the Isothermal, Isothermal and Isochimal lines is the greatest.
4. On issuing from the Straits of Florida the great Oceanic Current which at the Equator had a Westerly course passes through the North Atlantic from South West to North East. How is this accounted for?
5. Name the principal fresh water lakes in the world, and state the circumstances which may account for their formation.
6. To what cause or causes do you assign the continuous circulation of its waters that prevails throughout the Ocean?

Sources of reference: Reports of the Public Examiners for 1861, pp. 18 & 27; 1863, p. 27; 1864, p. 7; 1863, p. 28; and 1864, p. 18.

---

A P P E N D I X 10

THE EXAMINATION PAPERS OF THE BOARD OF PUBLIC EXAMINERS IN LITERATURE AND SCIENCE FOR THE THIRD CLASS CERTIFICATE, 1865 TO 1868 INCLUSIVE (Set in January of each year.)

Examination paper for the Third Class Certificate, 1865

1. Name the chief mountain ranges of the world, the direction in which they lie, the elevated table lands connected with them, and their river systems.
2. Give instances of contrast of climate at places whose mean annual temperature is the same, pointing out the circumstances which account for the contrast in each case.
3. Were the relative proportion of land and water on the earth's surface reversed, what would be the probable effect on its physical condition?
4. How are we enabled at any time to determine the quantity of moisture in the atmosphere? Is evaporation confined within any particular range of temperature? In what region of the earth does it most abound? Show that the trade winds promote evaporation in the zone where they prevail.
5. State what you know of the altitude of the line of perpetual snow in different parallels, and the cause of difference of altitude on the northern and southern slopes of the Himalaya range.
6. Name the seas where no sensible tide prevails, and account for the fact in each case. Explain the cause of the neap and spring tides. Why is the Antarctic Ocean said to be the birthplace of the tide wave?

Examination paper for the Third Class Certificate, 1866

1. Contrast the climate of the East Coast of Labrador with that of the West Coast of Europe on the same parallel, and account for the difference.
2. The South Polar Current, until it reaches the West Coast of South America, flows in the same direction as the current

from the Equator when it issues from the Gulf of Mexico. Can this apparent anomaly be explained?

3. Suppose three strata of water of the following temperature, A of the Temperature of 50 degrees, B of  $39\frac{1}{2}$  degrees, C of 34 degrees. What would be their relative positions if found in the ocean? Apply this in support of the theory of an under current of comparatively high temperature in the Polar seas; and state what you know of its action on icebergs.

4. Explain the phenomena of the tide wave, and name those regions of the ocean where it is necessarily least felt.

5. Why are our North-west gales accompanied by heavy falls of rain on the west coast of the Colony, whilst on the East, rain accompanies the South-East gale?

6. Account for the fact, that at the level of the sea, the average height of the Barometer is the least at the Equator.

Examination paper for the Third Class Certificate, 1867

1. Give an outline of the configuration of the African continent and its physical aspect. What do you know of its tropical regions?

2. Explain the circumstances which give rise to the tide-wave. What is meant by "establishment," and by the lagging of the wave? What are tidal bores, and how are they accounted for?

3. What are the limits, between which the depths to which solar heat penetrates into the solid crust of the earth in various latitudes, are supposed to lie? What relation exists between the temperatures at these depths and the isotherms of the place?

4. It has been estimated that the water discharged by rivers into the Mediterranean is but a third of that which passes from it in vapour. Explain this, and state in what way the deficiency is made up.

5. Give an outline of the regions of subsidence and upheaval now existing in the bed of the Pacific. Mention the evidence adduced in support of this.

6. Give an outline, (a) of the constitution of the atmosphere. (b) of the law of decreasing density, in passing from the lower to the upper strata. (c) of the purposes it fulfils in the economy of our world.

Examination paper for the Third Class Certificate, 1868

1. What are the chief elements of climate? Name the circumstances by which they are principally modified. Account for the great difference of climate at Brazil, on the East Coast of South America, and at Peru, on the same parallel, on the West Coast.
2. What are isothermal lines? Name some of the regions where their concave and convex deflections in respect to the equator are the greatest.
3. In what parts of the equatorial zone do we find existing the marked line of perpetual snow? At what latitude is it on a level with the sea?
4. In what directions, generally speaking, do the cold and warm currents of the ocean pursue their course? State any instance you know in which the cold stream occupies the surface, while an under current of higher temperature pursues a contrary direction.
5. Explain the causes of the tides; of their rising on opposite meridians at the same time, of their appearing as spring and neap tides. Trace over the surface of the several oceans, the direction of the tide wave, and account for what are called "bores," - naming the chief of them.
6. Name the zones of calms, and state the circumstances in which they have their origin. Where are they situated? Do they prevail equally in all the oceans?

Sources of reference: These examination papers are respectively taken from the Reports of the Board of Public Examiners for the following years:- 1865, pp. 15-16; 1866, pp. 35-36; 1867, p. 56; 1868, pp. 36-37.

---

A P P E N D I X 11.MATRICULATION PAPER OF THE UNIVERSITY OF THE CAPE OF GOOD HOPE, 1874 (Taken from the University Calendar for 1875.)

1. Give a brief description of the stratified rocks, and a fuller account of the Devonian and Carboniferous systems.
  2. Mention the principal centres of recent volcanic action, and describe some of the physical effects of volcanic action generally upon the surrounding countries.
  3. Show the connection which exists between mountain and river systems. Mention six of the highest mountain ranges and six of the largest rivers in the world, describing the physical features of the countries through which they pass.
  4. Draw an outline map of Africa, showing its boundaries, mountains, rivers, lakes, and plains; and marking the position of the equator, and the latitude and longitude (approximately) of each of the four points on the extreme north, east, south, and west of the continent.
  5. Mention the principal causes which affect the climate of a place. What are the distinguishing features of insular and continental climates respectively?
  6. Give some account of the climate at the following places, with such reasons as you may be able to adduce in explanation of marked points of difference, - viz, Gibraltar, Moscow, Quito, San Francisco, Buenos Ayres, Borneo.
  7. Name the principal constituents of the ocean and atmosphere respectively, and state some of the causes which affect the composition of each, and the proportions in which the principal constituents are generally found.
  8. Account for the currents, tides, and waves of the ocean, and indicate the respective courses of the principal oceanic currents.
-

A P P E N D I X 12THE GEOGRAPHY QUESTIONS WHICH WERE SET BY THE UNIVERSITY OF THE CAPE OF GOOD HOPE IN THE MIXED GEOGRAPHY AND HISTORY PAPERS FOR MATRICULATION IN 1876, 1877, 1878, 1879 & 1883History and Geography, 1876

(Calendar for 1877, pp. vi-vii.)

1. Draw a map giving the coast-line of Europe, and mark by name all the principal capes or promontories. (If you are unable to draw the map, marks will be given for an accurate description, in words, of the coast line.)

2. Describe the course or position (as may be) of the following:- The Humber, Pentland Firth, Milford Haven, Flamborough Head, The Solent, Holyhead, Jersey, the Clyde, Dundrum Bay, Ben Lomond, the Severn, Waterford, the Cotswold Hills.

3. Mention the capital cities of Europe, marking accurately the position of each, with its Latitude and Longitude (approximately).

A person starts from London to visit the European capitals. In what order should he take them, if his object is to reduce the actual length of his journey as much as possible?

4. Define the position and extent of Nova Scotia, South Australia, New South Wales, The Transvaal Republic, The Deccan, Afghanistan, Burmah, Bolivia, Herzegovina, Pennsylvania, British Guiana, Ohio, Labrador; and add remarks upon their physical characteristics, inhabitants, products, and general condition.

5. Enumerate concisely the Island groups of the Pacific Ocean.

(The five remaining questions in this paper are purely historical.)

History and Geography, 1877

(Calendar for 1878, pp. vi-vii.)

1. Enumerate the colonies and foreign possessions of Great Britain and of the Netherlands, in the Eastern Hemisphere.

2. Give the names of the rivers which fall into the North Sea, stating the countries through which they flow. Describe one of the chief rivers in detail.

3. What and where are the following?

Alexinatz, Astrakhan, Auckland, Bangkok, Belfast, Bristol, Brisbane, Cabool, Cangire, Mull of; Dresden, Dungeness, Helder, the; Kordofan, Matterhorn, The; Milford, Montenegro, Munich, Ookiep, Ottawa, Punjaub, The; Ras-el-Hadd, Titicaca, Yesso, Zutphen.

4. Mention the Republics of the world, with their capitals; give a general description of one of the minor Republics. (The five remaining questions in this paper are set wholly on history.)

History and Geography, 1878

(Calendar for 1879, pp. 6-7.)

(The first six questions are entirely historical.)

7. A Russian vessel sails from the mouth of the Don through the Suez Canal to the mouth of the Amour. Trace its course, stating in proper order the seas, straits, gulfs through which it passes, the promontories which it doubles, the principal seaports at which it may conveniently touch.

8. Give as accurately as possible the position of the following:- Besika Bay, Gallipoli, Shumla, Adrianople, Skipka Pass, Varna, Bucharest, Batoum, Kars, Erzeroum.

9. Trace the courses of the Mississippi, the Ganges, the Danube, the Rhine, the Rhone, mentioning in order the towns on their banks.

10. State what you know of the empire of Brazil, its physical features, and chief political divisions.

11. Write a brief essay on one (only one) of the three following subjects:- (a) Livingstone's Discoveries, (b) Stanley's Journey across Africa. (c) The principal voyages of Arctic Discovery.

History and Geography, 1879

(Calendar for 1880, pp. 6-7.)

(Questions 1, 2, 4, and 7 are purely historical, and Questions 3, 9 and 10 are geographical only to a very limited extent.)

3. Give an account of the union of the several Saxon kingdoms under one Sovereign. Shew that the physical features of the country greatly favoured this union.

8. Give the names and positions of those towns in Great Britain, the trade of which would be most seriously affected by (a) the failure of the cotton crops; (b) a strike among

the shipbuilders; (c) the exhaustion of our coal mines.

9. Where are the following places, and with what historical events are they connected? Ramilies, Trafalgar, Runnymede, Bannockburn, Breda, Naseby, Culloden, Rochelle, Ryswick, Sepastopol, Elba, Bunker's Hill.

10. Give the names and positions of those places in Hindostan which are closely connected with the foundation and establishment of the British power in that country.

History and Geography, 1880

(Calendar for 1881, pp. 6-7.)

(The first six questions are purely historical.)

7. Draw an outline of the coast of Continental Europe, marking specially the capes, bays and gulfs, and mouths of rivers.

8. Describe briefly each of the following:- Auckland, Algiers, Baalbec, Batavia, Caucasus, Chesapeake, Cyprus, Erie, Funchal, Fundy, Jordan, Khiva, Labuan, Liberia, Montreal, Quito, Rhode Island, Saumur, Yucatan, Zambesi.

9. Name the Japan Islands; state the limits of latitude and longitude between which they lie; write a few notes about the country, people, government, and religion.

10. Exhibit and describe the whole course of the rivers - Orange, Elbe, Thames, Gamtoos, Mississippi, and Amazon.

11. Write as full an account as time permits of any one of these countries:- The Austrian Empire. Equatorial Africa. Egypt.

History and Geography, 1883

(Calendar for 1884, pp. 105-106.)

(The first four questions are entirely historical.)

5. Where are these places situated: Luxembourg, Bordeaux, Leeds, Stockholm, Alexandria, Perth, Rio Janeiro, Glasgow, Seville, Quebec, Brindisi, Washington, Benares, Smyrna, Limerick?

6. Draw a skeleton map of Europe, filling in the different countries (with the chief town of each), rivers, mountains, and seas.

7. A ship bound from Liverpool for Calcutta via the Cape, hugs the coast the whole way as far as possible. What headlands, bays, gulfs, straits and mouths of rivers does it pass in its course?

8. "There are only two really great mountain-systems in the world." Give their extent and direction, and name the several ranges that they each comprise.

---

A P P E N D I X 13

THE EXAMINATION PAPERS OF THE UNIVERSITY OF THE CAPE OF GOOD HOPE FOR THE SCHOOL EXAMINATION FOR HONOURS, 1880, 1882, 1883, 1885 and 1886.

School Examination for Honours, 1880

(Calendar for 1881, pp. 192-193.)

1. How are ocean currents caused? Explain the difference between a drift current and a stream current. A bottle, thrown overboard off Cape Horn, was subsequently picked up near Ireland. Trace its probable course.
2. What are the chief phenomena of Volcanic Action? Give the chief facts of Volcanic distribution.
3. Give some account of the Trade-winds and the Anti-trades. To what causes do they owe the direction of their flow?
4. State what you know about Glaciers, noting especially the cause of their motion, the crevasses, and moraines. What are the signs of past glacial action?
5. To what causes are differences of climate due? What physical properties of water are important in connection with the subject of climate?
6. "Africa is the only one of the continents of the globe which has a large extent of land on each side of the equator: and upon its surface, therefore, are marked more clearly than in any other part of the world those natural landscape belts which result from the unequal distribution of heat and moisture in different latitudes." (Keith Johnston.) Give some comments on this passage.

School Examination for Honours, 1882

(Calendar for 1883, p. 353.)

1. "From Alpine snowfield to Ocean, and from Ocean to Alpine snowfield, there is a constant circulation of water." Trace

this circulation with special reference to the following points: (a) Evaporation, its causes and results. (b) Transfer of aqueous vapour. (c) Condensation, its causes and results. (d) Precipitation. (e) The downward flow of snow and ice. (f) The river and its action on the land.

2. What gives rise to seasonal changes of temperature?

Explain the following facts: (a) Para (in Brazil) under the Equator has two periods of maximum temperature, and two periods of minimum temperature in each year. (b) The mean annual range of temperature in the Azores is not more than 8 Degrees Fah. (c) To the N.E. of Yakutsk in Siberia the difference between the mean January temperature and the mean temperature was, in 1869, more than 147 Degrees Fah.

3. Give some account of the action of the sea upon the land. How is it that, while some coast-lines have but few bays and promontories, others are much indented?

4. What is an Earthquake? How far is it true that the earthquakes are caused by volcanoes?

5. Draw a sketch-map of the North and South Atlantic Ocean, and fill in the ocean currents, marking the direction of their flow by arrows.

School Examination for Honours, 1883

(Calendar for 1884, p. 261.)

1. What is meant by the Rotation of the Earth, and what by the Revolution of the Earth? Explain, in connection with these motions, (1) the phenomena of the Seasons, (2) the varying length of the Day and Night (a) at different points of the Earth's surface, (b) at different times of the year.

2. Give some explanation of the following:- (a) Other conditions being similar, a clear night is colder than a cloudy night. (b) Sometimes the steam from the funnel of a steam-engine rapidly disappears, at other times it floats in the air for some time. (c) Air which contains much vapour of water is lighter than dry air at the same temperature. (d) A cloud often clings to a mountain summit though a strong wind is blowing.

3. Write a short account of Cyclones and Anticyclones, shewing clearly their connection with atmospheric pressure.

4. What gives rise to the phenomena of the Tides? Explain the following facts:- (a) The Tides flow more rapidly at some places than at others. (b) The rise and fall of the

43.

Tides is greater at some places than at others. (c) The Rise and fall of the Tides is greater at some times than at others.

5. Give some account of (a) an Artesian Well, and (b) a Geyser.

School Examination for Honours, 1885

(Calendar for 1885-1886, p. 156.)

1. Write a short account of the relative age and the arrangement of rock-formation.

2. Draw a sketch-map of South Africa, and fill in the coast-line, the principal mountain ranges, the principal rivers, and the ocean currents.

3. Write a brief account of any two of the following subjects: (a) Waves, (b) Tides, (c) Currents, (d) Springs.

4. What do you know of the nature and composition of the atmosphere, and of "those features of the atmosphere - its heat, moisture, and motions - which bear more directly on climate"?

5. Write a short essay on "The principal Races of Man."

School Examination for Honours, 1886

(Calendar for 1886-1887, p. 169.)

1. Write a brief account of the earth's motions.

2. State what you know about the formation of rain, and the mean annual rainfall of the globe.

3. Write a brief account of the ice of the sea.

4. Describe any one of the principal volcanic regions of the earth, and state some of the views which are held with regard to the causes of earthquakes.

5. How is the climate of a place influenced by its distance from the equator, distance from the sea, height above the sea, and prevailing winds?

---

A P P E N D I X 14THE EXAMINATION PAPERS OF THE UNIVERSITY OF THE CAPE OF GOOD HOPE FOR THE SCHOOL HIGHER EXAMINATION, 1887, 1889, 1890 and 1891School Higher Examination, 1887

(Calendar for 1887-1888, p. 175.)

1. Explain the following terms: Meridian, Low latitude, High latitude, Zenith, Celestial pole.
2. Explain fully how the humidity of the air is expressed and what is meant by the term dew-point.
3. Give a short account of the distribution of the atmospheric pressure over the surface of the globe.
4. State what you know about the origin and occurrence of local winds such as the Mistral, Sirocco, the Harmattan, the Bora, the Fohn.
5. Mention some of the facts referring to the depths, temperature and other features of the great ocean basins, which have been brought to our knowledge by observations made with the sounding-line, the dredge, and the thermometer.
6. Mention the principal ingredients besides common salt in sea water, and explain the relation which some of these ingredients bear to the sea plants.
7. Give a short account of the currents in the Pacific Ocean.
8. Explain the statement, that the sea receives and preserves the materials out of which stratified rocks will in course of time be formed, and also distinguish between aqueous and igneous, or stratified and crystalline rocks.
9. Give a short account of the work of running water.
10. Write a short essay on any one of the following subjects:-  
The Karroo, the Pampas, Mount Vesuvius, the Dead Sea.

School Higher Examination, 1889

(Calendar for 1889-1890, p. 182.)

1. What is meant by the Longitude and the Latitude of a place? Explain fully how the Longitude of a place is found.
2. Explain the method of measurement, called triangulation, which is used in mapping a country.

3. Explain how the pressure of the atmosphere is affected (1) by temperature and (2) by aqueous vapour.
4. Enlarge upon the following statements:- "All movements of the air arise out of differences of pressure. The law governing the direction of these movements may be stated thus:- Air always flows in spirally from areas of high pressure to areas of low pressure."
5. What is the composition of sea-water? What is seen when a drop of sea-water is evaporated under the microscope?
6. Give a short account of the results of the observations made by the Challenger with regard to the temperature of sea-water.
7. What evidence is there which goes to demonstrate the high internal temperature of our globe?
8. Draw and describe sections illustrating the position and formation of surface springs, deep-seated springs and intermittent springs.
9. Explain the changes which have occurred in the formation of stratified rocks from crystalline rocks.
10. Draw a map showing the coast lines of the Continents to the West, North and East of the Indian Ocean, the islands, the directions of the sea-currents and trade-winds, and the mouths of the principal rivers which flow into the ocean: with explanatory notes.

School Higher Examination, 1890

(Calendar for 1890-1891, pp. 179-180.)

1. Give a sketch of the earth's path round the sun.  
Explain the terms Perihelion, Aphelion, Summer Solstice, Rotation and Revolution of the Earth, Meridian, Zenith, Celestial Pole.
2. Explain the method of measurement, called triangulation, which is used in mapping a country.
3. Give a sketch of the coast lines of the Northern Atlantic Ocean, with the isothermal lines: and explain the unequal distribution of temperature in January.
4. Give an account of the saline ingredients of sea water.
5. Enlarge upon the following statements:-
  - (a) The sea regulates the distribution of temperature:
  - (b) The sedimentary rocks are mainly formed from the materials carried by the rivers into the sea, or worn off by the sea from its shores.

6. Give a detailed description of volcanoes.
7. What is a "mineral spring"? State what you know of the mineral springs of South Africa.
8. Give a sketch of the course of the Orange River with its principal tributaries. Explain also the terms Delta, Right Bank, Drainage Basin, Watershed, Bifurcation.
9. Write a short essay on any one of the following subjects:-  
The Karroo. Table Mountain. The Nile. The Monsoons. The climate of the district we live in.

School Higher Examination, 1891

(Calendar for 1891-1892, pp. 198-199.)

1. Describe the earth's path round the sun. Define the terms Tropic of Cancer, Tropic of Capricorn, Rotation, Revolution.
  2. Give an account of the causes of the variations in the pressure of the atmosphere, and explain how the atmospheric pressure can be measured by means of the mercurial barometer.
  3. Mention the important qualifications of the general law that the fall of rain, being dependent upon the amount of evaporation, is greatest in tropical regions, where the largest supplies of vapour pass into the air, and decreases with the gradual sinking of the temperature towards the poles.
  4. Give some examples illustrating the fact that the action of wind in some localities changes the configuration of the surface.
  5. Give some account of the results of the observations made by the Challenger with regard to the temperature of sea water and the conditions of the deep-sea bottom.
  6. State as fully as you can what you know about "tides."
  7. Distinguish between sedimentary and crystalline rocks, and give examples from rocks occurring in South Africa.
  8. Write a short essay on any one of the following subjects :-  
The Cape Peninsula. Algoa Bay. The Climate of the Eastern Province. The Orange River.
  9. Draw a map of South America, marking Coast-line, Rivers, Mountain ranges, Capes and Bays.
-

A P P E N D I X 15REPORTS SUBMITTED BY SCHOOL INSPECTORS ON GEOGRAPHY TEACHING DURING THE PERIOD OF LANGHAM DALE1. Special Report on the State of Education in the Western Districts, by A. N. Rowan, 1876

Geography, Grammar and History are taught with varied success in most of the higher schools. In our elementary schools geography is the favourite subject and then comes grammar. In some of the better class oral instruction has superseded the use of textbooks which are introduced at a later stage when the pupils have acquired some general knowledge of the subject. (Report of Superintendent-General of Education for 1876, p. 40.)

2. Special Report of the State of Education in the Midland Districts, by F. H. Ely, 1876

I should like to see a little more life thrown into the teaching of Geography, Grammar, and History. Teachers should not be satisfied with a mere parrot-like knowledge on the part of their pupils. A class in a first class undenominational public school once brought up Wilmot's Geography of South Africa. I put down the book and asked them in what division they were living? not a boy could tell. I tried the rivers, I tried the mountains with the same result, until the teacher, unable any longer to restrain himself exclaimed "You know it? The great southern range", when one of the boys having got his cue rattled off the rest of the answer as a beggar would his patter. (Report of S.-G. E. for 1876, p. 47.)

3. Supplement to the Report of the S.-G. E. for the year ending 31st June, 1880

Geography has always been a favourite subject in most of my schools; but it is not generally taught in a way to interest the pupils. The questions are frequently of the stereotyped form, and one of the most attractive subjects is thereby rendered dry and uninteresting to the children. In several schools, I am happy to say, a more rational system is adopted. The teacher, instead of beginning with the distant and unknown, and ending with what is near and known, reverses the order, and begins with the immediate surroundings of the child. In the more advanced classes geography may be rendered doubly attractive by combining with it historical and other associations. (Report of the S.-G. E. for 1880, p. 14.)

4. Report by A. N. Rowan, Deputy Inspector, Western Districts, January, 30th, 1886

Geography is taught in almost all the schools in my district, and under this head a very sensible improvement has taken place. In several of the schools a more rational system is now adopted. Teachers no longer confine themselves to the mere pointing out of places on the map, but take pains to make this important subject as interesting as possible. The schools are, on the whole, fairly well supplied with maps, but globes and blank maps are still conspicuous by their absence. Map drawing on slate and on paper is carefully attended to, and the specimens shown at inspection are often neatly and tastefully executed. Cape geography is becoming more popular, and Physical Geography is gradually but surely making its way into the most of the better class of schools. (Report of S.-G. E. for 1886, p. IX.)

5. Report by J. Samuel, Deputy-Inspector, North Eastern Districts, 22nd January, 1886

Generally speaking, geography is fairly taught, and it is rare to find a child who passes in other subjects fail in this. Most of the schools are well supplied with approved maps, which are intelligently used. Occasionally I have found the maps used only as puzzles on which the children were required to pick out places by their names. Very few pictorial maps, shewing boldly the various divisions of land and water, are in use. Such a map as Cameron's Pictorial Map is of great value in communicating clear elementary ideas on geography.

The mode in which physical geography is taught is generally excellent; the teachers enter into the subject with zeal and intelligence, and the pupils are able to give a clear and correct account of the great phenomena of nature. Good useful textbooks are read. It is a matter of regret that no good textbook is available for the teaching of the physical geography of South Africa; few pupils can explain the causes of the prevailing winds or of the great variation of rainfall in the Colony. (Report of S.-G. E. for 1886, p. xlvii.)

6. Report on the state of education in the Southern Districts by J. H. Brady, Deputy Inspector of Schools, 1886.

Geography is taught in nearly every school, and the results, as far as the teaching of the subject extends, are good. As a rule, however, the pupils have merely

learned lists of names and the positions of places on a map. In not a few schools I have found that children have learnt, and can glibly and correctly repeat, lists of capes, peninsulas, etc., without having any notion of what a cape or a peninsula is. Now from an educational point of view, all this is merely a waste of time; the children would have received quite as much benefit as if they had been set to learn by heart a few lines of a Sanscrit poem. I hope, however, that by the introduction of geographical readers, a truer notion of the scope of geographical teaching will be obtained, and the lessons will be made more interesting and instructive, and of greater use in giving the pupils some idea of the peoples, products, wonders and beauties of the world they live in, and of the great universe of which that world is an atom. (Report of S.-G. E. for 1886, p. lv.)

#### Elements of Natural Science

As a rule the only science taken in the elementary schools is physical geography, a beautiful and valuable subject if properly taught; unfortunately, however, in most cases it is not properly taught; but degenerates, as does every subject in which the error is possible, into a learning by heart of definitions and lists, to the complete neglect of the study of the physiographical part of the subject, the explanation of principles, and the evoking of habits of intelligent observation. (Ibid., p. lv.)

#### 7. Inspector Rowan's special report on the state of education in the Western Districts for 1888

Geography continues to be the favourite subject in almost all the schools, and the instruction in it in many of them has undergone marked improvement. More intelligent methods are now superseding the old practice of repeating long lists of places and pointing them out on the maps. Globes and blank maps, however, are still conspicuous by their absence in most of the schools. Cape geography is not neglected. (Report of S.-G. E. for 1888, p. 7.)

#### Elementary Science

Physical geography, one of the requirements for Std V, is taught in 72 schools, and with fairly satisfactory results. (Ibid., p. 7.)

#### Inspector Brady's special report for 1888. Southern Districts

Geography and history are still weak points, and, as taught in many schools, are calculated chiefly to exercise the memory. The introduction of good Geographical and

Historical readers, which is now becoming pretty common in the better-class schools, and which I should like to see universal, will I hope, act beneficially. (Report of S.-G. E. for 1888, p. 31.)

Inspector Samuel's special report on schools, for 1888

The teaching of geography leaves much to be desired. It is still too much a mere matter of naming without description. (Report of S.-G. E. for 1888, p. 32.)

Superintendent-General's discussion of inspectors' reports, 1892

"Mr Nixon reported:- 'Descriptive geography is, as a rule, taught satisfactorily but physical geography is almost invariably weak. The common practice is to learn off definitions and explanatory paragraphs by heart. A series of blackboard lessons with due revision would be found to answer much better, especially in elementary schools.' Mr Fraser practically says the same thing. His words are: 'Geography, as mere topography, is studied to some purpose. In physical geography only the best schools make a creditable appearance. Even in these there is too much of mere book-work. The application of the lessons learnt from the book to the phenomena of daily life is scarcely thought of and seldom practised.' Mr Noaks inclines to the same opinion. 'In physical geography,' he says, 'a tendency was too often shown to repeat the exact words of the textbook; though allowance must be made, in this respect, for pupils who are still so far unfamiliar with the English language as to find a difficulty in putting the substance of the textbook into their own words. It is noteworthy, however, that in history, this tendency was far less conspicuous.'

As to map-drawing accounts vary. In Mr Fraser's circuit, 'considerable attention is given to map-drawing. Map-drawing from memory is often performed with much neatness and correctness'; in Mr Noaks', 'the drawing of maps is neglected. In two schools only had much attention been given to this point; and in these it was neatness of execution in making fac-simile copies rather than the faculty of drawing maps from memory that was being cultivated.'

'In no school that I visited did I find a wall-map of the district in which the school was situated; yet, as every skilled teacher knows, this is one of the first requisites towards the proper teaching of geography.'

The Census maps of the Surveyor-General's Department, although prepared for a quite different purpose, might be found useful in this respect. It is, at any rate, highly absurd to hang up a map of Africa in front of a class of children, whose intelligence has had little chance of development, and begin to teach them the names of countries, capes, and bays before they have formed any clear conception of what a map is.'" (Report of the S.-G. E. for 1892, p. 9.)

---

A P P E N D I X 16THE EXAMINATION PAPERS OF THE UNIVERSITY OF THE CAPE OF GOOD HOPE FOR THE SCHOOL HIGHER EXAMINATION, 1895, 1897, 1898, 1900, 1901.School Higher Examination, 1895

1. What is meant by the longitude and latitude of a place on the Earth's surface? How do travellers exploring new countries or seas find their approximate longitude and latitude?
2. (a) Why does the air press on the Earth's surface?  
 (b) Why is its pressure different at different heights above sea-level?  
 (c) Mention some of the principal causes of change of atmospheric pressure at the same place.  
 (d) Describe and explain the action of an ordinary mercurial barometer.
3. Give some account of the following periodical and occasional winds:- (1) The Monsoons; (2) Land and sea breezes; (3) The Mistral; (4) The Sirocco; (5) The Harmattan.
4. What are the principal substances found in solution in sea water? Mention some seas or parts of seas where there is either more or less than the average amount of substances in solution, and explain why this is so.
5. What is the principal cause of superficial ocean currents? Mention and describe the course of those which principally affect the climate of South Africa.
6. What is meant by the 'relief' of land and of the ocean bed? Illustrate by an imaginary section of the Cape Colony, extending from the Orange river near Kimberley to the Agulhas bank, naming the different ridges, plains, and table lands intersected.
7. Describe the principal ways in which (1) the air, (2) the sea, (3) rivers and springs, (4) ice, (5) volcanic action, are continually at work altering the present distribution of land and sea.
8. What is meant by the climate of a place? Mention the

principal circumstances on which climate depends. At high elevations on the mountains of Southern Europe plants are found which are the same or closely allied to plants in Norway and the Arctic regions. What changes of climate in Europe are supposed to have caused this?

9. Describe the six zoological regions into which the Earth's surface has been divided, giving a general idea of their boundaries, and mentioning some forms of animal and vegetable life which characterize each region.

(Calendar for 1895-1896, pp. 179-180.)

School Higher Examination, 1897

1. Give an account (with diagram) of the principal motions of the earth, accounting thereby for the alternations of day and night and the seasons.

2. What in lbs. per square inch is about the atmospheric pressure at sea-level? What causes this pressure to vary (i) at the same place, (ii) at different places at the same level, (iii) at different levels? What is meant by an "isobar"?

3. What is an "isotherm"? What are the principal causes on which the average annual temperature of a given place on the earth's surface depends? Why do the more oblique rays of the sun warm the earth's surface less than those which are more perpendicular?

4. What are the principal salts found in sea-water, and what is about the specific gravity of sea-water? Give a brief general account of the different temperatures of the sea in different latitudes and at different depths.

5. Give an account of the principal ocean currents, their cause and course, and the effect they have on climate, mentioning especially those which affect the climate of South Africa.

6. Explain what is meant by stratified rocks. How are they supposed to have been formed? Why are they now very often found not in horizontal beds but variously tilted up and contorted?

7. Give an account of springs, both superficial and deep-seated, of artesian wells, and of hot springs.

8. How do rivers gradually alter the distribution of the land and sea? Give some account of the deltas of the

## Nile and Mississippi.

9. Apply what you know of Physical Geography to give some account of the climate of the Cape Colony as to average temperature, rainfall, and prevalent winds, distinguishing between (i) the north-western region, (ii) the south-western region, (iii) the south coast region, (iv) the interior midland region, (v) the eastern region.

(Calendar for 1897-1898, pp. 294-295.)

School Higher Examination, 1898

1. Give a general account of the physical geography of the African continent, referring briefly and generally to (1) its geographical position in latitude, (2) its geographical position with reference to seas and oceans, (3) its river systems and lakes, (4) its deserts and well watered regions, (5) the principal ocean currents around it.

2. Explain the terms isobars and isotherms. Why do the latter often roughly follow parallels of latitude, but often differ considerably from them?

3. What is the primary cause of atmospheric motion? Give a general account of the most permanent or regularly periodical air currents which affect the climate of South Africa. What is meant by a cyclone and an anticyclone?

4. Describe the formation of icebergs, ice-floes and ground ice.

5. What is about the area in square miles of the Earth's surface which (1) is covered by the sea, (2) is dry land? Give a general short account of the three largest continuous land masses (1) Old World, (2) New World or America, and (3) Australia, with reference particularly to their size, geographical positions and the climates of North and South America.

6. What is Darwin's theory as to the formation of what are called fringing reefs, barrier reefs and atolls? Give some other reasons you may be acquainted with for believing in the slow upheaval or subsidence of different parts of the earth's surface.

7. Write a description of either the Nile, the Mississippi, or the Ganges.

8. Mention some of the principal indications from which it is concluded that regions now enjoying a warm or temperate climate were formerly the seat of glacial

action.

9. Give the meaning of six out of the following: (1) Artesian well, (2) avalanche, (3) geyser, (4) hoar frost, (5) lava, (6) mistral, (7) ozone, (8) river bar, (9) steppe, (10) water-shed.

(Calendar for 1898-1899, pp. 267-268.)

School Higher Examination, 1900

1. What is the cause of day and night? Why does the sun rise higher in summer than in winter? Why is it hotter in summer than in winter?
2. Why are places in the same latitude not always of the same temperature? Why do places with the same mean temperature not always have the same climate? Illustrate your answers by examples.
3. What are the causes of the prevailing S.E. and N.W. winds of South Africa? Why does the former bring rain to the eastern parts, the latter to the western parts of the country? Explain exactly in both cases how the rain-clouds are formed.
4. Give a short description of the nature of the sea-bottom from the shore to oceanic depths.
5. Give a short resume with illustrations of the part played by the sea in changing the earth's surface.
6. What evidences have we that the internal parts of the earth are at a high temperature? What would you infer regarding the previous state of the earth?
7. A shower of rain has fallen. Trace the various ways in which the water disappears from the surface of the ground.
8. What is a glacier? How is it caused? What does it do to its bed? What evidence is there that glaciers once occurred in places that are now much too hot for them to exist?
9. "Some mountains are mountains of elevation, and some are mountains of denudation." Explain and illustrate this statement.
10. Illustrate, by noting briefly the history of (a) a sandstone rock, (b) a limestone rock, the fact that portions of the earth which are now dry land were once under the sea.

(Calendar for 1900-1902, pp. 272-273.)

School Higher Examination, 1901

1. What observations afford the most convincing proof that the earth is very nearly spherical? Show how no actually performed "circumnavigation of the world" is a proof of the true shape of the earth.
  2. Explain how the succession of the seasons and the variations in the length of day and night are produced. (Diagram should be given.)
  3. How are changes in the temperature of the atmosphere brought about? What are the physical conditions which influence the mean annual temperature of any particular locality?
  4. Give an account of the chief phenomena which may be observed at a volcanic eruption. Name one active volcano in each of the following continents: Europe, Asia, Africa, America.
  5. What views are held as to the condition of the earth's interior.
  6. Explain, with examples, what is meant by (1) oceanic, and (2) continental islands.
  7. Compare the appearance presented by a raised beach with that of a river terrace.
  8. How do we know that the climate of any part of the world has varied throughout the earth's long history?  
(Calendar for 1902-1903, p. 804.)
-

A P P E N D I X 17INSPECTORS' REPORTS ON GEOGRAPHY TEACHING FOR THE MUIR PERIOD.Reports contained in the Superintendent-General of Education's Report for the year 1893

Inspector Milne (Circuit: Cradock, Albert, Tarkastad, Wodehouse, Barkly East, Glen Grey.)

In Geography and History the memory work was usually fairly well done. It is a pity, however, that some teachers don't seem to be aware that Geography and History can have any educative utility except as memory exercises.

Physical Geography for Std. V is miserably taught with very few exceptions. (Annexures, p. XX.)

Inspector Murray (Circuit: Graaff-Reinet, Somerset East, Jansenville, Aberdeen, Willowmore, Uniondale, Humansdorp.)

In two schools only did I notice a map of the Division, and one of these was a Poor School, which the teacher with praiseworthy efforts has furnished as fully as he could. The Blackboard seems but little used in teaching Physical Geography, though in a few cases I listened to some interesting class teaching. (Annexures, p. xxii.)

Inspector le Roux (Circuit: Ceres, Tulbagh, Piquetberg, Clanwilliam, Sutherland, Calvinia, Vanrhynsdorp, Namaqualand, Walfish Bay.)

The teaching of this subject (geography) is most deficient. Teachers do not seem to realise its importance, and take small pains to make the subject interesting and fascinating. To most the teaching of Geography means defining the commonly used geographical terms often in formal language not understood by the pupil. This is the initial stage. Then follows the burdening of the memory with names of places, rivers, mountains, etc., which are not made to have some living connection in the minds of the pupils with something interesting. Reference to parts of the country with which the pupils are familiar is seldom made, and such a thing as the making of a rough model out of clay, sand, water, etc., whereby to illustrate geographical terms, is never attempted. In the more advanced classes increased attention should be given to map-drawing. (Annexures, p. xxxiii.)

Inspector Woodroffe (Circuit: Komgha, Stutterheim, Butterworth, Idutywa, Ngamakwe, Tsomo, Willowvale, St. Marks.)

This subject, so far as descriptive geography is concerned, is one in which I could report favourably of every school except one in Order A were it not for the map drawing. In four or five schools this is fairly good, in the rest it is inferior. In schools under Order B and C, the geography is nearly always learned by rote. Thus not long ago I heard an isthmus defined as a narrow piece of land that joins two sentences together. Map teaching is too much neglected." (Annexures, p. xxxvi.)

Reports contained in the Report of the Superintendent-General of Education for 1894

Acting-Inspector Bennie (Circuit: Stellenbosch, Caledon, Bredasdorp, Swellendam, Riversdale.)

Geography receives more attention in mission than in public schools. It is, however, frequently a mere repetition of names, of which the pupils know nothing but their locality on the map." (Annexure 1, p. 10.)

Inspector Clarke (Circuit: Queenstown, Fort Beaufort, Stockenström, Victoria East.)

Definitions are frequently learnt by rote without any attempt on the part of the teacher to make them comprehensible to the children. The teaching is in many cases lacking in practical interest, and is in some instances made to appear to the pupils so far outside their every-day life that I have several times found children who could not tell me the name of the country they lived in - I remember one girl hazarding 'North America.'" (P. 28.)

Inspector Mitchell (Circuit: Mossel Bay, George, Knysna, Oudtshoorn, Ladismith and Prince Albert.)

In First and Second Class Schools this subject is taught with fair success. Too often, however, the chief aim appears to be to enable a pupil to know where and what a place is, or to point out on a map the position of a number of names. In Standard III a parrot-like repetition of the definitions as given in the text books, and the ability to locate the position of the names of places on the map of Africa, frequently constitutes the whole training. I have often found that when a rough sketch map, illustrating the different forms of land and water has

been drawn on the blackboard, and the names of these forms have been asked for, no answer was forthcoming. As a memory exercise the work was often well done, but the amount of mental development resulting from it could have been but small. Pupils are often familiar with the names of places in remote countries, but if asked a few questions regarding their own country, or even their own district, are often at a loss."

Physical Geography is generally poorly taught. I have been frequently asked to recommend a text-book for school use. It is a pity that some teachers confine themselves so closely to the use of text-books; more oral teaching is what is needed. (P. 50.)

Inspector le Roux (Circuit: Ceres, Tulbagh, Piquetberg, Clanwilliam, Sutherland, Calvinia, Vanrhynsdorp, Namaqualand, Walfish Bay.)

The teaching of this subject (geography) continues to be very little more than mere map-drill. (P. 61.)

Inspector Theron (Circuit: Beaufort West, Britstown, Carnarvon, Fraserburg, Kenhardt, Murraysburg, Prieska, Richmond, Victoria West.)

Geography. The most striking deficiency in the teaching of this subject is the almost total neglect of everything relating to people, productions, industries, commerce and historical associations. I have occasionally asked a teacher to give a lesson on any country he chose. The result was generally far from satisfactory, giving me the impression that the teacher had not thought it worth his while to go beyond the meagre contents of the textbook for his own information, and that he was not any better up in the lists of names (apparently the only end in view) than his class. There is too much memory task-work set and too little of intelligent and interesting talk with pupils in teaching geography. In Standard III the definitions are fairly repeated but the utter absence of blackboard or other illustration is very conspicuous when one goes from mere words to things in trying to get at the intelligence of the children. Whenever I expressed my surprise to find that IV and V Standard classes knew nothing of the South African territories that came under the British influence during recent years, the usual excuse was "It does not stand in the book," and in some instances I found that the teacher was as ignorant of the

merest geographical outline of our northern expansion as his pupils. In a few first and second class schools the subject is most efficiently taught, and in a manner proving its capability of being made an educational instrument of no mean value. (P. 66.)

Reports contained in the Report of the Superintendent-General of Education for 1895

Acting-Inspector Bennie (Circuit: Barkly East, Glen Grey, Engcobo, St. Mark's, Xalanga, Mclear.)

In Grammar, Geography, History, and Object Lessons unintelligent rote work and neglect of the educative side of the subject is still marked. While there are many teachers who cultivate habits of neatness in work, and yet more who store their pupils' minds with facts useful to know, the proportion of those who make it an aim to develop intelligence, thinking power, and habits of observation in those they teach is very small.

(Annexure 1, p. 12a.)

Inspector Brady (Circuit: Cape.)

History and Political and Descriptive Geography are mainly exercises of memory. The elements of Physical Geography are now taught in a few schools sensibly, with the help of previously prepared or extemporized diagrams and apparatus; in the majority of cases it is simply rote work. (Annexure 1, p. 18a.)

Inspector Mitchell (Circuit: Mossel Bay, George, Knysna, Oudtshoorn, Ladismith, and Prince Albert.)

The quality of the teaching of Geography leaves much to be desired. Map Drawing from memory, even in Standard IV., is generally weak; outlines are often fairly well known, but nearly always a want of thorough knowledge of internal detail may be observed. (Annexure 1, p. 59a.)

Inspector le Roux (Circuit: Ceres, Tulbagh, Piquetberg, Clanwilliam, Sutherland, Calvinia, Vanrhynsdorp, Namaqualand, Walfish Bay.)

Geography. Tested according to the requirements of the new Standards, this subject gave poor results. Teachers did not seem to understand what was required, and wanted to know the best book from which to teach geography according to the new Standards. In very few schools did I find a map of the division in which the school is situated. (Annexure 1, p. 69a.)

Inspector Theron (Circuit: Beaufort West, Britstown,

Carnarvon, Fraserburg, Kenhardt, Murraysburg, Prieska, Richmond, Victoria West.)

Weakness in Geography of the locality in which the school is situated is generally put down to the want of a map of the division. This excuse does not appear to be valid, as I have in some instances found classes intelligently prepared in the work prescribed for Standard III without a map. In regard to the work of the higher standards I cannot report more satisfactory results than I did last year. Excepting in a few of the more efficient schools in my circuit descriptive Geography still fails to interest pupils, while physical Geography is very imperfectly understood. (Annexure 1, p. 74a.)

Reports contained in the Report of the Superintendent-General of Education for 1896

(All these are taken from Annexure 1 of this Report.)  
Inspector Clarke (Circuit: Cathcart, Fort Beaufort, Queenstown, Stockenstrom, Victoria East.)

Geography. The benefit of the instruction given at Vacation Courses is becoming evident, but the subject is generally poorly taught in Standards II and III. (P. 23a.)  
Inspector Hofmeyr (Circuit: Calvinia, Ceres, Clanwilliam, Namaqualand, Piquetberg, Tulbagh, Vanrhynsdorp, Walfish Bay.)

Geography. The quality of the teaching in this subject leaves much to be desired. It should be more intelligent, and greater care should be taken to make the subject interesting to the pupils. (P. 37a.)  
Inspector Mitchell (Circuit: Mossel Bay, Oudtshoorn, Ladismith, Riversdale.)

The class subjects, geography and history, especially the former, have improved. (P. 50a.)  
Inspector Theron (Circuit: Same as for 1895.)

Intelligent and well expressed answers are seldom given in History and Physical Geography. (P. 78a.)  
Inspector Woodroffe (Circuit: Komgha, Stutterheim, Butterworth, Idutywa, Ngamakwe, Tsomo, Willowvale, St. Mark's.)

Knowledge of the subject has improved. The map drawing in the better class of school is becoming very neat and correct. (P. 84a.)

Reports contained in the Report of the Superintendent-General of Education for 1897

Superintendent-General of Education

The teaching of Geography has not made the advance which was fairly to be expected. One great drawback is the want of local maps. A good general atlas from the South African standpoint has also been a desideratum. A first approximation to this, however, has now appeared under the auspices of the Department, and it is hoped that fresh interest may thus be awakened in a neglected subject. (P.19.)  
(The remaining reports are contained in Annexure 1.)

Inspector Bennie (Circuit: Barkly East, Glen Grey, Engcobo, St. Mark's, Xalanga, Maclear.)

The teaching of this subject to Standards 11 and 111 is not satisfactory as a rule, nor does it improve as might be expected. Where Government maps are provided there is still a tendency to shelve the subject, and where no maps are procurable the teacher very seldom goes to the trouble of making a sketch map of the district. In teaching Geography to Standards 1V and above, as well as History, unintelligent rote-work is still far too common. (P. 8a.)

Inspector Fraser (Circuit: Albany, Alexandria, Bathurst, Bedford, Port Elizabeth, Uitenhage.)

Grammar, Geography and History. There is a general belief among teachers that these are subsidiary subjects, and that they have little or no bearing upon the question of pass or failure in standard work. My aim has been to assure teachers that these subjects must receive a due share of attention; that where reading, dictation and arithmetic are good, the minutiae of grammar, geography and history will not be looked for as essential to a pass. When reading, dictation and arithmetic are not good, the knowledge of the other subjects is always taken into account in determining the question of pass or failure. (P. 30a.)

Inspector Hagen (Circuit: Aberdeen, Humansdorp, Jansenville, Knysna, Uniondale, Willowmore.)

Geography. This subject gives little satisfaction, especially in the second, third, and fourth standards, although so little is required here. (P. 40a.)

Inspector McLaren (Circuit: Komgha, Stutterheim, Butterworth, Idutywa, Kentani, Ngamakwe, Tsomo, Willowvale.)

Geography. The teaching of this subject is usually mechanical in the extreme. The physical part of the subject is often learned by rote without being understood. The subject requires to be taught in a practical and realistic,

and above all, intelligible way if it is to have any educative value. (P. 50a.)

Inspector Mitchell (Circuit: Mossel Bay, George, Oudtshoorn, Ladismith, Riverdale.)

Geography. This subject receives satisfactory attention in many schools. The answers to questions in Physical Geography, are, however, not always creditable; and too frequently one notes that while classes have a very extensive and accurate acquaintance with the mere names and situations of places, matter which would be of interest is left alone. (P. 67a-68a.)

Inspector Watermeyer (Circuit: Bredasdorp, Caledon, Stellenbosch, Swellendam.)

In Geography the text book is followed too closely, and the interest of the children is not excited. (P. 98a.)

Reports contained in the Report of the Superintendent-General of Education for 1898

Report of Superintendent-General

In the teaching of Geography there are now some signs of improvement but, as yet, they are not very marked. This is partly explained by the want of good local maps, but the real root of the evil lies in the fact that the need for a common-sense and realistic treatment of the subject has not yet been recognised by any considerable number of the teachers. This is especially the case in regard to the lower Standards; in the upper Standards the South African Atlas prepared under the auspices of the Department has had an excellent influence, an edition of ten thousand having been exhausted within little more than a year. (P. 15.)

(The remaining reports are contained in Annexure 1.)

Inspector Bennie (Circuit: Same as in 1897.)

Geography and History are apt to be neglected, the work offered being often a mere apology for what should have been done. Physical Geography in particular is generally unsatisfactory. But as a result of Vacation Lectures, I have had enquiries for school globes, which, I hope, may be taken as a sign that this subject is to be taught in such a way that the pupils will understand what they learn. (P. 9a.)

Inspector Brice (Circuit: Barkly West, Gordonia, Hay, Herbert, Vryburg, Hopetown, Kenhardt, Kimberley, Mafeking, Prieska.)

...Geography, especially of Standards III and IV, is as a rule, very poor... (P. 16a.)

Inspector Ely (Circuit: Kingwilliamstown, East London, Peddie.)

Geography is generally poor in Native schools, and even in European schools it is often poor in the third standard, owing to the want of suitable maps of the Divisions; but I am glad to say that many of the European teachers endeavour to supply this want by drawing maps for themselves. (P. 25a.)

Inspector Fraser (Circuit: Albany, Alexandria, Bathurst, Port Elizabeth, Uitenhage.)

Geography is often treated as mere topography. In the best schools attention is directed to the interchange of products between different countries, the effect of the physical features of a country upon its climate, and of the climate upon the life of the people. (P. 30a.)

Inspector Hagen (Circuit: Same as in 1897.)

Geography, especially physical, still leaves much room for improvement. The poorest results are found in the Third Standard, where only a few facts relating to the district are required. The good maps of the Colony so liberally distributed by the Department have not been put to proper use. Teachers ought to have copied from them on a larger scale the map of the divisions in which their schools are situated. Such a map ought to have been drawn on the blackboard before the eyes of the pupils. (P. 37a.)

Inspector McLaren (Circuit: Komgha, Stutterheim, Butterworth, Idutywa, Kentani, Ngamakwe, Tsomo, Willowvale.)

Considerable improvement is apparent in the teaching of Physical Geography. In teaching the descriptive and political parts of Geography most teachers too slavishly set lessons in some text book, instead of selecting the salient facts for themselves and teaching them orally with the help of the map.

Inspector Milne (Circuit: Bedford, Cradock, Somerset East, Tarkastad, part of Wodehouse.)

Commercial Geography is receiving more attention, and the teaching is being less confined to lists of names and places, with the result that the pupils are taking more interest in the subject. More might be done in the way of an attempt at a museum for teaching purposes. Pupils who can tell that indigo and opium are produced in India often do not know what these are or for what they are used.

An odd pupil can tell that there is a growing commercial intercourse between this country and Australia, but fails to give any reasons for this growth. Some know that there has been trouble in China and fighting in the Soudan, but few can indicate what connection there is between the anxiety of the great nations to gain a footing in these countries, and the need for extended commerce. A reference to such points in the teaching would add life to the lesson. (P. 57a.)

Inspector Mitchell (Circuit: Mossel Bay, George, Oudtshoorn, Ladismith, Riversdale.)

I have noted with pleasure that in the case of a larger number of schools than formerly, teachers have been presenting to their pupils something more than the "dry bones" of Geography, and so it has not been an uncommon experience to find that, in higher classes at any rate, pupils had an intelligent knowledge of the productions, industries, etc., of the countries whose Geography they professed. (P. 65a.)

Inspector Murray (Circuit: Britstown, Colesberg, Graaff-Reinet, Hanover, Middelburg, Philipstown, Richmond, Steynsburg.)

Physical geography is more often than not neglected in Standard IV, or confined to definitions without any attempt to make clear the value of lines of latitude and longitude to enable us to measure distance from one place to another and at a later stage through knowledge of the longitude of various places to enable us to tell difference of time between such places. (P. 72a.)

Inspector R. Rein (Circuit: Matatiele, Mt. Ayliff, Mt.

Currie, Mt. Fletcher, Mt. Frere, Pondoland East, Pondoland West, Qumbu, Taolo, Umzimkulu.)

Geography and grammar are, I think, in most schools not made sufficiently interesting to the pupils and not taught intelligently. Teachers are too apt to confine themselves too closely to the book instead of bringing maps personal knowledge and common-sense into use.

(Annexure 1, p. 88a.)

Inspector T. W. Rein (Circuit: Cathcart, Ft. Beaufort, Queenstown, Stockenstrom, Victoria East.)

Physical Geography, Grammar and Composition are subjects that require increased attention in most of the schools. Very fair work, as a rule, is done in Descriptive Geography and History. (Annexure 1, p. 95a.)

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch, Tulbagh, Worcester.)

The Standard in which the requirements in Geography are worst taught is the Third. The usual lame excuse is that no map of the district can be obtained. When the teacher possesses sufficient energy and the necessary sense of responsibility, this want is easily supplied. The Geography of the Colony is often well got up by Fourth Standard Classes, though I still occasionally find pupils ready with mere lists of names. In the higher Standards the subject is not neglected, but answers in Physical Geography often betray very poor teaching. Very few Fifth Std. Classes are able to explain how the seasons are caused. A prevalent idea seems to be that the summer heat is due to the nearer approach of the sun. (Annexure 1, p. 109a.)

Reports contained in the Report of the Superintendent-General of Education for 1899

Superintendent-General of Education

There is very little improvement to be chronicled in regard to the teaching of Geography, which in most Inspection-Circuits continues to be taught in a most dry and uninteresting way.

The new edition of the South African Atlas, prepared under the auspices of the Department, did not appear during the year, the improvements and enlargements requiring more<sup>time</sup> than had been expected. (P. 15.)

Inspector Bennie (Circuit: Glen Grey, Elliott,

Engcobo, <sup>a</sup>McLear, St. Mark's, Xalanga.)

I have in previous reports referred to a want of thoroughness in teaching Geography, Grammar and History, and have to note the same fault again. It often arises from the teacher's own want of familiarity with the subject, and a consequent slavish adhesion to the text-books, by which the subject is robbed of most of its educational value. (Annexure 1, p. 9a.)

Inspector Fraser (Circuit: Albany, Alexandria, Bathurst, Port Elizabeth, Uitenhage.)

Geography is a disappointing subject. In many outlying schools, when the subject is called for, the teacher presents a book and informs the Inspector that so many pages have been learnt. (Annexure 1, p. 28a.)

Inspector McLaren (Circuit: Komgha, Stutterheim, Butterworth, Idutywa, Kentani, Ngamakwe, Tsomo, Willowvale.)

Grammar is beginning to be taught in a more practical manner in many schools. The same may be said of Physical Geography, but the descriptive and political aspects of the subject, e.g., the relation between a river and the towns on its banks, are not sufficiently stressed. (Annexure 1, p. 55a.)

Inspector Mitchell (Circuit: Mossel Bay, George, Oudtshoorn, Ladismith, Riversdale.)

Geography continues to improve in the direction to which reference was made in the last report. More attention is being given to Physical and Commercial geography. (Annexure 1, p. 72a.)

Inspector Pressly (Circuit: Albert, Aliwal North, Barkly East, Herschel, Tarkstad and Wodehouse.)

The results in General Geography are generally satisfactory. The weakest part of this subject is that set down for Std. III. Many of the teachers have but slight knowledge of their districts, nor in the absence of maps can they easily acquire such knowledge. A series of district maps would be a distinct boon. (Annexure 1, p. 89a.)

Inspector R. Rein (Circuit: Bizana, Libode, Matatiele, Mt. Ayliff, Mt. Currie, Mt. Fletcher, Mt. Frere, Ngqeleni, Ntabankulu, Qumbu, Tsolo, Umsikara, Umzinkulu.)

Grammar and Geography are still taught too mechanically. The definitions are mostly well known, but badly understood. The notions of Physical Geography are, as a rule, vague, even in some of the European Schools. The fault lies, I am afraid, more with those that teach than

with those that are taught. (Annexure 1, p. 98a.)

Inspector T. W. Rein (Circuit: Cathcart, Queenstown, Stockenstrom, Stutterheim, Victoria East.)

In his report Rein mentions Physical Geography as one of the least satisfactory subjects.

Inspector le Roux (Circuit: Ceres, Tulbagh, Piquetberg, Clanwilliam, Sutherland, Calvinia, Vanrhynsdorp, Namaqualand, Walfish Bay.)

Geography is efficiently taught in the higher class schools. In the lower schools it is often a mere repetition of names of which the pupils know no more than their position on the map. The teaching of Physical Geography should also be made much more practical.

(Annexure 1, p. 113a.)

Inspector Theron (Circuit: Bredasdorp, Caledon, Tulbagh, Stellenbosch, Worcester.)

What I said in last year's report about geography still holds good. There is hardly any practical or educational value in what is taught as geography in Standards 11 and 111. In the fourth standard the subject receives a little better treatment, and in the higher standards satisfactory knowledge of Commercial Geography is usually shown. The results of examination in Physical Geography were quite satisfactory in only one First-Class School. (Annexure 1, p. 122a.)

Reports contained in the Report of the Superintendent-General for 1900

(All these reports are taken from Annexure 1.)

Inspector Bennie (Circuit: Glen Grey, Elliot, Engcobo, Maclear, St. Mark's, Xalanga.)

"...while much attention is given to getting up the subject in which the pupils are thought to fail most commonly - a proceeding quite right in itself - yet this is often done at the expense of other subjects which are far from being without value. Thus Geography, Grammar, and History are seldom taught in such a way as to interest the pupils, and cultivate their minds; the last named suffers especially in this respect. (P. 10a.)

Inspector Golightly (Circuit: Britstown, Colesberg, Graaff-Reinet, Hanover, Middelburg, Philip's Town, Richmond, and Steynsburg.)

Political Geography is on the whole very satisfactory,

though more use might be made of the handy separate maps now published. Physical Geography is a very weak subject in almost all schools. It is quite useless to make children learn pages out of a Physical Geography text-book; there must be oral instruction and full blackboard illustration. (P. 41a.)

Inspector Hofmeyr (Circuit: Calvinia, Carnarvon, Ceres, Clanwilliam, Fraserburg, Namaqualand, Sutherland, Walfish Bay.)

The teaching of Geography and History in most schools should be more practical and interesting. (P. 54a.)

Inspector Milne (Circuit: Bedford, Cradock, Somerset East.)

This subject is being most intelligently taught. (P.74a.)

Inspector R. Rein (Circuit: Bizana, Flagstaff, Matatiele, Lusikisiki, Mt. Ayliff, Mt. Currie, Umzimkulu.)

Grammar and Geography are taught, as I have frequently noticed, only for part of the year. Confronting the children with the map of the world and putting a few elementary questions sometimes had most unsatisfactory results, though the definitions were, as a rule, memorised well. (P. 105a.)

Inspector T. W. Rein (Circuit: Cathcart, Queenstown, Stockenstrom, Stutterheim, Victoria East.)

The subjects generally that give least satisfaction are English Composition, Physical Geography, English History and Grammar. (P. 112a.)

Inspector le Roux (Circuit: Humansdorp, Uniondale.)

The teaching of Grammar and Geography leaves much to be desired. (P. 122a.)

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch, Tulbagh, Worcester.)

The general want of proficiency shown in the Geography set down for Standard 111 proves how helpless the majority of teachers are without a textbook in their hands. Knowledge of this subject is distinctly more satisfactory in the high standards. (P. 130a.)

Inspector Tooke (Circuit: Elliotdale, Idutywa, Libode, Mqanduli, Ngqeleni, Tsomo, Tsolo, Umtata, Willowvale.)

Grammar and Geography are often rather mechanically taught. (P. 139a.)

Reports contained in the Report of the Superintendent-

General for 1901

(All contained in Annexure 1.)

Inspector Bennie (Circuit: Glen Grey, Elliot, Engcobo, Maclear, St. Mark's, Xalanga.)

...the study of Geography and History continues in many instances to be mere accumulation of unconnected and uninteresting facts... (P. 10a.)

Inspector Ely (Circuit: East London, Kingwilliamstown.)

I have much pleasure in being able to report a marked improvement in the Geography of the Public Schools, in some of which map-drawing was excellent. (P. 34a.)

Acting-Inspector Logie (Circuit: Malmesbury, Paarl, Piquetberg.)

The two subjects most neglected are Geography and History. It is astounding to find children with so little knowledge of their immediate surroundings, of their own country, and, in the case of the larger ones, of the rest of the world... I ascribe this state of affairs to the uninteresting and unintelligent way in which the subjects, History and Geography, are presented to the pupils. (P. 68a.)

Inspector R. Rein (Circuit: Same as for 1900.)

In Geography the definitions are mostly well memorised and fairly understood. The maps, however, are frequently not put to proper use. Physical Geography is seldom taught exhaustively. (P. 120a.)

Inspector Theron (Circuit: Same as for 1900.)

Geography and History are taught, as a rule, in an intelligent manner. (P. 136a.)

Inspector Tooke (Circuit: Same as for 1900.)

The teaching of Grammar and Geography are apt to be too mechanical. In the latter subject particularly, it is not uncommon to meet with classes quite ready to repeat lists of capes, bays, rivers, etc., but with little or no knowledge of the map. (P. 146a.)

Inspector Watermeyer (Circuit: Bredasdorp, Riversdale, Robertson, Swellendam.)

History and Geography show that greater intelligence is being brought to bear upon the teaching. (P. 154a.)

Reports contained in the Report of the Superintendent-

General for 1902

(All contained in Annexure 1.)

Inspector Bennie (Circuit: Engcobo, Glen Grey, St. Mark's, Xalanga.)

The teaching of Geography continues to be generally unsatisfactory, and the case of History is worse. (p. 9a.)  
Inspector Golightly (Circuit: Colesberg, Graaff-Reinet, Hanover, Middelburg, Somerset East.)

It will...be possible to make Grammar and Geography really interesting subjects, when once the ancient method of learning the text-book page by page from memory is a thing of the past. (P. 30a.)

Inspector Logie (Circuit: Malmesbury, Paarl, Piquetberg.)

In the smaller schools the subject of Geography is the most neglected, and next to this stands History. (P. 54a.)

Inspector McLaren (Circuit: Butterworth, Komgha, Tsomo, Ngamakwe, Stutterheim.)

Geography and History are taught with much greater thoroughness than formerly. (P. 73a.)

Inspector Mitchell (Circuit: George, Knysna, Mossel Bay, Oudtshoorn.)

In Geography much satisfactory work is done, but Map-Drawing from memory is, on the whole, weak. (P. 93a.)

Inspector Pressly (Circuit: Albert, Aliwal North, Barkly East, Herschel, Molteno, Steynsburg, Wodehouse.)

Geography receives a due amount of attention in most schools, and in many cases memory maps are creditably drawn. (P. 110a.)

Inspector Tooke (Circuit: Elliotdale, Idutywa, Kentani, Mqanduli, Ngqeleni, Umtata, Willowvale.)

Grammar and Geography are on the whole better taught than formerly, and a slight improvement was shown in History this year. (P. 129a.)

Inspector Watermeyer (Circuit: Same as in 1901.)

There is a further marked increase in efficiency in the teaching of the ordinary standard subjects. Especially is it noticeable that Geography and History are taught more intelligently each year. (P. 136a.)

Inspector Craib (Circuit: High Schools Western District.)  
 No report.

#### Railway Education Officer's Report

Instruction in Geography is now generally fuller and more interesting. The weak point in the teaching of it is neglect of the physical side of the subject, and failure to make this throw light and interest upon the topographical and political facts, with an attempt to "cram" them in quite unnecessary detail. (P. 154a.)

Reports contained in the Report of the Superintendent-  
General for 1903

(All contained in Annexure 1.)

Inspector Ely (Circuit: Cape Town, Green Point, Sea Point.)

Now that maps of the different divisions, or groups of divisions, of the Colony can be obtained, I shall expect teachers in Native Schools to give greater attention to this subject in the Third Standard. (P. 29a.)

Inspector Golightly (Circuit: Colesberg, Cradock, Graaff-Reinet, Hanover, Middelburg, Somerset East.)

...on the whole Geography and Arithmetic are better taught. (P. 36a.)

Inspector Hagen (Circuit: Engcobo, Glen Grey, St. Mark's, Xalanga.)

Geography is not being taught to satisfaction. The first teaching in this subject should be in the form of Observation Lessons. Pupils should not merely learn to answer a few stereotyped questions. (P. 43a.)

Inspector Hobden (Circuit: Elliot, Maclear, Mt. Fletcher, Mt. Frere, Qumbu, Tsolo.)

Grammar, Geography, and History would be of some benefit to the children if these subjects were taught in an interesting and intelligent manner. At present the average teacher contents himself with teaching a list of definitions and a string of names which are meaningless to the children. (P. 51a.)

Inspector Hofmeyr (Circuit: Calvinia, Carnarvon, Ceres, Clanwilliam, Fraserburg, Namaqualand, Sutherland, Vanrhynsdorp, Walfish Bay.)

Geography should receive more attention. There is no subject which betrays such lack of intelligence as this. (P. 58a.)

Inspector Logie (Circuit: Malmesbury, Paarl, Piquetberg.)

In most of the schools History and Geography still continue to be the subjects most neglected. (P. 64a.)

Inspector Macleod (Circuit: Barkly West, Gordonias, Hay, Herbert, Hopetown, Kenhardt, Kimberley, Mafeking, Philipstown, Prieska, Vryburg.)

Grammar, Geography and History are as a rule satisfactorily taught in the public schools. In Mission and Poor Schools little progress has taken place in the teaching of these subjects. (P. 71a.)

Inspector McLaren (Circuit: Komgha, Butterworth, Kentani, Ngamakwe, Tsomo.)

The lessons given in Geography are not sufficiently connected together. A class may know the names of a great many rivers and of a large number of towns and yet be quite ignorant of the relations of the towns to the rivers. In Geography as in other subjects children should be taught to answer the question "Why?" as well as the question "What?". (P. 78a.)

Inspector Milne (Circuit: Alexandria, Port Elizabeth, Uitenhage.)

Geography and Grammar are, on the whole, done very fairly. (P. 84a.)

Inspector T. W. Rein (Circuit: Cathcart, Queenstown, Stockenstrom, Stutterheim, Victoria East.)

The teaching of History and Geography, particularly of Physical Geography, often leaves much to be desired. A small globe should be found in every school, and more general use should be made of one or other of the many excellent geographical and historical readers that are now on the market. (P. 119a.)

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch, Tulbagh, Worcester.)

In Geography the work is generally satisfactory... (P. 134a.)

Inspector Tooke (Circuit: Elliotdale, Idutywa, Libode, Mganduli, Ngqeleni, Umtata, Willowvale.)

Geography is generally fairly well known by the pupils, but the teaching is apt to be too mechanical. (P. 142a.)

Reports contained in the Report of the Superintendent-General of Education for 1904

(All contained in Annexure 1.)

Inspector Bartmann (Circuit: Humansdorp, Knysna, Uniondale.)

Geography...left much to be desired. This can hardly be wondered at when one finds that a child who has just passed the Third Standard is introduced to the Geography for Std. IV by being made to commit to memory such facts as the following:- "Cape Town is situated on the 34th parallel of South Latitude and in the 18½ degrees East Longitude," without the teacher previously explaining what a degree of longitude or latitude means. (P. 6a.)

Inspector Bennie (Circuit: Albany, Alexandria, Bathurst, Bedford.)

In Geography and History much still requires to be done to make the pupils realize the facts they learn, so that these become part of their world. But in the case of schools where one teacher has several classes, want of time is a real hindrance to the proper teaching of these subjects. (P. 16a.)

Inspector J. Craib (Circuit: Cradock, Graaff-Reinet, Somerset East.)

He indicates that Geography and History are not taught with success.

Inspector Freeman (Circuit: Aberdeen, Beaufort West, Jansenville, Prince Albert, Willowmore.)

The Geography of Cape Colony might be taught in a more attractive way than it usually is. (P. 42a.)

Inspector Golightly (Circuit: Malmesbury and Paarl.)

Political Geography is fairly well taught, but the teaching of Physical Geography to Stds IV and V in country schools is very much neglected. (P. 48a.)

Inspector Hagen (Circuit: Elliot, Engcobo, St. Mark's, Xalanga.)

Geography is still poorly taught. A good map of Tembuland is not yet obtainable, but survey maps of Elliot and Xalanga can be obtained. (P. 64a.)

Inspector Hobden (Circuit: Maclear, Mt. Fletcher, Mt. Frere, Ntabankulu, Qumbu.)

In Native Schools, he indicates, Geography, among other subjects, remains weak. (P. 72a.)

Inspector Hofmeyr (Circuit: Clanwilliam, Namaqualand, Tulbagh, Vanrhynsdorp, Walfish Bay.)

In most schools History and Geography are very inadequately taught. (P. 79a.)

Inspector Logie (Circuit: Glen Grey, Queenstown, Tarka.)

In most schools Geography is the subject most neglected. In Std. III this is partly due to the fact that no satisfactory maps of the divisions can be obtained, but in coloured schools it is largely due to the teacher's imperfect knowledge of the subject and consequent inability to teach it. (P. 84a.)

Inspector McLaren (Circuit: Butterworth, Nqamakwe, Tsomo.)

In Geography too much use is made of the memory, and too little of the understanding. Along with lists of names or facts the relations between the facts should be taught.

In several schools very creditable map-drawing is done in Stds III and IV., particularly when the lines indicating latitude and longitude are taken as a framework for the map. (P. 100a.)

Inspector Milne (Circuit: Port Elizabeth, Uitenhage.)

Geography, while generally well taught in the schools for whites, is not very intelligently taught in many cases in schools for coloured children. (P. 108a.)

Inspector T. W. Rein (Circuit: Fort Beaufort, Peddie, Stockenström, Victoria East.)

Generally speaking, the subjects in which there is the greatest scope for improvement are Written and Mental Arithmetic, Composition, History and Geography. (P. 145a.)

Inspector Robertson (Circuit: Ceres, Robertson, Sutherland, Worcester.)

Geography, and especially Physical Geography, and History are too often taught by making the pupils learn set answers to set questions. Sufficient use does not appear to be made of the map in teaching geography. (P. 154a.)

Inspector Spurway (Circuit: Elliotdale, Idutywa, Kentani, Willowvale.)

Too little use is made of the map in teaching Geography, and map-drawing receives scant attention. It is no rare occurrence to have a class of children repeat the names of a number of rivers or capes in perfect order though they cannot find one of them on the map... So long as the subject is treated in a way that does nothing to develop the intelligence of the children it will remain unsatisfactory. (P. 180a.)

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch.)

The requirements in Geography are, as a rule, better mastered. (P. 186a.)

Inspector Tooke (Circuit: Libode, Mqanduli, Ngqelani, St. John's, Tsolo, Umtata.)

Geography and History are much the same as last year. (P. 194a.)

Inspector Young (Circuit: Cathcart, East London, Komgha, Stutterheim.)

...in but three instances were anything like intelligent methods applied to the teaching of Geography, Grammar, and History. (P. 210a.)

Reports contained in the Report of the Superintendent-General of Education for 1905

(All contained in Annexure 1.)

Inspector J. Craib (Circuit: Cradock, Graaff-Reinet, Somerset East.)

Geography and History are still in too many schools taught as mere lists of names and dates. (P. 32a.)

Inspector Grant (Circuit: Britstown, Gordonia, Hay, Herbert, Hopetown, Kenhardt, Philipstown, Prieska.)

Geography suffers greatly from faulty methods. In no lesson ought the teacher to be more certain of his own knowledge. Given that knowledge, the map ought to take the first place as a means of instruction, and the text-book serve merely as a collection of memoranda of things taught. (P. 57a.)

Inspector Hagen (Circuit: Elliot, Engcobo, St. Mark's, Xalanga.)

Geography is not successfully taught. Many Native teachers have apparently not received the training necessary for teaching the subject intelligently; they are satisfied with cramming a few definitions and facts into their pupils' heads. Too little practice is given in Map Drawing. More blackboard demonstration is needed if any practical benefit is to be derived from the teaching of this subject. (P. 66a.)

Inspector Hobden (Maclear, Mt. Fletcher, Mt. Frere, Mabankulu, Qumbu.)

...in the higher Standards more Map Drawing should be taken. (P. 74a.)

Inspector Hofmeyr (Circuit: Clanwilliam, Namaqualand, Fiquetberg, Tulbagh, Vanrhynsdorp, Walfish Bay.)

Generally speaking, History and Geography are the two worst taught subjects in the curriculum. Pupils rarely show an intelligent grasp of these subjects. (P. 81a.)

Inspector Logie (Circuit: Glen Grey, Queenstown, Tarkastad.)

Incompetence in teaching History and Geography is very frequent except in First and Second Class Schools. (P. 86a.)

Inspector McLaren (Circuit: Butterworth, Nqamakwe, Tsomo.)

Geographical names and definitions are learnt by heart, and are but little understood. (Pp. 93a-94a.)

Inspector Mitchell (Circuit: George, Mossel Bay, Oudtshoorn.)

Results of examinations in Geography are very often good; there is increase of effort to impart information

which is practically useful rather than to secure accuracy in committing to memory lists of names of places. The use of pictures, photographs, etc., in connection with the teaching of this subject is not so general as is desirable. It is certainly possible on the part of those who are responsible for the equipment of schools to show greater liberality in the supply of these aids to the teaching of geography. (P. 111a.)

Acting-Inspector Porter (Circuit: Elliotdale, Idutywa, Kentani, Willowvale.)

Geography is taught with little intelligence, and no attempt is shown to make the lessons interesting to the pupils. Lists of different surface features, and perhaps a few definitions, are taught, and that is all. Physical Geography is often neglected. Both branches of the subject would improve if teachers would devote time to the preparation of the lessons. (P. 129a.)

Inspector R. Rein (Circuit: Bizana, Flagstaff, Lusikisiki, Matatiele, Mt. Ayliff, Mt. Currie, Umzimkulu.)

Geography, when taught with reference to the maps, and not simply as a collection of names, is very satisfactory. Map-drawing is not practised extensively enough; in native schools it is absolutely bad. (P. 143a.)

Inspector Robertson (Circuit: Ceres, Robertson, Sutherland, Worcester.)

Geography and History are fairly satisfactory, but in teaching the former subject too little use is still made of the map. (P. 161a.)

Inspector Spurway (Circuit: Albert, Colesberg, Hanover, Middelburg, Molteno, Steynsburg.)

History and Geography, subjects which when properly treated afford an opportunity to widen a child's ideas, are well taught in the better schools, but in Private Farm, the smaller A3 (Third-Class Public Schools) and in Coloured Schools these subjects receive little attention, possibly owing to the many classes that have to be taught by one teacher. (P. 194a.)

Inspector Tooke (Circuit: Bredasdorp, Caledon, Stellenbosch.)

Geography and History are apt to be too mechanically taught. (P. 209a.)

Inspector Young (Circuit: Cathcart, East London, Komgha, Stutterheim.)

In Geography much remains to be done by way of imparting an adequate knowledge of maps, and of showing how to read and interpret them to advantage. In most schools the equipment for adequately teaching this subject, as well as Physical Geography, is very defective. (P. 222a.)

Reports for the year 1906

(These are taken from a bound volume of the reports as originally submitted.)

Inspector Bond (Circuit: Kingwilliamstown.)

Geography and History might be taught in a more interesting and practical way; it would be well if all teachers who take these subjects would plan their year's work in advance, allowing ample time for revision of back lessons and for discussion of any modern events of more than passing interest. In this manner pupils would be encouraged to read and think... The mere memorising of places and events should be discontinued once for all.

Inspector D. Craib (Circuit: Cape Town, Green and Sea Point.)

In Geography it is not uncommon to find children in Std. III who tell you quite readily that the Cape Division is bounded on the west by the Atlantic Ocean, but who say that they have never seen it, or, perhaps, that they have seen it when they went to England. In the same subject Std. V pupils should be able to give a clearer explanation, of the seasons than they sometimes do.

Inspector Hofmeyr (Circuit: Clanwilliam, Namaqualand, Piquetberg, Tulbagh, Vanrhynsdorp.)

Geography and History are still in too many cases taught as dry lists of names and dates.

Inspector Logie (Circuit: Glen Grey, Queenstown, Tarkastad.)

The subject of geography is still more inefficiently taught than any other. Wall maps should be much more largely used, and the subject made more realistic. Committing to memory long lists of names, having no corresponding ideas, leads to loss of interest in the subject on the part of pupils.

Inspector McLaren (Circuit: Butterworth, Ngunakwe.)

In Geography facts are taught with considerable care, and remembered with considerable accuracy, but the relations of facts to each other, and the bearing of one part of the subject on others, are little attended to, and in consequence the value of this subject as a mental

discipline is missed.

Inspector Milne (Circuit: Port Elizabeth, Uitenhage.)

In geography the descriptive part is frequently well done, but it is not enough to know that there are certain rivers and mountains in a country; children should also learn what part these have had in the development of the country. Questions like the following should receive attention:- Why have certain towns flourished and others languished? Why are countries so interdependent? Why is Cape Colony so interested in the Transvaal? Why are certain products often a failure in Cape Colony? These, and such like points, add living interest to the study. The pupils should understand what a map really means, and be familiar with it.

Inspector Porter (Circuit: Bizana, Flagstaff, Lusikisiki, Matatiele, Mt. Ayliff, Mt. Currie, Umzimkulu.)

In Geography in native schools the plan of the school room is wrongly taught, and the map-drawing is very badly done. In this subject and in History some very good work was done in European schools.

Inspector Pressly (Circuit: Aliwal North, Barkly East, Herschel, Wodehouse.)

Physical Geography is apt to be neglected, even where the other branches of Geography are well done.

Inspector J. Robertson (Circuit: Ceres, Laingsburg, Montagu, Robertson, Sutherland, Worcester.)

Only in a few schools are Geography and History taught intelligently.

Inspector G. M. Robinson (Circuit: Humansdorp, Knysna, Uniondale.)

In the teaching of Geography more use should be made of Maps...

Inspector Satchel (Circuit: Albert, Colesberg, Hanover, Middelburg, Molteno, Steynsburg.)

History and Geography, as taught in most of the A3 and Private Farm schools are of little educational value. However, well qualified he may be to give instruction the teacher of several classes must find it difficult to give enough time to these subjects. In the more important schools these subjects are usually taught with success.

Inspector Tooke (Circuit: Libode, Mqanduli, Ngqeleni, Port St. John's, Tsolo, Umtata.)

The teaching of Geography and History is frequently

too mechanical.

Reports for the year 1907

(These are taken from the original copies of the reports.)

Inspector Bain (Circuit: Elliot, Engcobo, St. Mark's, Xalanga.)

Geography is to many pupils little more than lists of names of seaports, rivers etc.; a few of the more intelligent teachers do, however, try to give the subject a living interest by showing the children the relations existing between their own districts and the other parts of the country and between one country and another.

Inspector Bond (Circuit: Kingwilliamstown.)

In some European schools, pupils evince interest in History and Geography, but these subjects are as a rule perfunctorily taught and lists of names and places are memorised... Map-drawing in Boys' schools is curiously bad.

Inspector J. Craib (Circuit: Cradock, Graaff-Reinet, Somerset East.)

In Geography and History the teaching still leaves much to be desired in the way of stimulating interest and thought.

Inspector Freeman (Circuit: Aberdeen, Beaufort West, Jansenville, Prince Albert, Willowmore.)

Composition and Geography are the two subjects which are taught in the least intelligent manner...

Inspector Golightly (Circuit: Malmesbury, Paarl.)

Physical Geography and Physiography

Praiseworthy improvement continues to be made in the methods of teaching the majority of subjects, but a word or two may again be said regarding the proper and sensible method of teaching Physical Geography and Physiography. This in our school curriculum is the point at which the pupil first lays hold of the fringe of natural science, and it is first here that the true teacher will avail himself of his opening when such subjects as the laws of gravity, the tides, seasons etc., are first brought before the view of the child. Here the pupil's own observation, however slight and insignificant, may be used as stepping stones to the acquirement of fuller and more correct knowledge of the natural sequence of cause and effect, and the scholar may naturally be led on to a love of the study of Astronomy or Physics or Geology, in fact of Science generally for its own sake and not because it has to be

"got up" for the purpose of earning marks. The words of a famous educationist on the latter method may here be quoted with advantage. "Examinations being once passed books are laid aside; the greater part of what has been acquired, being unorganized, soon drops out of recollection; what remains is mostly inert - the art of applying knowledge not having been cultivated; and there is little power either of accurate observation or independent thinking." (Golightly is here quoting from Herbert Spencer. Cf. "Education Intellectual, Moral, and Physical," foot of page 28 to top of 29; Watts & Co., London, 1945.) At the present stage of education in the country the popular opinion of the value attached to examinations may be inevitable, but the warning expressed in the above quotation is certainly worthy of consideration...

Inspector Hagen (Circuit: Calvinia, Carnarvon, Fraserburg, Murraysburg, Richmond, Victoria West.)

The first teaching in geography should be based more upon actual observation. Very little is required in Stds 11 and 111 but this little should be intelligently taught... There are not as yet any very suitable maps of the separate Divisions, but the ordinary survey maps will be found of some use. These are now easily procurable at low prices. Physical Geography in the upper Standards of my First Class schools is as a rule fairly good, but the results in many of the lower grade schools show that the teachers themselves are not sufficiently at home in this subject. Map Drawing is not yet satisfactory.

Inspector Hobden (Circuit: Maclear, Mt. Fletcher, Mt. Frere, Ntabankulu, Qumbu.)

In History, Grammar and Geography there is still too much pure mechanical memorizing of a particular text-book. Teachers should prepare the lessons and instruct the children without the introduction of text books at all.

Inspector Hofmeyr. (Circuit: None given.)

Geography and History are generally by no means interesting subjects to the pupils, owing to the way in which these subjects are taught.

Inspector Logie (Circuit: Glen Grey, Queenstown, Tarkastad.)

The teaching of Geography is, generally speaking, very inefficient. In many cases this is due to defective knowledge on the part of the teacher. Mere lists of names

are of little value, but it is of high value that pupils should have a mental picture of the map. For this purpose the map should be in constant use, and the teacher's knowledge of the subject should be sufficiently wide to explain in an interesting and intelligent way the features of which the map is a picture.

Inspector Mitchell (Circuit: George, Mossel Bay, Oudtshoorn.)

Geography and History are not successfully taught. There is too much dependence upon text-books; too little attention to matters of living interest when one finds that the only information concerning the geography of his own land, which a boy in Std. IV knows, has been "crammed" from a text-book, or that a Std. III pupil is altogether unable to read with some amount of intelligence the map of his own district, the experience is not refreshing. Pictures and illustrations are, in most schools, conspicuous by their absence.

Inspector Porter (Circuit: Bizana, Flagstaff, Lusikisiki, Matatiele, Mt. Ayliff, Mt. Currie, Umzimkulu.)

Geography is often taught without sufficient preparation on the part of the teacher. Sometimes in white schools, and generally in native schools it is found that teachers do not know how to teach the plan of the schoolroom to Std. II. Physical Geography is very poor in Standards IV and V, and with History is very little understood by the native children.

Inspector R. Rein (Circuit: Elliotdale, Idibywa, Keabani, Willowvale.)

Geography, descriptive as well as physical, gave in all schools least satisfaction. Map drawing, too, needs much better attention.

Inspector Robertson (Circuit: Ceres, Laingsburg, Robertson, Sutherland, Worcester.)

In Arithmetic, Geography and History the results may be classed as fairly satisfactory.

Acting-Inspector Robinson (Circuit: Humansdorp, Knysna, Uniondale.)

Geography and History are still somewhat neglected: a result caused by so many of the classes in most of the schools being under the charge of one teacher. In the former subject the map must be more regularly used...

Inspector Spurway (Circuit: Albert, Colesberg, Hanover, Middelburg, Molteno, Steynsburg.)

History and Geography, as taught in many of the A3 and Private Farm Schools, are of little educational value, but in the larger schools these subjects are taught far better.

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch.)

Geography is as a rule taught with fair success in the higher grade schools, but in the case of most A3, Private Farm, Poor and Mission Schools the teaching of this subject is as often as not totally lacking in practical interest and intelligence, being usually treated as mere topography.

Inspector Tooke (Circuit: Libode, Mganduli, Ngqelani, Port St. John's, Tsolo, Umtata.)

Geography and History are as of old too mechanically taught, and are often merely a matter of memory repetition.

Inspector Young (Circuit: Cathcart, East London, Komgha, Stutterheim.)

Geography, as a rule, is taught with but little system, the textbook order being adhered to, and the inter-dependence of Physical, Political, and Commercial Geography being but little recognised. Yet the subject, in the hands of a capable teacher provided with the necessary equipment might be made the most interesting of the Elementary Course. In no school, however, is there adequate equipment for its thorough teaching.

Reports for the year 1908

(Taken from the original reports.)

Inspector H. G. Anderson

Inspector Anderson carried out a survey of the four European Training Schools - Training Institute, Normal College, Grahamstown and Wellington - and of the chief native training schools in 1908. His comments on the geography lessons which he heard teacher candidates give are as follows:- "In the lessons on the plan of the schoolroom scarcely enough use was made of general measurements, e.g. in finding the relative positions of objects situated in the room, mere guesses at sight being considered sufficient. Similarly more accurate measurement of angles might have been attempted in determining the direction necessary for drawing a map of the district. In most schools a simple form of theodolite, such as could easily be constructed under the guidance of the Woodwork Instructor, might very well be used. The teaching in the more advanced Geography lessons confines

the treatment to an examination of physical and topographical features and points to the need for a more scientific treatment of the subject in the instruction given to the pupil teachers themselves. The lessons on physical geography were speaking generally the least satisfactory, in many cases because the students had not grasped the necessary scientific principles. Thus one teacher explained entirely to her own satisfaction that the greater heat of the sun in summer was due merely to the fact of its being closer to the earth during that season." (Pp. 104-105 of his Report.)  
Inspector Bain (Circuit: Elliott, Engcobo, St. Mark's, Xalanga.)

Geography and History are still taught in a very uninteresting fashion generally, but there has been some improvement.

Inspector D. Craib (Circuit: Cape Town, Green and Sea Point.)

In the Geography of Std. IV the positions of the chief seaports is sometimes imperfectly known. The lines of railway should be taught by constant use of the blackboard. It is frequently the case that the knowledge of the descriptive Geography presented for Standards V and VI is too meagre.

Inspector Freeman (Circuit: Aberdeen, Beaufort West, Jansenville, Prince Albert, Willowmore.)

Geography and History still remain in an unsatisfactory condition except in First and Second Class Schools.

Inspector Hofmeyr (Circuit: Clanwilliam, Namaqualand, Piquetberg, Tulbagh, Vanrhynsdorp.)

Geography and History are not made sufficiently interesting to the pupils.

Inspector Logie (Circuit: Glen Grey, Queenstown, Tarkastad.)

It seems incredible that Geography and History should be so badly taught, especially in B Schools, (i.e. Mission Schools) if the teachers themselves had had satisfactory teaching when they attended the training institutions. I cannot but think that if these subjects had been taught with intelligence at the institutions they would be taught with at least some degree of intelligence by the teachers who have received their training at these institutions... Geography is seldom taught in such a way as to interest the pupils. Very often the map is not used, and too often the defective teaching is due to lack of knowledge of the subject on the part of the teacher. The relation between

commercial conditions and physical conditions is seldom taught.

Inspector McLaren (Circuit: Butterworth, Ngamakwe, Tsomo.)

With the advent of simpler and more practical textbooks, the teaching of geography is being put on a sounder basis.

Inspector Mitchell (Circuit: George, Mossel Bay, Oudtshoorn.)

The remarks which were made in last year's report with reference to the teaching of Geography are still applicable, although in one high school for boys superior methods of treatment are in use, and the equipment at the disposal of the teacher of the subject is far in advance of that of any school in the circuit. In addition to the prescribed work, exercises in map-making to show rainfall, temperature, etc., from figures taken from the reports of the Meteorological Commission, practice measurements of areas from various scales, etc., are given, and with very promising results.

Inspector Porter (Circuit: Bizana, Flagstaff, Matatiele, Mt. Ayliff, Mt. Currie, Umzimkulu.)

Geography and History were not well taught. It is surprising how few teachers understand how to draw a plan of the schoolroom. The children are taught to draw a picture of the building and insert drawings of all the articles in the room.

Inspector R. Rein (Circuit: Elliotdale, Idibywa, Kenbani, Willowvale.)

Poor work is still being done in Geography... (I.e. in Native schools). The European Schools have given every satisfaction in nearly all subjects. There is scope for improvement in History and more so in Geography.

Inspector Robertson (Circuit: Ceres, Laingsburg, Robertson, Sutherland, Worcester.)

Only in a few schools are History and Geography taught intelligently; much too little use is made of the map in teaching these subjects.

Inspector A. Scott (Circuit: Humansdorp, Knysna, Uniondale.)

Except in a few instances Geography and History are sadly neglected in country schools. If anything at all is attempted it amounts to little more than the learning by rote of a list of names and the committing to memory of passages from a text-book in History. The use by the teacher of a good Geographical Reader has been repeatedly urged.

Inspector Spurway (Circuit: Albert, Colesberg, Hanover, Middelburg, Molteno, Steynsburg.)

History and Geography are intelligently taught in the town schools, but these are essentially subjects for which the teacher needs to have much wider knowledge and experience than can be expected of most of those who take up work in small schools.

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch.)

Geography is as a rule satisfactorily taught up to Standard V but is frequently weak in Standards VI. and VII.

Inspector Watermeyer (Circuit: Ladismith, Riversdale, Swellendam.)

Geography and History show improvement.

Inspector Young (Circuit: Cathcart, East London, Komgha, Stutterheim.)

In the teaching of Grammar, Geography, and History there is still room for much improvement in lower grade schools, even when these are staffed by certificated teachers. In no subjects of the school course is there greater scope for the application of intelligent and well directed method in teaching, and one naturally looks for an improvement in this respect to the influence of the Training Schools which prepare and send out the majority of the teachers who staff the class of school referred to.

Reports for the year 1909

(Taken from the original reports.)

Inspector Anderson

During 1909 Anderson visited and inspected both European and Native training schools and departments, with the object of conferring with the school authorities and advising generally regarding the best means of securing efficiency in the schools. His comments on the lessons which he heard in geography are as follows:- "Geography like grammar is still apt to be treated too much as matter of memory, an enumeration of facts and places. Its advantages as a means of training the reasoning powers are thus lost. As in the case of Arithmetic fundamental ideas were often vaguely apprehended by the students themselves; it was rarely found that a teacher could give a clear account of the system of colouring in a physical map. The Second-Class Certificate students, many of whom have not renewed a acquaintance with Geography since leaving school,

were very little if at all superior to the pupil-teachers. It is strongly felt that all true students should be introduced before the end of their course of training to a systematic treatment of the main principles of modern geographical science."

On geography instruction in these training schools he says: "Attention has already been called under the head of Class Teaching to the need for a scientific treatment of geography. It was surprising to find that many intelligent students had not even heard of contour lines.

Now that the standard of admission to enrolment to the pupil-teacher course has been raised it is hoped that some of the work of revision which has hitherto been found necessary may be dispensed with.

In several centres an effort has been made to render the teaching of geography more stimulating. The series of illustrated lectures which were delivered during the year at the Training Institute deserves mention in this connection. Certain parts of the present course in physical geography offer great difficulties, especially to Native pupil-teachers; these portions of the subject might with advantage be transferred to the (contemplated?) final year of study, when the students would it is hoped have acquired a better knowledge of elementary mathematics and science.

In view of the remarks and criticisms made in the latter part of the report it may be of interest to note that in the pupil-teacher examinations in December, 1908, the subjects of Composition, Geography, and History, showed the lowest range of average marks in the training schools." Inspector Bain (Circuit: Elliot, Engcobo, St. Mark's, Xalanga.)

Geography and History are not often made interesting to the pupils, the teachers' own knowledge of these subjects being scanty.

Inspector Bennie (Circuit: Albany, Alexandria, Bathurst, Bedford.)

There is some improvement in Physical Geography, but abundant room for more; in this subject the danger is that the pupils may be satisfied with knowing certain facts by heart, without realizing the actual state of affairs.

Inspector Bond (Circuit: Kingwilliamstown.)

In many of the country schools the teaching of Geography is quite unsatisfactory; lists of names are committed to memory and repeated to order, parrot-wise.

D.

Inspector Craib (Circuit: Cape Town, Green & Sea Point.)

In Geography it is still necessary to insist in Standard IV on the constant use of the blackboard as the best means of getting the pupils to realise the lines of railway and the relative positions of the chief towns. In Standard V the explanation of the seasons, as depending on the position of the Earth's Axis in relation to the plane of its orbit, is often not thoroughly understood.

Inspector J. Craib (Circuit: Cradock, Graaff-Reinet, Somerset East.)

The study both of Geography and History is still too much a mere effort of memory. Lists of names and large quotations from the textbooks on the one hand, and want of definiteness and of conciseness on the other show the weak points in the instruction given, as for such work little demand on the reasoning powers is made by or required from the pupils.

Inspector Freeman (Circuit: Aberdeen, Beaufort West, Jansenville, Prince Albert, Willowmore.)

Geography and History are still usually unsatisfactory subjects to examine, and it must be said that the fault in most cases lies with the teacher who has trained the pupils to consider these subjects more as memory tests than anything else. While so many teachers' knowledge betrays superficiality and lack of interest it is almost useless to expect to find any but the sharpest pupils showing intelligence in their answers.

Inspector Hobden (Circuit: Maclear, Mt. Fletcher, Mt. Currie, Ntabankulu, Qumbu.)

Grammar, Geography and History are taught in too mechanical a manner and are therefore very little use from an educational standpoint. It is a regrettable fact that the teachers themselves rely almost entirely on the knowledge acquired during their own course of training and make little or no attempt to keep in touch with up-to-date methods regarding teaching of these subjects. Map drawing, too, is taught in a haphazard manner. Shawbury Girls' School is the only school in which this subject is properly taught.

Inspector Hofmeyr (Circuit: Clanwilliam, Namaqualand, Piquetberg, Tulbagh, van Rhynsdorp.)

Geography and History are rarely taught intelligently. In most cases no attempt is made to make these subjects interesting.

Inspector McLaren (Circuit: Butterworth, Ngamakwe, Tsomo.)

Geography is now efficiently taught in the majority of schools, though in some only half the prescribed work had been mastered, no doubt owing to the teaching of the subject having been postponed to a late period in the school year. Map-drawing is rarely satisfactory. Every pupil besides a text-book of Geography, should be supplied with an Atlas and with Memory Maps of the continents or countries studied.

Inspector Milne (Circuit: Port Elizabeth, Steytlerville, Uitenhage.)

Geography is to a considerable extent well taught. The work of the third Standard, however, is not often taught as intelligently as it might be. As an extension of Standard 11 requirements, the plan of the town or farm should be studied, due care being given to the proportions. The district should be studied with the aid of the Black board. The outline being quickly sketched in, a first lesson might be taken up with tracing a road, and noting carefully all rivers etc. observable on a journey along the road. The remaining main roads should be dealt with in the same way in succeeding lessons. Then the rivers, mountains and railways might be taken individually, carefully correlating all previous observations. The pupils should be asked to sketch from memory the previous lesson as done on the Black Board.

In the higher classes, the significance of a map should be fully gone into. Related History should be referred to. The effect of land forms on human and animal life should receive attention - how for instance, Bayville, Sundays River Valley, is dependent on the river.

Inspector Mitchell (Circuit: George, Mossel Bay, Oudtshoorn.)

Geography and History rarely get the attention they deserve, and so, as often as not, results of examinations in these subjects are meagre indeed. In a few schools, however, instruction in both subjects is being given on good lines and with creditable results. In one school, the Boys' High School of George, there is an exceptionally liberal supply of illustrative material, and knowledge of Geography is thereby presented in a more interesting way.

Inspector Noaks (Cape Suburbs and District.)

In the case of the class subjects, i.e. Geography, History, and Grammar, teachers have every wish to carry out the full requirements of the syllabus....in geography

and History the fundamental facts are in general passably well known.

Inspector Pressly (Circuit: Aliwal North, Barkly East, Herschel, Wodehouse.)

Geography and History are mainly taught as giving information about places, persons, and events, without any systematic attempt to correlate them as cause and effect, which is absolutely necessary in order to give these subjects their true educational value.

Inspector R. Rein (Circuit: Elliotdale, Idibywa, Kenbani, Willowvale.)

Physical Geography is often neglected or badly taught, owing to inadequate knowledge many teachers have themselves. In European schools generally a satisfactory or high degree of proficiency is attained in most subjects. History and Geography still remain the weakest subjects.

Inspector T. W. Rein (Circuit: Ft. Beaufort, Peddie, Stockenstrom, and Victoria East.)

The teaching of Geography and History which more frequently than not is on mechanical and unintelligent lines could be rendered far more interesting and instructive if more extensive use were made of the excellent historical and geographical readers that have been published during the past decade, e.g. "High Roads of History", and "The World and its People".

Inspector Robertson (Circuit: Ceres, Laingsburg, Montagu, Robertson, Sutherland, Worcester.)

Only in a few schools are History and Geography intelligently taught. Much too little use is made of the map in teaching these subjects, and the teachers adhere too slavishly to the text book in use. Very rarely does one find that the pupils have been made acquainted with important contemporary events. The teachers' reading should be much wider than the school text-books.

Inspector Satchel (Circuit: Barkly West, Kimberley, Kuruman, Mafeking, Vryburg.)

The methods of teaching Geography have improved, but some of the teachers still use text books of a hatefully repellent character in spite of the publication year by year of new and delightful books of descriptive geography.

Inspector Scott (Circuit: Humansdorp, Knysna, Uniondale.)

Writing, Geography and History call for no remarks beyond those made in my last report. Strictly speaking generally the standard of attainment is slightly higher than

it was last year.

Inspector Spurway (Circuit: Albert, Colesberg, Hanover, Middelburg, Molteno, Steynsburg.)

History and Geography are intelligently taught in the large schools, but in the rural schools the lack of knowledge and experience of a large majority of the teachers precludes the giving of efficient instruction.

Inspector Theron (Circuit: Bredasdorp, Caledon, Stellenbosch.)

The teaching of Geography is as a rule fair, though it must be said that the knowledge shown seldom extends further than mere topography.

Inspector Watermeyer (Circuit: Ladismith, Riversdale, Swellendam.)

Geography and History are still taught too much from the book. Teachers should endeavour to awaken in their pupils a lively interest in these lessons. Till this is done these subjects will remain dry bones.

Report of the Superintendent-General of Education for 1910

The Superintendent-General's own report

On the teaching of History and Geography, nearly all the inspectors speak in much the same strain. Inspector Noaks says:- "In Geography and History not much more than a passable acquaintance with the elementary facts is to be expected from the average pupil; but in the best schools an effort is made to rationalise both subjects by tracing facts and events to underlying causes and principles".

On the same subjects Inspector Theron writes:- "The teaching of Geography and History is seldom done in a manner calculated to widen the pupils' ideas and awaken his interest. In both subjects the textbook is usually the only source of information, and the children's knowledge seldom amounts to more than some sort of acquaintance with the names of places, persons and events".

Inspector Scott writes:- "Geography and History are seldom well taught; but in fairness it should be mentioned that the time-table of most teachers is terribly overcrowded".

Report of the Superintendent-General for 1914

In this Report the Superintendent-General gives extracts from certain Inspectors' Reports for 1895 and 1914 in order to illustrate the educational progress which has taken place during the intervening years. We shall quote from his Report and give the extracts which he quotes from the reports on geography teaching.

"...the last annual reports of Inspectors do not contrast effectively the general condition of instruction with the position of affairs in, say, 1895. Each annual report shows to a certain extent the state of affairs at the date of its compilation; and in dealing with the subject of instruction the Inspectors are critical rather than descriptive in their treatment... Notwithstanding this hindrance to a clear comparison it is of interest to give parallel passages from the annual reports of an Inspector still on the staff and who was at work in 1895."

Muir proceeds thence to quote from the reports of Inspector Theron. The following two reports refer to geography:-

1895

Weakness in Geography of the locality in which the school is situated is generally put down to the want of a map of the Division. This excuse does not appear to be valid, as I have in some instances found classes intelligently prepared in the work prescribed for Std. III without a map. In regard to the work for the higher classes, I cannot report more satisfactory results than I did last year. Excepting in a few of the more efficient schools in my circuit descriptive Geography still fails to interest pupils, while physical geography is very imperfectly understood.

1914

In the teaching of Geography mere topography is becoming less conspicuous; the use of models, generally made by the teachers themselves, is more frequently met with; the immediate neighbourhood of the school is often carefully investigated in connection with the work in Standards II and III, while in higher classes more careful note is taken of the general build of regions and of the physical conditions which influence vegetation and the occupations of the people.

The Superintendent-General adds that "Evidence in regard to the greater thoroughness of the instruction given is to be found in all of the Inspectors' Annual Reports...", and cites part of the geography report of Spurway for 1914 as further evidence of the general improvement in geography teaching. Spurway says: Geography is gradually improving. The best work is done where the teachers prepare their own maps, which arouse the interest of the pupils, and fix their attention on the essentials...

Having cited these geography reports, and also others

on the various other subjects of instruction, Muir says:-  
 "These brief extracts necessarily give a very imperfect idea of the advance made in the nature of the education given to-day as compared with 1895, but to those who have been closely associated with the development of the work the progress is manifest; and it may without doubt be ascribed to four chief causes:- (1) The publication in 1894 of a thoroughly revised syllabus of school work, in the compilation of which the following objects were kept in view: (a) that certain neglected subjects, such as recitation, mental arithmetic, sewing should be explicitly included in the curriculum; (b) that there should be a careful gradation of the work from year to year, in accordance with the results of sound educational experience; (c) that the work of each Standard should as nearly as possible represent what could be undertaken in one year by a child of average ability; (d) that the subjects should be looked at from a South African as well as from a cosmopolitan standpoint. (2) The guidance and help given to teachers throughout the Province by Inspectors, and by Instructors in special subjects. (3) The improvement and expansion of the course of training for teachers, and the institution of such courses for special subjects (e.g., needlework, woodwork, drawing, kindergarden, and cookery). And finally, (4) The introduction of the School Board Act in 1905, as a result of which children are brought to school at an earlier age than hitherto, in greater numbers, and remain longer under instruction.

"The progress brought about by these four main causes continues, but it is fully realised that in many directions there is need for still greater effort, so that the advance in educational standards may be further promoted throughout the Province". (Pp. 20-22.)

Reports contained in the Education Gazette of 17th September, 1914; Volume 14, No. 7 For year ending 30 th, June, 1913.

Excerpt from prefatory remarks

...the various Inspectors agree in the main that progress can be noted in the teaching of the subject and that there is the promise of its soon being taught on really educative lines in most of our European schools. It is not without reason and not in vain that the Inspectors look to the Training Colleges for the imparting of the desirable

and necessary training to persons who will eventually be placed in charge of schools or classes, on account of the recent inclusion of the subject, from a more educational point of view, in the Third Year Senior Pupil Teachers' syllabus. A new measure cannot, of course, make its full influence felt immediately and we must give it due time to exert such influence." P. 3 283.

#### Inspector Young

A much-needed stimulus has been given to the teaching of Geography by the articles which have appeared from time to time in the Education Gazette, and by the newer methods with which students are now becoming acquainted in the Training Schools. Instruction in this subject is becoming more practical in aim and at the same time really more educative: it is becoming less bookish and merely informational...In the larger fully-staffed and well-equipped schools, much good work has already been done; the smaller rural A3 and Private Farm Schools do what they can, many of them; and no doubt, as the methods become better known, a general improvement will be affected. P. 284.

#### Inspector Logie

Much improvement in the condition of History and Geography teaching is not to be expected until the effects of the new course in these subjects required of Third-Year Senior Pupil Teachers begin to be felt in the schools. Most of the teachers in Third Class, Private Farm, and Mission schools do their best. But they have not the breadth of knowledge necessary to teach these subjects properly. The instruction given involves memory work alone, and has very <sup>little</sup> educational value. In this matter too many teachers are bond slaves to text-books. Until they themselves become interested in these subjects it is hopeless to expect them to interest children. P. 284.

#### Inspector Golightly

At High Schools, A1 and A2 Schools much improvement has taken place in the teaching of Physical Geography, but in many of the lower-class schools the old and useless system of making the children learn certain facts by rote is still adopted. What is so repeated may be quite a correct answer to the question put, but there is no satisfaction in it, and further questioning invariably reveals the fact that there is no clear idea of the real meaning in the child's mind at all, and that the answer might as well have been learnt in Greek as in English or Dutch. We must look to the heads of Training Colleges, and to others entrusted with the training of teachers for the eradication of the pernicious system

mentioned above. P. 284.

Inspector Mitchell

In schools whose teachers have been able to attend vacation and other classes in which improved methods of teaching are presented a pleasing advance has been made in Geography. There is evidence of increased effort to treat the subject on more rational lines, to spend more time in imparting information which is of real interest and importance and to give less attention to the memorising of the contents of text-books. P. 284.

Inspector J. Craib

In the larger town schools Geography is gradually acquiring a better position than that of a subject to be committed to memory and both descriptive and physical work show improvement. Weather charts, natural and meteorological observations, physical and relief maps, have all tended to lend interest and to bring intelligence to bear on this many-sided subject. P. 284.

Inspector Spurway

The best results in Geography are obtained where teachers prepare their own maps, which interest the pupils more than any that are usually purchased. Physical Geography should be based on actual observation wherever possible. In every classroom there should be a collection of books and pictures which would give the pupils some idea of the life of the people in other lands. Some of these books the pupils should be expected to read, there being now no dearth of such literature. Pp. 284-285.

Inspector Bond

A change for the better is noticeable in the teaching of Geography, which is now on rational lines, but with the exception of the High Schools and a few others, the ordinary school does not offer a course in Geography which is sufficiently brief, instructive and stimulating, and Native teachers have little grasp of the subject. They should study more, make up their minds as to what they want their pupils to know, and be sure that the children get a few clear ideas about the portions of the Earth's surface that concern them.

A word of warning must be sounded with regard to the modern method; unless it is very carefully worked, the pupil is likely to have the most hazy notions of places and actual heights above sea-level, influence of winds, distance from equator, and the products that should be found in certain localities (but probably are not). There is a risk, too, of the syllabus being overloaded. P. 1 285.

---

MODEL SYLLABUS IN GEOGRAPHY ISSUED BY THE ROYAL GEOGRAPHICAL SOCIETY

(Published in the Education Gazette of 4th February, 1904, No. 20, pp. 302-306, and 322-323.)

1.- In Elementary SchoolsA. Preliminary StageFor children between five and eight years

At this stage children listen with eagerness to narratives of adventure by land and sea, to the tales of travellers in Australian or Asian deserts, or in the Arctic Ocean; to stories whose scenes lie on coral islands or in tropical forests; to accounts of combats with tigers, lions, and other wild animals; to tales of heroism and endurance in face of danger; to descriptions of the appalling effects of volcanic outbursts, earthquakes, cataracts, floods, and similar incidents. For this purpose, it is best to make use of suitable extracts from books of famous travellers - Livingstone's adventure with a lion; McClintock's account of the last of the Franklin Expedition; Wallace's description of the mysterious sounds of the tropical forest; and similar famous narratives. Sometimes the readings may be from cuttings from the daily press, but these will have to be chosen with care.

The readings should be accompanied by simple explanations of geographical terms used in the narratives and descriptions illustrated by models, figures made with the aid of sand-trays, etc., and the children themselves should be practised in modelling. But the teaching of geography at the first stage will have fulfilled its main purpose if it has been attractive, and has made the children think of other countries besides their own.

B. Foundation for systematic studyChildren between eight and eleven years oldThe Necessity for Maps

It is a serious difficulty in geography that the mind has to deal with facts that cannot be directly observed. The relations of places hundreds of miles apart and separated by surfaces of very diverse character, have to be grasped in a single mental operation, but the observations by which these relations have been determined can be made only piecemeal, and only in a few cases by any one individual.

Hence arises the necessity for representing on a map the facts of nature which are the real subjects of study. It is very important, therefore, that the learner should be brought to realise two things: first, that geography is actually based on the observation of nature; and, second, how the map is connected with such observations, and may be made to stand for an extent of ground that no individual can directly observe. This can be done to a large extent at this stage.

Observational preparation with a view to this necessity

With this object in view, it is of vital importance to lay a foundation for geographical teaching on the actual observations of the children themselves. Children will, in the course of their observations, become acquainted with the methods of recording what is observed on maps, and they can be brought to see how this third function of geography determines what we try to express on maps. Though the observations of children can be made only in limited areas, the observations of such areas is as much a function of geography as that of the most extended areas, and the method is the same with the big and the little.

Opportunities should certainly be found for making a number of observations that will ultimately lead up to a just appreciation of the value of maps and of what is expressed on maps. The teacher will bear in mind that whatever affects in a constant or more or less regular manner the value of local conditions and place relations is a fact in geography, but he will, of course, direct special attention to those facts which are most wide-reaching or otherwise most important in their effects of that nature. Children, whether living in town or country, can have things pointed out to them at school: they can look at things on the way between school and home; they can make short expeditions; and they can make "school journeys." The nature of the observations that can be made will differ greatly according as a child lives in town or country, and as the majority of English children are town children, it may be useful to begin by considering what can be observed even by children in towns.

Geographical observations within the reach of town children

Use of the globe

From the first children should be made familiar with the globe, which has the advantage of making intelligible a number of observations which even town children can make

for themselves. For example, they can be made to understand the apparent movements of the sun. Even in London the sun shines often enough in a school year to make it possible for a teacher to connect both its daily and annual apparent movements with the actual movements of the Earth as represented by a globe. Some method should be adopted for indicating the direction of the zenith on any part of the globe, such, for example, as a strap with a few pins stuck vertically in it. Putting this strap over the most northerly point of the ecliptic would enable the teacher to show where a person standing there would have to look for the sun at midday at the summer solstice, and shifting the strap to the latitude of the observer, he would then be able to show the difference in the direction of the zenith at his standpoint. In the absence of a regular quadrant, the same strap might be made use of at a later stage to show why, in sailing, say, from Vancouver to Yokohama, you begin by steering in a northerly direction.

The idea of direction and its representation on maps

Further, town children equally with country children can acquire from their own observations the idea of direction, and can be shown how direction is represented on a map. Streets serve this purpose as well as roads. Certain streets can be selected as peculiarly fitted to show the relation of certain directions to the position of the sun. In the case of streets running east and west, children can see for themselves that throughout the winter and for the greater part of the day in summer the shadows are always on one side of the street, but vary in direction at different hours. They can see that about 12 o'clock the shadows are at right angles to the street, and with reference to that the convention by which directions are represented on maps can be explained to them.

Differences in elevation and the modes of representing them on maps

In the great majority of cases town children can also be taught to understand, with the aid of their own observations, the importance and the mode of representing differences of elevation on maps. Most towns have sloping streets as well as level or nearly level streets. This distinction cannot be too strongly insisted on or too often repeated. The fact referred to is one of the most important of those which modify the value of horizontal place relations, and has thus had a marked effect on human devel-

opment from the remotest prehistoric times to the date of the latest inventions. Therefore, though it may be long before children can grasp all the significance of differences in altitude, every effort should be made to get them to notice these differences, and why and how we try to indicate them on maps. Now that so many children cycle, it should be easy to bring home, at least to such as do cycle, some idea of the importance of the distinction. On a level, smooth and hard-surfaced street, all that has to be overcome by the cyclist is air-resistance and friction, but where there is the slightest upward slope, the cyclist at once feels the effect of having to lift both himself and his cycle. If there are steep streets in a town, children can see for themselves how horses have to strain themselves in pulling uphill. On some parts of the tramway lines they can see that extra horses have to be used, and the cost of that will be readily understood.

The importance of such facts being in some degree grasped, children will then be interested in learning how they are indicated on a map. With the aid of their own observations they can be most easily taught to understand contour-lines. In a fairly steep street, the boys might be taught to mark off approximately the points in that street at intervals of 3 or 4 feet in height. Let one boy stand erect at the bottom of the street, and another balance on his shoulder a straight, uniform stick. Looking along it up the street, the latter will be able to direct a third to stand with his feet at the level of the first boy's shoulder. The opposite side of the street will probably be at the same level, and the line joining these will be part of a contour-line at a level above the starting-point equal to that of the first boy's shoulder. With this basis of observation, the meaning of contour-lines and other modes of indicating surface inequalities can be expounded with some chance of their being properly apprehended.

#### Rivers as hindrances to communications

Where there are rivers, the teacher can show how they prevent communication by land except where they are bridged.

#### Water as a means of facilitating communication

This shows them how water may hinder communication; but they can also learn at riverbanks or on ponds in town parks how water may also assist communication. If a boat is afloat, the smallest child can learn that he can move it

with a touch of his finger, whereas he will find that a good deal of strength is required to move it when it is drawn up on shore. From that alone he will get some idea of the advantages of rivers, seaports, and canals.

Physical changes modifying the value of local conditions and place relations.

Many of the important changes which regularly or from time to time modify the value of local conditions, and even place relations, can also be observed in towns. Children can, for example, be taught to notice the rise of water and its rapid flow in gutters during heavy rains. There are very few towns in which it is not also possible for them to observe the effect of long-continued rains in raising the level of a river; but even where that is not possible, their observations on gutters may lead them to that idea. They can see the mud in rapidly running water, and see how it is deposited in the streets when the rain is over. They know that in wet weather they cannot cross certain parts of a public park which they can freely walk over when it is dry.

Town children know also the difference between winter and summer, and could be made to observe that some plants do not thrive in cold summers. They know, also, that even in summer plants are apt to wither in droughts unless they are watered. They may therefore be taught that where both warmth and moisture are found, vegetation is likely to be abundant and varied. So, also, they can learn from observation the advantages on a southerly aspect.

Further, they know the difference, or at least can be taught to observe the difference, between cold and warm winds, and could also be got to observe the advantage of shelter from cold winds.

Evidences of interchange products

Then town children know that things are bought in shops, and that some of these, eggs, milk, butter, flour, fruit, come from a distance; and even London gardens and parks may assist in giving them some idea of the different aspect presented by the districts in which such things are produced from that of the town in which they are sold.

Observations more easily made by children in the country

Use of the Compass

Children in the country generally have the opportunity of making shorter or longer walks amidst varied features. The use of the Compass can be learnt in towns, but it can be

more fully demonstrated in such walks. Children should learn to take the bearings of objects from the tops of hills, and to plot their observations on paper.

Comparison of Ordnance Maps of the same district on different scales

Work of this kind should be aided by ordnance maps of various scales, and great pains should be taken to get the children to understand the different degrees of generalization in the representation of the country on different scales. The same means of comparison will serve to show the ratio of the horizontal scales to the areas represented on different scales on maps of the same size. On the more comprehensive smaller-scale maps, parallels of latitude and meridians are of course marked, and the practical use of a knowledge of latitude and longitude in indicating positions may be explained before the study of mathematical geography. With the aid of a contour map a relief map of the district may be constructed, without which the surface of a region as a whole can hardly be adequately comprehended. The frequent attention, in the course of walks, to river-banks and hill-sides will lead to the observation of the flow of water and the way in which rivers hollow out valleys, receive tributaries, and spread out mud into plains. Special attention should be called to such actions of rivers as tend to modify their value for man. On the one hand, the great fertility of flood-plains should be pointed out; but on the other hand, children should be taught to notice that deposits make rivers shallower in different places, and thus made to understand why constant dredging is required to keep navigable channels clear.

Connected with the observation of wind, the formation of mist, cloud, and rain should be noted. Quarries and railway cuttings will reveal variation of soil. It should be pointed out that woods, scrub and marsh, grassy meadows, cultivated lands, and varied types of agriculture depend on configuration, soil, and local climate, and their position should be shown on the maps made by the children. There may also be opportunities to show the connection between local conditions and other industries than agriculture. In some cases it may be found profitable to study, even at this stage, the parish boundaries with some care. Historical remains should, of course, be examined. Children should learn to trace the course of roads and railways from place

to place, and to note where bridges are needed, where embankments, where steep gradients are avoided or necessitated, where "saddles" in a range of hills form a pass, where roads are made to deviate in order to avoid steep gradients or to reach the easiest saddle or the most convenient bridge; and on this part of the work great stress should be laid. Such information, if obtained first-hand, renders the description of foreign lands and their products a subject for reasoning, not for mere memory.

Systematic study of geography with maps as a basis

By such observational work as has been indicated, the child will be brought to understand the relation between maps of different kinds and the region which they represent. Further geographical knowledge must be built up on maps as a basis. From the necessities of school-life, this further knowledge must be acquired concurrently with that which is gained by observation.

From the study of their own parish, children may rise to that of their own country or some well-defined geographical region. At this stage, some general knowledge of the continents, and of the relative distribution of land and water, should also be acquired.

In the study of maps, the same ideas to be emphasized as in observational work

In work based upon maps, it is important to remember that prominence should be given to the same ideas as are emphasized in the observational work. Unless that is done, the observational and practical work is thrown away.

This consideration determines the point of view in the study of physical features. In our own country, at least, mountainous and even hilly regions must first of all be thought of as having very few inhabitants. The pupils must learn that the great bulk of the population live in the low grounds.

Mountain and hill ranges to be considered first as hindrances to communication

Where mountains or hills separate low grounds, they should, therefore, be regarded as a hindrance to communication between the people living on opposite sides.

River-basins

Some river-basins will be found specially worthy of study, and the main facts connected with two or three of those in our own country are of a kind that can be grasped

even by children under eleven. It will be pointed out that the importance of a river-basin is not confined to what determines the direction and volume of the rivers. It should also be noted that where the country has varied surface features, the general slope of the land is more or less in accordance with the flow of the rivers, so that roads and railways run in much the same direction.

#### Importance of rainfall and temperature

The importance of rainfall and temperature with respect to agriculture, and of facilities for mining and manufactures, will, of course, not be overlooked.

Even in the most elementary study of continents, emphasis should be laid on the great facts that affect the distribution of population. For this reason it is sometimes important to note that rain does not fall everywhere at all periods of the year, as in our own country, but is mostly confined to certain seasons. In the case of Asia, it should always be noted that throughout the south-east the rains are very heavy in summer, and that for that reason enormous quantities of food are grown there, and that a comparatively small part of that huge continent contains the great bulk of the population.

#### Pictures

At this stage much more use may be made of wall and lantern pictures, but it should be remembered that they are distinctly harmful if they cannot be made to illustrate the value of local conditions or place relations. Thus, a view of Glasgow cathedral may be of use if the children are at such a stage as to appreciate the circumstances that favoured the spread of Gothic architecture in a certain region; but if it is shown merely as the picture of a building in a particular town, it does not instruct, but serves only to burden and confuse the mind.

#### C. Children from eleven to fourteen years old

##### Observational work

In one important particular observational work may be carried further at this stage, and in this particular town children may even be said to have an advantage over country children. The observations referred to are those on the convergence of street traffic.

##### Convergence of traffic

Town children know the difference between main streets and by-streets. They can easily be taught the advantage of

a corner shop. In London the importance of such centres of convergence as the Bank of England and the Elephant and Castle can be brought home to them. When they pass from what they can actually see to what they are obliged to imagine with the aid of a map, it is only one step from this idea to that of a town looked upon as a centre of trade.

### Bridges

In London, Glasgow, Bristol, and other towns, children can be made to observe the special importance of bridges at the lowest point where a river can be bridged. They can be made to see how not merely the traffic that goes more or less directly across the river, but also a great deal from points downstream on the other side of the river is brought to a bridge so situated. They can thus be brought to appreciate the special importance attached to such points of convergence.

### Systematic study of various parts of the world at this stage

In drawing up syllabuses for this stage, it is not desirable to attempt to fix any hard-and-fast lines either as to the scope of the syllabus or the order of presentation, but it will, no doubt, be generally recognized that such a syllabus ought to provide at least for a general knowledge of the distribution of land and water, rainfall and temperature, and the main characteristics of the continents, and a more detailed knowledge of the United Kingdom, the more important parts of the British Empire, some of the countries of Western and Central Europe, and of the United States.

The important thing, however, is to note the main facts on which stress should be laid in the study of any of the regions mentioned. The necessity for calling attention to the agricultural and mineral resources of any country or region need not be emphasized. Such points are never overlooked, and perhaps the only suggestions that need be offered under these heads are that due emphasis should be laid on the most important of such resources, and that in many cases precision is a matter of importance with regard to the situation of minerals. There are, however, one or two other points to which it may be worth while to direct the attention of teachers at greater length.

### Detailed study of Physical Features. Importance of the lowest points and lines in mountainous and hilly country

At this stage the study of our own country will under

every head be more detailed than at stage B. There will accordingly be a more detailed study of the physical features, and under this head the teacher, keeping in mind the goal of the study of geography, the estimation of the value of local conditions and place relations - will direct attention, not to the highest points of mountain chains or ranges of hills, but their lowest points, or at least those points which make them less of a barrier to communication between opposite sides than otherwise they would be. In the case of the Pennine Chain, for example, Cross Fell and the Peak need never be mentioned, but attention should be carefully and emphatically drawn to the lines along which the easiest communication is established between such towns as Leeds and Manchester. There can be no geographical study of the means of communication in a country unless these are studied with reference to the physical features. Important deviations from the main route brought about by the character of the physical features, should be carefully observed; and this by constant repetition should be so thoroughly instilled into the minds of boys and girls, that they should come to feel it to be as absurd to draw a railway (say) from Exeter to Plymouth as running over Dartmoor, as it would be to try to find the square of a number by dividing instead of multiplying. Ordinary railway maps, without physical features, such as accompany the official time-tables of the railway companies, may be found of great use in calling attention to the point here insisted on.

### Climate

Boys and girls will now be better able to understand the laws affecting climate, and hence to get a firmer hold of the main facts under this head. They have already learnt by observation that winds bring with them, not only rain, but also heat and cold. They must now learn to read their physical maps in the light of that and other facts.

### Effect of physical features on rainfall

As to the rainfall they must learn that mountains have a great effect in causing water-vapour borne by winds to take the form of clouds and rain. But they must never be allowed to think or say that mountains or hills attract clouds or rain. They should be brought to understand that the effect of mountains in causing clouds and rain consists in forcing the winds upwards, so that the air, exposed to less pressure, expands and becomes cooled, in consequence of which the moisture is condensed first into clouds and

then into rain. To speak of mountains as attracting clouds or rain not merely introduces a false idea, but is apt to prevent the entrance of the correct idea. It is apt to blind the learners to the fact that mountains promote rainfall chiefly on the side directly exposed to the moisture-bearing winds, not on the lee side.

Effect of physical features on temperature

Boys and girls have also learnt by observation that a row of houses, or even a wall, may afford some protection against cold north or east winds. That will enable them to understand that ranges of hills and mountains may afford a still more effectual protection against cold winds, and they should be able to pick out on their maps the parts of the British Isles which are most likely to enjoy that advantage. They will readily understand that winds that blow from the north are likely to be cold, and those from the south warm, and the teacher will not omit to explain why maritime regions in the northern hemisphere exposed to south-westerly winds are likely to have milder winters and cooler summers in consequence of that situation.

Climatic differences between our own country and other parts of the world

In teaching the geography of other countries than our own great pains will, of course, be taken to get the children to realize that they differ from our own in climate in various ways. The observations on the sun, expounded with the aid of the globe, will enable them to see how some countries get more heat from sun, and others or parts of others less than our own. The fact that there are some countries with perpetual summer should not be difficult to seize. On the other hand, in describing many parts of the Earth, it will be necessary to point out how the value of extensive areas is greatly reduced by their high altitude, and the low temperatures resulting therefrom. Where the lesson deals with a country which differs from our own in having a well-marked rainy season, whether in summer or winter, alternating with a season of little rain, great stress should be laid on that fact. If the explanation is of such a nature that it can be grasped by children under fourteen it should be given. But even if it is not, the distinction of rainy seasons is one that is important to emphasize with a view to the fundamental geographical idea which must be impressed on them by every means. Even if the cause cannot be understood, the effect of winter or summer

rains, as the case may be, in modifying the value of other local conditions, should never be overlooked.

#### The position of towns

The study of the physical features with special reference to the means of communication will, in many cases, throw light on the position of towns, and afford the best means of fixing that position in the memory. When towns are related to any well-marked physical features, this should always be pointed out, and in some cases, when that relation is once perceived, the precise position can hardly be forgotten. This, for instance, can be confidently asserted of Carlisle when once its relation to the valleys of the Irthing and Tyne, the Eden and Petterill, has been perceived. And when such relations are noticed, the town boy, who has observed the importance of such a point of convergence as the Bank of England, may be able to perceive how long streets or roads running through natural furrows on the face of the country and meeting at one point, give more or less importance to that point. In any case it should be remembered that a truly geographical account of what gives importance to towns must refer first to conditions that were present before the town was there, not to things that have been made by man because a town had already acquired importance. Some such things are, indeed, rightly referred to secondarily. Railways for example, are in most cases made to towns because the towns are already important, but once made they add to the importance of the towns to which they run.

#### Convergence of traffic at the mouths of great rivers

At this stage a boy or girl will be better able to appreciate the ultimate importance of the fact pointed out under stage B as to the direction of the main roads in river-basins with well-marked physical features. They will be able to understand how this tends to concentrate a large amount of traffic at the mouth of the main stream, and therefore to contribute to the importance of any seaport that may exist there.

#### Connection between geography and history

Before they have reached the end of this stage, boys and girls should be able to understand something of the influence which geographical conditions have exercised on history. Those influences are too manifold to be summarized, and can only be briefly indicated. Regions on which local conditions have conferred special advantages are apt to be coveted by stronger powers than those to which they belong.

Local conditions, in various ways, mark out the routes by which they are invaded by foreign armies, and such routes are in many cases the same as those followed in peaceful commerce. Illustrations may be taken from many parts of the world, but none, perhaps, would be more instructive than that which is offered by Egypt, a country which presents a striking example of the value, not only of local conditions, but also of place relations, and of the mode in which the value of both may be modified by different circumstances. We have here a valley, the bottom of which is entirely composed of a fertile mud-plain, bordered by elevated deserts. The temperatures are high enough to allow of cultivation all the year round. Every year inundations supply the necessary moisture, at least during the colder months of the year. This moisture suffices for the less valuable crops. In modern times the value of the local conditions has been greatly enhanced by the extension of the area that can be supplied with moisture during the warmer months of the year, and thus rendered available for the cultivation of the more valuable crops. Even in ancient times, however, the valley was always extremely productive and very populous. It has hence been frequently invaded, and in the course of history has fallen under the dominion of many powers. It was coveted, not merely on account of its local advantages, but also because it lay on a great trade route. Frankincense, ivory, fine woods, spices, and other valuable commodities were from time immemorial introduced into the Mediterranean region, partly by way of the Red sea and through Egypt. For hundreds of years, however, the discovery of the sea-way to India greatly reduced the value of the relation of Egypt to the countries producing some of those commodities; but again in modern times Egypt has been placed on a great trade-route between the East and West, a route on which the trade is once more of the highest consequence, though very different in its nature from what it was in former days.

#### 11.- In higher schools

The problem presented by geography in secondary education is complicated by the customary organization of the pupils in forms, with the consequence that as a boy is moved up a school mainly on his linguistic results, he may have to learn about some portions of the Earth's surface

twice, and may chance never to have lessons upon others. The effect is that geography is treated not only incompletely, but also non-progressively. With methods essentially the same throughout, the subject is found to have small educational value. The remedy appears to lie in an arrangement of the boys or girls in special sets for geography, as is now the custom for mathematics and certain other subjects. In this manner it would be ensured that in his or her passage through the school each pupil would not merely learn consistently about the whole surface of the Earth, and thus obtain a sense of geographical perspective, but would also gradually use more concentrated methods, and thus travel more thoroughly, though rapidly, over the wider material of the later stages.

A further difficulty lies in the nature of the subject itself. Geography, at any rate in the school, must be considered from the human standpoint. The object of the teacher is to build up a conception of the surface of the Earth as the product of inter-acting physical forces, in order that that surface may be intelligently viewed as the scene of social activities. It is therefore clear that the geographical teaching should be related to the teaching, on the one hand, of natural science, and, on the other, of history. A frequent practice is to treat physical geography or physiography as an introduction to natural science, and for the rest to be content with the employment of atlases during the teaching of history. The result is that the two sides of the subject are not habitually connected in the mind of the pupil. The remedy probably lies in the teaching of geography on a regional basis, with such a distribution of the physiographic explanations as shall not obliterate the regional interest. At every step in the treatment the learning of the topographical data, their physical analysis, and their application to the facts of human society, whether commercial, political, or historical, should be closely correlated.

In order to carry out the principles enunciated in the preceding paragraphs, it is suggested, by way of example, that the teaching of pupils in the four years between thirteen and seventeen might be arranged according to some such scheme as the following: In the first year, the study of a considerable portion of Britain, that surrounding the school; in the second year, the whole of Britain; in the third year, Europe, and perhaps the Mediterranean; in the fourth year, the remainder of the world. In each

stage a comparison would constantly be made with that which preceded. The standards in treating of all Britain would be taken from the section of the country learned in detail, those for Europe would be taken from Britain, and those for the outer continents from Europe: thus recapitulation would be ensured, and a coherent and simultaneous knowledge of the whole arrived at.

#### First year

It is assumed that the pupils will have obtained such first conceptions of geographical facts and methods as are implied by the "Syllabuses of instruction in geography in elementary schools." That is to say, they will have learnt the use of the globe and something of the relations of the Sun to the Earth; they will understand the use of the compass; they will be able to read a map and to connect it with the landscape; and they will have had examples of the flow of rivers, their relation to the rainfall, their action as roadways and as barriers to human movement, the convergence of traffic to bridges and the resulting growth of towns, and other similar ideas well within the reach of children in preparatory and higher elementary schools. They will also have obtained some knowledge of the largest facts of the world's topography. In other words, they will have learnt the rudiments of the world's geography, and will have had them illuminated by an intelligent Heimatskunde. It is not suggested that mere Heimatskunde should be repeated in the first year of secondary training. The portion of Britain then studied should extend far beyond the home. It might, for instance, consist of Wales and the Welsh Marches, or of Yorkshire and Lancashire, or of the Thames basin and the Weald. It should be large enough, in other words, to contain complete examples of river-basins and such lengths of road and rail as will permit of the demonstration of the influence of physical features on their course. At least once in the year, at some favourable opportunity, a visit should be made to a carefully chosen viewpoint, in order that the map of the region may be correlated with the landscape, and that the pupils reading from the map may be asked to imagine what lies in each direction a little beyond the horizon of the landscape. Such a point, for instance, as Cleeve Cloud, immediately above Cheltenham, would be admirable for this purpose, with its views extending down the Severn estuary to the Welsh border, and in the opposite direction almost

to the Wrekin.

At this stage it would be convenient to introduce such simple geological ideas as are needed for the explanation of the surface forms, such, for instance, as the difference between limestone and sandstone; the nature of strata and their foldings, faults, escarpments, and outliers; the deposit of alluvium; and so forth. Obviously, there would be much advantage in one or two excursions for the observation of these facts, but much may be done by photographs and pictures, which should, as far as possible, relate to the area chosen for study. The essential facts in the denudation of the surface, and their relation to the grain of the rock structure, involving the contrast between the longitudinal and the transverse flow of the rivers, would then be introduced, and thus a reasoned, and yet concrete, picture of the physical geography of the district would be built up. Geological maps would, of course, be compared with contoured relief maps, and for this purpose the Index Sheets of the Geological Survey and Bartholomew's coloured contour maps, reduced from the Ordnance Survey, would be found very useful. The lie of the villages along the outcrop of the water-bearing strata would next be drawn attention to, and the position of the market centres in relation to bridges or to gaps in hill ranges would be pointed out. Contrasts of agricultural conditions as between uplands and lowlands, tidal facilities upon rivers, and the relation of the mines to the structure, would be explained. The network of railways and canals would be fitted to the relief model. Maps showing the distribution of density of population would be correlated with relief and geological maps. Finally, some reference would be made to the historical factor; for instance, the frequent adoption of Roman roads as county and parish boundaries. In the course of the year it would probably be found possible, even in the one, two, or at most three hours a week which are available, to obtain a very living conception of a considerable section of the British Islands, and to obtain it by methods which, having been patiently and thoroughly used, might be assumed as available in the subsequent more rapid treatment of larger areas.

#### Second year

Britain would be studied as a whole in this year, its several sections being traversed by the comparative method, with the section studied in the first year as standard.

The meteorological portion of the general physiographical processes would be appropriate to this stage, the greater moisture of the west and of the hilly districts being the text. The movement of the tides round the coasts would also be noted. Some marine charts should be shown, and the weather maps in the newspapers might be followed for a short time, and compared with the movements of the barometer and thermometer at the school. On the other hand, the geological knowledge obtained in the first year could be appealed to without the necessity of delay for parenthetical explanations. The methods employed in connection with the location of towns and the lie of roads would also be available, but would be applied to the correlation of the larger facts of economic and historical geography. Probably it might be possible to devote three or four lessons to a geographical epitome of the chief phases of English history, or, on the other hand, if the school were commercial, to a more detailed correlation of the industries and the physical geography.

#### Third year

This year would be devoted to the study of Europe and the Mediterranean, the standard for comparison being furnished by Britain. The physiographical methods would now broaden to a study of such contrasts as those involved in the equable British and the extreme Russian climates, the tidal Oceanic and non-tidal Mediterranean waters, the glacial phenomena of the Alps, and the volcanic phenomena of Italy. In this stage, the applications of geography to human conditions must, obviously, depend very largely on the character of the school. In a boys' public school stress would be laid on the scenes of classical and sacred history in the Mediterranean. In a commercial school greater weight would be given to such contrasts as are involved in the predominance of agriculture in France, and of the industries in Germany.

#### Fourth year

This year would be devoted to the non-European portions of the globe. The first term might, perhaps, be given to Asia, the second to North America, and the third to the southern continents and the ocean, although the order is by no means essential. Obviously, the study of physical conceptions would now become widest. The glacial phenomena of the Alps would have been an introduction to those of Greenland and the Polar sea. The contrasts between the western and eastern climates of Europe would have

prepared the way for similar contrasts in North America and in Asia. The contrast of seasons in the Mediterranean would lead naturally to the zonal arrangement of climates along the west coast of Africa, and so forth. This would be the time for a recapitulation of the world's geography from the standpoint of the British Empire and commerce.

In each of the four years the value of the study of geography would be greatly enhanced if the solution of problems were made a regular part of the discipline. They might be solved either by the whole class, under the stimulation of the teacher, or by individual pupils as written answers to questions, or as essays. Perhaps they might most easily and usefully be set on topics in which geography touches the subjects taught in other hours. Thus, by arrangement between the geographical and physical teachers, an essay might be set involving the explanation of some physical law, not in general terms, but as applied to some geographical instance, the topographical details of which would have to be taken into account. Or, by arrangement between the geographical and historical teachers, a similar question might be formulated as to the scene of some historical event. For instance, in the first year of geographical study in a school near London, in which the Thames basin and the Weald was the section dealt with, an account of the march of William the Conqueror from the battle of Hastings to his coronation in Westminster Abbey might be asked for in such a manner as to compel the pupils to connect their geographical and historical lessons, instead of keeping them in separate pigeon-holes of the mind. Or, in relation to elementary mathematical teaching, there might be a computation from given data of the density and distribution of population in some specified district.

What is essential throughout is that nothing should be taught as an isolated fact, and yet that the line of argument should be so chosen that in the end every essential fact of the world's geography which should be known to an educated man or woman would have been learnt in its due setting of related facts, and in its proper perspective.

---

A P P E N D I X 19MODEL SYLLABUS IN GEOGRAPHY SUBMITTED BY A. RITTER OF THE  
GEORGE HIGH SCHOOL FOR BOYS

(Published in the Education Gazette of 29th April, 1909;  
Vol. VIII, No. 26; pp. 603-604.)

Sub-Standards A and B and Standard I

(For this section no Geography to appear on time-table.)

Tales of adventure by land and sea; of travellers, of peoples, their habits and customs; of methods of transport; of modes of living in cold temperate and warm regions; of animals; of forests; of natural phenomena; tales from the history of South Africa and other countries. The geography of direct observation of mountains, rivers, plains, plants, animals; nature study; school-gardening.  
Standard II.

(In this Standard no Geography to appear on time-table.)

Deal very generally with the formation of natural features such as bays, channels, rivers, etc.; the reading of maps, beginning with the plan of the school and its immediate neighbourhood; how to record on maps observations made; the globe; the compass; direction on a map.  
Standard III.

To know the mode of representing on a map the chief surface features; to know the position and chief features of the division in which the school is situated on a map of Cape Colony; to explain and know a map of the division in greater detail; to know something of the birds, flowers, fruit, shells, fish, etc., that may be found in the district; to know the names and positions of the continents, the position of the great mountain belts and two or three of the chief rivers in each continent; typical scenes of natural life in (1) the polar regions; (2) lofty mountains; (3) deserts; (4) temperate and tropical regions; (5) grasslands and forests; (6) round the sea-coast.  
Standard IV.

Familiarity with the globe and form of the earth; apparent movements of the sun; day and night; latitude and longitude; altitude and how this is represented on a map; correlation of climate-belts and vegetation, and some of the more important economic products; description of life in some industrial centres and great ports; to know

the map of Cape Colony; the chief mountain ranges, river basins and natural divisions; the chief industries and railway systems; the position of the more important towns; the wet and dry seasons; direction of hot and cold winds and their connection with formation of clouds, fog, and mist; sowing and reaping seasons; distribution of population and the main facts that affect the distribution in Cape Colony. Rainfall and temperature with respect to agriculture in Cape Colony.

Standard V.

A general knowledge of the distribution of land and water; the main characteristics of the continents, and a more detailed knowledge of Africa and Europe; commercial relations with the Colony; the seasons. General distribution of rainfall and temperature.

Standard VI. or High School Standard A.

Climate; to show climatic differences between Cape Colony and other parts of the world; winds; rainfall; the relations between geography and history; the nature of strata, faults, escarpments; a more detailed knowledge of Asia, America, Australasia.

Standard VII. or High School Standard B.

Thermometers and barometers, daily readings of which must be kept; such simple geological and chemical ideas as are required for the explanation of the difference between limestone and sandstone, the folding of strata, rocks; movements of the ocean; isotherms, isobars; revision of the World with special attention to the British Isles; British Colonies and Dependencies in greater detail; geographical distribution of the principal commercial products.

Notes. - Nothing should be taught as an isolated fact. Suitable excursions should be arranged, of which notes should be made and filed.

Problems should be given for solution. No pictures or slides should be shown unless they have something definite to teach.

As soon as the Ordnance Survey Maps are procurable, they should be placed in the hands of the pupils.

---

A P P E N D I X 20LIST OF THE CONTENTS OF THE FIRST TWO VOLUMES OF THE  
"GEOGRAPHICAL TEACHER".

(Taken from "Memorandum on the teaching of geography in schools", Appendix IV, pp. 382-383.)

Volume 1 (1901-1902)

- A. A. Andrews. - The use of maps in geography teaching.  
 A. Bähre. - School Excursions in Germany.  
 F. Betteridge. - Notes on practical methods of teaching geography.  
 H. Beveridge. - School excursions in Scotland.  
 C. Bird. - Limitations and possibilities of geography teaching in Day Schools.  
 A. Bramwell. - Some Practical Difficulties in lower school geography.  
 J. Bryce, the Rt. Hon. - The importance of geography in education.  
 C. C. Carter. - Photography as an aid in teaching geography.  
 A. Geikie, Sir. - The use of Ordnance Maps in teaching geography.  
 A. J. Herbertson. - The teaching of the geography of the world.  
 M. W. Keatinge. - Geography as a correlating subject.  
 J. B. Reynolds. - School Excursions in Wales and England.  
 T. G. Rooper. - Methods of teaching geography.  
 E. V. Stocks. - A school syllabus of geography.

Volume 2 (1903-1904)

- C. Brereton. - The teaching of geography in secondary schools.  
 A. J. Herbertson. - The making of maps.  
 E. G. W. Hewlett. - Aims and difficulties in the teaching of geography.  
 P. F. Kendall. - The making and use of models.  
 J. Lemas. - Excursions and the teaching of geography.  
 H. J. Mackinder. - Geography in education.  
 H. J. Mackinder. - The development of geographical teaching out of nature study.  
 A. Morgan. - The scope and practical teaching of geography in schools.  
 J. B. Reynolds. - The regional method of teaching geography.  
 H. Richardson. - The use of maps, experiments, and books in teaching geography.

- T. Alford Smith. - Teaching geography by means of  
map-drawing.
- T. Alford Smith. - The practical use of the globe in  
teaching geography.
- J. F. Unstead. - Regional geography in schools.
-

A P P E N D I X 21GEOGRAPHY SYLLABUS FOR PRIMARY STANDARDS, 1919.Standard I

Talks about our own and other lands. The more striking physical features of the immediate neighbourhood, taken in conjunction with Nature Study. Direction. The determination of the cardinal points.

Standard II

The geography of the surrounding country, taken in conjunction with Nature Study.

Direction. Elementary notions of distance. Modes of travel. The representation of physical features by means of models and drawings, and simple notions of plans and maps derived from them. Tales of travel as an introduction to the position of the Continents and Oceans.

Standard III

The representation on the map of the different surface features. The Union of South Africa in simple outline, with due attention to the main regional characteristics.

The Continents and Oceans, studied from a school globe.

Standard IV

The Union of South Africa in greater detail. Europe in simple outline, with special reference to natural features. The Earth as a planet. Day and Night.

Standard V

The geography of Europe in fuller outline, with special attention to the British Isles and the Netherlands, and to the trade relations of South Africa and Europe.

A brief survey of the British Dominions, India and the Dutch East Indies.

The movements of the Earth more fully taught, as an introduction to the study of the seasons.

Latitude and longitude.

Standard VI

The more detailed study of the British Dominions. Africa, Asia and America in broad outline: their trade relations with South Africa.

Winds and rainfall; the state of the atmosphere as affecting climate.

(Education Gazette of 20th February, 1919, Vol. XVlll, No. 19, p. 652.)

Directive contained in notes which precede the history and geography syllabi

History and Geography. - In the case of both subjects an effort should be made throughout the course to associate facts and events as far as possible, with their underlying causes. In the Geography course actual observations made by the pupils and the resulting records, upon the lines adopted in Nature Study, should be fully utilized. (Same Gazette, p. 650.)

---

A P P E N D I X 22PRIMARY SCHOOL COURSE FOR USE IN EUROPEAN SINGLE- AND TWO-TEACHER SCHOOLS

For this subject (geography) there should be three groups - Standards I. and II., III. and IV., and V. and VI. In the first two groups, the syllabus for the two years will be approximately covered each year; but in Standards V. and VI. the work of the two standards should be taken in alternate years.

The notes attached to the syllabus for each group indicate which details may be regarded as essential and, in most cases, sufficient. The teacher should endeavour to make the children understand the general conditions rather than to teach a large number of proper names. It is more important, for example, that pupils should have a proper idea of the climate and general configuration of a continent, the position and direction of the main mountain ranges and other watersheds, and so on, than that they should know a large number of names of mountain ranges and other natural features. Similarly, a clear idea of the general nature of the industries and social life of a country is more valuable than a knowledge of the names and positions of a large number of towns. The names mentioned below should, however, be regarded as practically a minimum list, to which others may be added in accordance with the interests of the pupils. This applies specially to the geography of South Africa, which will naturally be treated from the point of view of the district in which the school is situated.

Standards I. and II.

"Talks about our own and other lands" should refer mainly to the life of the different races of mankind and to specially interesting natural features. The physical features of the neighbourhood should be only such features as mountains, rivers, islands, lakes (dams), and capes and bays in the coast districts. "Tales of travel" might be confined to Diaz, Da Gama, Columbus and Livingstone.

Standards III. and IV.

The representation of physical features by means of models and drawings, and simple notions of plans and maps derived from them.

The Union of South Africa. (Minimum list of factual requirements.)

Coast features: The Cape Peninsula with Table Bay and False Bay.

Mountains: Drakensberg, Stormberg, Nieuwveld, Swartebergen, Langeberg, Outeniqua, Tzitzikama.

Rivers: Orange (and Vaal), Limpopo, Tugela, Great Kei, Great Fish, Sundays, Gamtoos, Gouritz, Olifants.

Regions: Western Province, Coast Belt, Karroo, Kalahari, High Veld, Low Veld.

Divisions: The Provinces of the Union (and Basutoland, Bechuanaland, South-West Africa and Rhodesia).

Seaports and inland towns and the railways connecting them: Cape Town, Mossel Bay, Port Elizabeth, East London, Durban, Taderitzbucht; Stellenbosch, Paarl, Wellington, Kimberley, Oudtshoorn, Graaff-Reinet, Grahamstown, King William's Town, Queenstown, Bloemfontein, Johannesburg, Pretoria, Potchefstroom, Pietermaritzburg, Ladysmith, Windhoek (and Bulawayo and Salisbury).

Products:

Exports: Gold, diamonds, hides and skins, mohair, wool, fruit, feathers, maize, sugar, coal, and tobacco.

Imports: Clothing, machinery, foodstuffs (tinned, etc.), hardware, timber.

#### Standard V.

Europe (Minimum factual requirements.)

Islands: The British Isles, Corsica, Sardinia, Sicily, Iceland.

Peninsulas: The Balkans, Italy, Spain and Portugal, Denmark, Scandinavia.

Parts of the ocean: Black Sea, Mediterranean, Strait of Gibraltar, Bay of Biscay, English Channel, Strait of Dover, North Sea, Baltic, White Sea.

Mountains: The Alps (Mont Blanc), Urals, Pyrenees, Caucasus, Vesuvius; position of main watersheds.

Rivers: Volga (with the Caspian Sea), Danube, Rhone, Seine, Thames, Rhine, Elbe.

Countries and towns:

England and Wales: London, Liverpool, Manchester, Birmingham, Sheffield, Leeds, Cardiff, Southampton.

Scotland: Edinburgh, Glasgow.

Ireland: Dublin, Belfast.

Holland: Amsterdam, The Hague, Rotterdam.

Belgium: Brussels, Antwerp.

France: Paris, Havre, Lyons, Marseilles.

Spain: Madrid.

Portugal: Lisbon.

Italy: Rome, Naples, Venice, Brindisi.

Switzerland: Geneva.

Germany: Berlin, Hamburg, Munich, Leipzig.

Denmark: Copenhagen.

Norway: Christiania.

Sweden: Stockholm.

Russia: Moscow, Petrograd, Odessa.

Austria: Vienna.

Hungary: Buda-Pest.

Poland: Warsaw.

Greece: Athens.

Turkey: Constantinople.

Productions of chief natural regions: Mediterranean (similar to Western Province) - fruit, wine, silk, etc.; Middle Europe - grain, but trade mainly in manufactured articles; Northern Europe - timber, furs, skins and the hardier grains.

#### Standard VI.

Africa. (Minimum factual requirements.)

(The story of its exploration should be told incidentally.)

Revise Union of South Africa (Standards III. and IV.)

Coastline: Gulf of Guinea, Red Sea, Suez Canal.

Islands: Madagascar, Ascension, St. Helena, Canaries (with Madeira).

Mountains: Atlas, Abyssinian Mountains, Kilimanjaro and Kenya.

Desert: Sahara.

Lakes: Victoria, Albert, Tanganyika, Nyasa (with River Shire).

Rivers: Nile (cataracts), Niger, Congo, Zambesi (Victoria Falls).

Countries and towns: Egypt (Cairo and the Pyramids, Alexandria, Port Said, Suez, Khartum), Tripoli, Tunis, Algiers, Morocco, Sierra Leone, Lagos, Timbuktu, Elisabethville, Lourenco Marques, Beira, Zanzibar, Mombasa, Nairobi.

Productions and chief natural regions: Mediterranean - fruit, wine; Egypt - cotton, rice, wheat, tobacco; tropical - rubber, palm oil, ivory, tea, coffee, tobacco; South Africa - see Standards III. and IV.

Australasia. (Minimum factual requirements.)

(Australia and South America should be compared with Africa as regards position, climate and build.)

Coast features: Great Australian Bight, Great Barrier Reef.

Islands: Tasmania, New Zealand.

Towns: Melbourne, Sydney, Auckland, Wellington.

Productions: Wool, mutton, fruit, gold.

India and Dutch East Indies (Minimum factual requirements.)

Islands: Ceylon, Java.

Mountains: Himalayas (Mt. Everest.)

Rivers: Ganges, Indus.

Towns: Delhi, Calcutta, Bombay, Madras, Singapore, Batavia.

Productions: Rice, tea, cotton, opium, silver work, jewels, ivory, valuable woods, rubber, spices, cocoa, coffee.

Remainder of Asia (Minimum factual requirements.)

Coast features: Persian Gulf, Behring Strait.

Islands: Sumatra, Philippines, Hong Kong, Japan.

Peninsulas: Arabia, Malay Peninsula, Korea.

Mountains: The Great Central Watershed.

Rivers: Euphrates and Tigris, Hwangho, Yangtsekiang.

Countries and towns:

Arabia: Mecca.

Turkey-in-Asia: Smyrna.

Syria: Damascus.

Palestine: Jerusalem.

China: Peking, Canton, Shanghai.

Japan: Tokio, Yokohama.

Siberia: Trans-Siberian Railway, Vladivostok.

Productions: as for India.

America (Minimum factual requirements.)

Coast features: Hudson Bay, Gulf of Mexico, Panama (isthmus and canal), Cape Horn.

Islands: Greenland, Newfoundland, The West Indies.

Mountains: The Western Watershed (Rockies, Andes).

Rivers: St. Lawrence (the Great Lakes, Niagara), Mississippi and Missouri, Orinoco, Amazon, River Plate.

Countries and towns:

Canada: Ottawa, Montreal, Quebec, Winnipeg, Vancouver .

U.S.A.: Washington, New York, Philadelphia, Chicago, St. Louis, New Orleans, San Francisco.

Mexico: Mexico City.

West Indies: Cuba (Havana).

Argentina: Buenos Ayres.

Brazil: Rio de Janeiro.

Chile: Valparaiso.

Productions: Wheat, gold (California - the Klondike), silver, rubber, valuable woods, fruit, tinned meats, petroleum, timber (lumbering), furs (trappers), tobacco.

(Education Gazette, 22nd November, 1923, Vol. XXII., No. 39, pp. 773-774.)

On page 768 of the same Gazette we read: "Special syllabuses in history, geography, nature study, singing, needlework, drawing and physical training have been prepared. These have been planned to meet the needs of these schools, (i.e. Single- and Two-Teacher schools) the aim being to reach the same standard of attainment in the essential subjects as is attained in the larger primary schools".

---

A P P E N D I X 23SYLLABUS IN GEOGRAPHY FOR PRIMARY CLASSES, 1937

(This syllabus came into force at the beginning of 1939.)

Syllabuses in History and Geography

1. These two subjects should, as far as possible, be taught in conjunction and in Standards 1 and 11 they should form one subject.
2. In the teaching of both geography and history practical work should be performed by the pupils themselves - maps, pictures, books of reference and manual training are indispensable aids.

(Education Gazette of 10th June, 1937, Vol. XXXVI, No. 12, p. 660.)

Geography SyllabusStandard 1-111.

At this stage the subject should be taught mainly by means of stories.

Human Relations: Our own country: Population, types and countries of origin; activities, how the people live and what they produce. Peoples of other countries and how they live. Travel and means of communication arising from the reciprocal commercial requirements. General acquaintance with modern conveniences in the household.

General and Practical Knowledge: Observational study of the situation of the school and places in the neighbourhood. Representation by means of models, plans, maps, etc. Direction; seasons; weather; how time and distance are measured; day and night. Continents and oceans. The reading of maps and the globe; ability to indicate on a map the general physical features. The relief of the land; the chief natural regions; products and general acquaintance with the machinery used in connection with them.

Standards IV-VI.

At this stage stress should be laid on the scientific aspect of the study.

At the end of Standard IV the pupil should have a good grasp of the following, in addition to the above:-

- (a) The Continent of Africa as a whole in outline; Northern and Southern Rhodesia in general outline; detailed study of the Union of South Africa.
- (b) Observational study of direction; clouds, winds, rain;

heat, air, light and moisture as conditions for the germination and growth of plant life, taken in connection with what has been observed in nature.

(c) Introductory study to the general natural regions of the world: climate, vegetation and animal life, typical products, modes of living of the different peoples.

At the end of Standard VI the pupils should have a good grasp of the following:-

(a) The primary products and secondary manufactured products of the Union.

(b) Europe; British Dominions and Crown Colonies; Netherlands East India; America and Asia; general treatment of natural regions; economic relations with the Union; how products are distributed.

(c) Physical study: Lines of longitude and latitude; shape and size of the earth; how heat and moisture are measured; records of seasonal changes; prevailing winds; the main ocean currents. The earth as a planet in the planetary system; very elementary knowledge of the heavens.

(d) Man and his conquest of Nature: Water power, steam, electricity, telegraphy, telephone, wireless, aviation, lighting, heating and household appliances.

The following particulars will serve as hints for the interpretation of the above:-

Standards I-III.

Human relations: Activities: Sheep farmer of the Karroo; fruit farmer of the Western Province; sugar planter of Natal; mealie farmer of the Free State and Transvaal; forest workers of Knysna; grain farmer of the Malmesbury area; native life. How gold, coal and diamonds are obtained.

Other Countries: Eskimos of the Ice Region; Laplander of the Tundras; Norwegian fishermen; Canadian lumbermen; fur-trappers; cowboy life in North and South America; pygmies of the Congo; children of Holland, Japan, India, England, Switzerland, etc.; Camels of the desert, gipsy life.

Travels: Travels of explorers, navigators and traders on land and sea; development of trade routes.

Modern Conveniences: Lighting; heating; furniture; houses; cooking facilities; labour-saving devices in the home.

Standards IV-VI.

1. Simple brief studies in economic products pivoting on food, clothing, shelter and implements. Basis of study the things used in daily life, constant reference to be made to commodities produced in South Africa and those which must be imported.
  2. Knowledge of the main sea routes and the cargoes carried along them; chief sea ports; the transport of perishable goods (cold storage).
  3. Map-reading including the interpretation of scale on a map. Lines of longitude and latitude on the map and the globe; longitude and time; wireless & time signals; the use of the thermometer, the barometer, the rain-gauge; temperature and rainfall charts; wind star. Observation of sunrise and sunset at different intervals during the year; length of day at different intervals during the year; varying height of midday sun at different seasons of the year. Permanent wind systems and their effect on climate and rainfall; main ocean currents in North and South Atlantic and Indian Oceans.
- (Ibid., pp. 664-666.)
-

A P P E N D I X 24BROADCAST TALKS OF A GEOGRAPHICAL NATURE WHICH WERE GIVEN TO CAPE DEPARTMENTAL SCHOOLS DURING THE PERIOD 1940-1951 INCLUSIVETalks given during the year 1940First Quarter, 19401. Travel Talks, by Mr Hein H. Wicht (In English.)Information about Mr Wicht

"Mr Wicht has travelled widely in all parts of the world and he can speak with first-hand knowledge of many strange, out-of-the-way places. Recently he spent many months in travelling throughout the length and breadth of South America, and in this series of talks he tells us of some of his experiences. At present Mr Wicht is living in Cape Town, but, to use his own words, 'the itch to travel' may seize him again at any moment and he may set off on his travels once more."

Days and times when talks were given

Every Tuesday from 11.15 to 11.35 a.m.

Titles of talks

1. Buenos Aires. 2. Valparaiso. 3. Lima. 4. Panama.  
5. Rio de Janeiro. 6. Jamaica. 7. San Francisco. 8.  
Hawaii.

Illustrations

Twenty small photographs. All save one are reasonably clear. (The Education Gazette, 18th January 1940, Vol. XXXIX, No. 1, pp. 28-43.)

Second Quarter, 19402. Deur 'n Winkelvenster, deur Mej. A. du Toit. (In Afrikaans.)Information about Miss du Toit

"Mej. du Toit is by die personeel van die Hoër Meisieskool, Parktown, Johannesburg. In hierdie reeks praatjies handel sy aardrykskunde op 'n nuwe en interessante manier."

Days and times when talks were given

Every Thursday, 11.15-11.35 a.m.

Titles of talks

1. 'n Stukkie Sjokolade. 2. 'n Sy Sakdoek. 3. 'n Pond Rys. 4. 'n Sak Sout. 5. 'n Rolletjie Garing. 6. Olyfolie. 7. Velle Papier. 8. Perlemoerknops. 9. 'n Blik Beskuitjies.

Illustrations

A map of the world, showing the main sources of the various raw materials used to make the above products. The map is clear.

(The Education Gazette, 21st March 1940, Vol. XXXIX, No. 7, pp. 516-521.)

Third Quarter, 1940

3. The Far East, by Mr S. H. Lawrence (In English.)

Information about Mr Lawrence

"Mr Lawrence lived for many years in the Far East, where he taught in schools for Chinese and natives in Singapore and Borneo. He is now retired and lives in Cape Town. In this series of talks he tells you something of his experiences in these eastern tropical lands."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of talks

1. Singapore. 2. Borneo. 3. Dyaks. 4. Off the Beaten Track. (In this talk Mr Lawrence describes trips he made to Brunei, the native territory between Sarawak and British North Borneo, ruled by a Sultan under British protection. From there he takes you with him to the pretty island, Lebuan, off the coast of Brunei. Finally, he has something to say about British North Borneo.) 5. The Land of River and Palm. (I.e. interior of Borneo, and Borneo's people.)

Illustrations

Eight clear photos and a simple and clearly legible map of Borneo, showing political divisions and chief towns, Equator, a guiding meridian. Scale given.

(The Education Gazette, 4th July 1940, Vol. XXXIX, No. 14, pp. 903-909.)

Fourth Quarter, 1940

4. Central Africa, by Mrs Kitty Kraft (In English.)

Information about Mrs Kraft

"Mrs Kitty Kraft is a South African journalist. Before taking up her residence in Pretoria, she was a regular broadcaster from the Cape Town studio. These talks on Central Africa are based on her own travels, particularly in the Belgian Congo, where she lived for some time."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. East Coast Impressions. 2. The Great Rift Valley. 3. The Great Rivers of Central Africa (Mainly the Congo.) 4. African Volcanoes. 5. Native Tribes. 6. Gorillas and

Elephants. 7. Pioneers - African explorers and pioneers.

Illustrations

Ten clear photographs.

(The Education Gazette, 26th September 1940, Vol. XXXIX, No. 21, pp. 1376-1383.)

5. Die Industrieë van Suid-Afrika, deur mnr. P. E. Rousseau  
(In Afrikaans.)

Information about Mr Rousseau

"Mnr. Rousseau het 'n breedvoerige studie van die staal-industrieë oorsee gemaak en daarna is hy vir 'n paar jaar op die personeel van "Isacor". Tans woon hy te Johannesburg en is besig met die vervaardiging van olie uit torbaniet en steenkool."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Steenkool en die maak van gas en kooks. 2. Steenkool-byprodukte. 3. Torbaniet en Torbanietolie. 4. Petrol uit steenkool. 5. Yster en staal. 6. Die mieliepit en sy produkte. 7. Dier- en Plantolies en kunsmatige botter.

Illustrations

Eight clear photos.

(The Education Gazette, 26th September 1940, Vol. XXXIX, No. 21, pp. 1384-1389.)

6. Ceylon en Indië, deur Prof. H. P. Cruse (In Afrikaans.)

"Professor Cruse is werksaam aan die Universiteit van Stellenbosch in die Fakulteit van Opvoedkunde. In November, 1938, het hy Suid-Afrika verlaat en 'n uitgebreide toer deur Indië en Ceylon onderneem. Hy was een van die afgevaardigdes na die Wêreldsending-konferensie wat gehou is te Tambaram, naby Madras, in Indië. Die konferensie het hom die geleentheid gegee om baie verteenwoordigers van ander lande te ontmoet en om kennis te maak met mense wat in Indië woon. Van sy ondervindings op die reis na en in Indië word in die praatjies een en ander meegedeel."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. Ceylon, introductory. 2. Ceylon. 3. Ceylon. 4. Ceylon. 5. India. 6. India. 7. India. 8. India.

Illustrations

Six clear photographs.

(Ibid., pp. 1390-1394)

Talks given during the year 1941

First Quarter, 1941

No talks given.

Second Quarter, 1941

7. Die Hollands Oos-Indiese Eilande, deur Mnr. Teo de Witte  
(In Afrikaans.)

Information about Mr de Witte

"Mnr. Teo de Witte het al baie gereis, en is, soos hy homself noem, 'n swerwer, en dus nog steeds op reis. Hy gesels met julle oor dinge wat hy self gesien en ondervind het - indrukke wat die mense, hul godsdienste, hul gewoontes en kuns, en die land self op hom gelaat het."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. Die Nederlandse Kolonies. 2. Sumatra. 3. In die Oerwoud. 4. Java. 5. Madoera. 6. Na Bali. 7. 'n Tempelfees. 8. Dodefeeste. 9. Die Molukke. 10. Die Koppesnellers van Nu-Guinea.

Illustrations

Ten clear photographs and a map of the islands concerned. (The Education Gazette, 13th March 1941, Vol. XL, No. 7, pp. 440-452.)

Third Quarter, 1941

No talks given.

Fourth Quarter, 1941

8. Die kleinspan van allerlei lande, deur Mej. H. C. Olivier,  
L.P.R. (In Afrikaans.)

Information about Miss Olivier

"Mej. H. C. Olivier, L.P.R., is teen hierdie tyd al baie goed bekend as een van die persone wat bydra tot ons skoolradio-programme. Sy is 'n afgetrede skoolhoof."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of talks

1. Die Rooihuide. 2. Chinese Kinders. 3. Hollandse Kinders. 4. Franse Kinders. 5. Hindoe-Kinders. 6. Italiaanse Kinders. 7. Japannese Kinders. 8. Hawaiiëse Kinders.

Illustrations

Two photographs which are not too clear.

(The Education Gazette, 25th September, 1941, Vol. XL, No. 21, pp. 1245-1252.)

9. The Mediterranean, by Miss M. H. le Roux (In English.)

Information about Miss le Roux

"Miss M. H. le Roux was the principal of the Bloemhof Girls' High School, Stellenbosch. She retired a few years ago, and has since travelled extensively."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. The sea voyage from Holland. 2. Algeria and Tunisia. 3. The Adriatic. 4. Greece. 5. Greece (continued). 6. The Aegean Sea. 7. Islands in the Aegean. 8. The Dardanelles.

Illustrations

Twenty-two clear photographs, one map showing the Bosphorus and surrounding area, two drawings and an engraving.

(The Education Gazette, 25th September 1941, Vol. XL, No. 21, pp. 1265-1287.)

10. Reisindrukke, deur Dr. I. D. du Plessis (In Afrikaans.)

Information about Dr. du Plessis

"Dr. I. D. du Plessis is lektor in Afrikaans aan die Universiteit van Kaapstad."

Days and times when talks were given

Every Wednesday, 11.15-11.35 a.m.

Titles of Talks

1. 'n Reis na die Ooste. 2. Java. 3. Bali. 4. Bali (vervolg). 5. Brasilië. 6. Brasilië (vervolg). 7. Brasilië (vervolg). 8. Brasilië (vervolg).

Illustrations

Eight clear photographs.

(Ibid., pp. 1291-1300.)

Talks given during the year 1942

First Quarter, 1942

11. Reisindrukke, by Mrs S. M. Gordon-Bagnall (In Afrikaans.)

Information about Mrs S. M. Gordon-Bagnall

Mrs Gordon-Bagnall was earlier a teacher at the Girls' High School, Wynberg. Since then she has travelled widely, and tells in an interesting way in these talks of what she has seen and experienced.

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. 'n Studentetoer. 2. Nederland. 3. Frankryk en Praag. 4. 'n Seereis na Europa. 5. Londen. 6. Engeland. 7. Italië. 8. Venesie.

Illustrations

Nine clear photographs.

(The Education Gazette, 15th January 1942, Vol. XL1, No. 1, pp. 11-19.)

Second Quarter, 1942

12. A journey round Africa, by Mrs C. Money (In English.)

Information about Mrs Money

"Mrs C. Money was formerly the Editress of a well-known South African women's journal. The trip round Africa described in this series of talks was made just before the present war broke out."

Days and times when talks were given

Every Wednesday, 11.38-11.58 a.m.

Titles of Talks

1. Luderitzbrucht and Walvis Bay. 2. French Equatorial Africa: Pointe Noire. 3. Lagos. 4. The Ivory Coast. 5. Dakar. 6. Cairo. 7. Port Said and the Suez Canal. 8. Massaua. 9. Aden. 10. Mogadiscio. 11. Mombasa, Zanzibar, Dar-es-Salaam.

Illustrations

Fourteen clear photographs.

(The Education Gazette, 12th March 1942, Vol. XL1, No. 7, pp. 513-526.)

Third Quarter, 1942

13. Geography through a shop window, by Miss A. E. du Toit

(In English.)

Information about Miss du Toit

"Miss A. E. du Toit is a teacher at the Girls' High School, Parktown, Johannesburg."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of talks

1. A pound of tea. 2. Pottery. 3. Furs. 4. Toy Balloons. 5. Desiccated Coconut. 6. Teak Furniture. 7. Tinned Fish. 8. A pound of coffee.

Illustrations

None.

(The Education Gazette, 25th June 1942, Vol. XL1, No. 14, pp. 880-886.)

Fourth Quarter, 1942

14. South African Historical Geography, by Mr W. T. Gregor

(In English.)

Information about Mr Gregor

"Mr W. T. Gregor is a teacher at the Springs West School, Springs."

Days and times when talks were given

Every Wednesday, 11.15 a.m.

Titles of Talks

1. Cape Town. 2. Towns of the Frontier. 3. Great Trek Towns. 4. The Provincial Capitals. 5. Pretoria. 6. Along the Missionaries' Road. 7. Johannesburg. 8. The Reef Towns.

Illustrations

None.

(The Education Gazette, 17th September, 1942, Vol. XL1, No. 20, pp. 1207-1212.)

Talks given during the year 1943First Quarter, 1943

15. Vervoermiddels in verskillende lande, deur Mej. H. C. Olivier, L.P.R. (In Afrikaans.)

Information about Miss Olivier

"Mej. H. C. Olivier, wat vroeer onderwyseres was, en tans 'n lid van die Provinsiale Raad is, het al baie keer radiolesse opgestel en uitgesaai. In hierdie reeks gesels sy oor vervoermiddels waarmee ons nie daeliks in aanraking kom nie. Vir die illustrasies in hierdie reeks is ons dank verskuldig aan mnr. N. Brauer wat 'n kursus aan die Kaapstadse Opleidingskollege loop."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. Die Kameel. 2. Die Olifant. 3. Die Takbok en die Wolfhond. 5. Die os en die Ossewa. 6. Posduiwe en Lugskepe. 7. Eienaardige Vervoermiddels. 8. Skepe.

Illustrations

Seven clear engravings.

(The Education Gazette, 14th January 1943, Vol. XL11, No 1, pp. 11-18.)

16. Egipte, deur Mnr. P. de Waal (In Afrikaans.)

Information about Mr de Waal

"Mnr. P. de Waal is by die personeel van die Johannesburgse ateljees van die Suid-Afrikaanse Uitsaaikorporasie. He het onlangs uit Egipte teruggekeer, waar hy 'n lid van die Opnameeenheid van die Suid-Afrikaanse Uitsaaikorporasie was."

Days and times when talks were given

Every Tuesday, 11.38-11.58 a.m.

Titles of Talks

1. Per vliegtuig oor Afrika. 2. Per vliegtuig oor Afrika. 3. Ou Egipte. 4. Uit die land van die Faro's. 5. Per trein van Kairo na Luksor. 6. Deur Egipte. 7. Kairo. 8. Die

hedendaagse Egipte.

Illustrations

Eleven clear photographs.

(The Education Gazette, 14th January 1943, Vol. XL11, No. 1, pp. 30-37.)

Second Quarter, 1943

17. Aardrykskunde deur 'n Winkelvenster, deur Mej. A. E. du Toit (In Afrikaans.)

Information about Miss du Toit

See talks which she gave during the Second Quarter of 1940.

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

These are precisely the same talks as Miss du Toit gave during the Second Quarter of 1940. Nine talks in all.

Illustrations

A map of the world, showing the main regions where the raw materials concerned are produced.

(The Education Gazette, 25th March 1943, Vol. XL11, No. 8, pp. 523-528.)

Third Quarter, 1943

18. Our Neighbours, by Major Louis Kraft (In English.)

Information about Major Kraft

"Major Kraft is a South African journalist in peace time and at present a staff officer at Defence Headquarters, Pretoria. He is from Antwerp (Belgium) and his native language is French. He has travelled extensively in Africa by road, river and air and once crossed the whole continent on a motorcycle.

Madagascar and the Belgian Congo are among the many territories he has visited. Before the war Major Kraft was a regular broadcaster from Cape Town studio."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Madagascar (I). 2. Madagascar (II). 3. Madagascar (III).  
4. Belgian Congo (I). 5. Belgian Congo (II). 6. Belgian Congo (III). 7. Belgian Congo (IV).

Illustrations

Eleven clear photographs.

(The Education Gazette, 1st July 1943, Vol. XL11, No. 12, pp. 765-773.)

Fourth Quarter, 1943

19. Rivers and waterways of the world, by Mr Hein Wicht

(In English.)

Information about Mr Wicht

"Mr Hein Wicht has travelled widely in all parts of the world and can speak with first-hand knowledge of the rivers and waterways that he is going to discuss in this series of talks."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. The Amazon. 2. The Nile. 3. The Mississippi. 4. The Ship Canals. 5. The Thames. 6. The Irrawaddy. 7. The Volga. 8. The Orange River.

Illustrations

Ten clear photographs and two maps. The maps are in black and white. One is of the Amazon basin and is not too clear, while the other is a clear map of the Irrawaddy.

(The Education Gazette, 23rd September, 1943, Vol. XLII, No. 16, pp. 942-953.)

Talks given during 1944First Quarter, 1944

20. 'n Reis na die Ooste, deur mnr. Pieter de Waal (In Afrikaans.)

Information about Mr de Waal

"Mnr. P. de Waal is by die personeel van die Kaapstadse ateljees van die Suid-Afrikaanse Uitsaaikorporasie. In Julie 1940 het hy 'n reis na die Hollands Oos-Indiese eilande onderneem, en deel in hierdie reeks sy ondervindings mee."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. Mauritius. 2. Zanzibar en Mombassa. 3. Die Sichelle en Sumatra. 4. Oor Singapoer na Batavia. 5. Die Stad Batavia. 6. Bandoeng. 7. Djokja in Sentraal Java. 8. Soerabaja en Bali. 9. Oorsig van die Reis.

Illustrations

Nine clear photographs.

(The Education Gazette, 13th January 1944, Vol. XLIII, No. 1, pp. 22-27.)

Second Quarter, 1944

21. France, by Lt.-Comdr. L. Pacteau (In English.)

Information about Lt.-Comdr. L. Pacteau

"Lt.-Comdr. Louis Pacteau is the French Naval Attaché in

South Africa. Before the war he was a schoolmaster at the a French lycee in Toulouse. In these talks he gives you some idea of what his country, and what French life and the French people, are like."

Days and times when talks were given

Every Thursday, 11.38-11.58 a.m.

Titles of Talks

1. The making of France. 2. The French Colonial Empire.
3. French Agriculture. 4. French Industry. 5. Paris. 6. Home life in Provincial France. 7. French Communications.
8. French Literature. 9. French Arts and Sciences. 10. France since 1940.

Illustrations

Eleven photographs, not too clear.

(The Education Gazette, 23rd March 1944, Vol. XLIII, No. 7, pp. 438-452.)

Third Quarter, 1944

No talks.

Fourth Quarter, 1944

22. The United States of America, by Mr D. Wilson, M.A.

(In English.)

Information about Mr Wilson

"Mr D. Wilson, M.A. is Principal Teacher of Shawbury Native High School in the Transkeian Territories, and is the writer of the series of lessons on "The South African Citizen", broadcast in 1942. Mr Wilson visited the United States a few years ago."

Days and times when talks were given

Every Thursday, 11.38-11.58 a.m.

Titles of Talks

1. The greatness of the United States. 2. Expansion of Territory. 3. Expansion of Territory (continued). 4. The Middle West. 5. The Prairie States. 6. The Constitution of the United States of America. 7. Constitution (continued).
8. The American People.

Illustrations

Four fairly clear photographs.

(The Education Gazette, 21st September, 1944, Vol. XLIII, No. 15, pp. 8 986-990.)

Talks given during the year 1945

First Quarter, 1945

No talks.

Second Quarter, 194523. Lande in die Verre Ooste, deur Mej. W. E. Serton en Prof. P. Serton (In Afrikaans.)Information about Miss Serton and Prof. Serton

"Mej. W. E. Serton is lektrise aan die Tegniese Kollege, Kaapstad, terwyl haar vader, dr. P. Serton, professor in aardrykskunde aan die Universiteit, Stellenbosch, is. Professor Serton word allerwee beskou as een van die beste kenners van aardrykskunde in ons land. Sy oud-students wat tans onderwys gee, sal ongetwyfeld bly wees om weer op hierdie wyse met hom in aanraking te kom."

Directive to teachers

"Die onderwyser(es) moet asseblief sorg dra dat die kaart van die betrokke land wat behandel word, byderhand is. Sketskaarte sal ook goed wees."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. Ceylon. 2. Burma. 3. Thailand. 4. Frans-Indo-China. 5. Malakka of die Maleise Skiereiland. 6. Sumatra. 7. Java. 8. Java (vervolg). 9. Borneo. 10. Die Filippynse Eilande. 11. Japan.

Illustrations

Eight clear photographs.

(The Education Gazette, 22nd March 1945, Vol. XLIV, No. 7, pp. 426-450.)

Third Quarter, 194524. Egypt, by Mr J. M. Steenkamp (In English.)Information about Mr Steenkamp

"Mr J. M. Steenkamp resides at Cape Town and recently visited Egypt."

Days and times when talks were given

Every Thursday, 11.15-11.35 a.m.

Titles of Talks

1. Geography. 2. The River Nile. (This talk is partly historical.) 3. Agriculture. 4. Temples, Monuments and Tombs. 5. Temples, Monuments and Tombs (continued). 6. A day in Cairo. 7. A day in Cairo (continued). 8. Manners and customs. 9. The Ancient Gods.

Illustrations

Seven clear photographs.

(The Education Gazette, 28th June, 1945, Vol. XLIV, No. 11, pp. 793-800.)

Fourth Quarter, 1945

No talks.

Talks given during the year 1946First Quarter, 1946

25. Die Behoud van ons Natuurlike Bronne, deur Dr. C. L. Wicht (In Afrikaans.)

Information about Dr. Wicht

"Dr. C. L. Wicht is Navorsingsbeampte van die Bosbou-departement, en staan aan die hoof van die Jonkershoek-navorsingstasie by Stellenbosch, waar die uitwerking van bosbou, veldbrand en die beskerming van die plantegroei op natuurlike waterbronne ondersoek word."

Days and times when talks were given

Every Thursday, 11.15-11.35 a.m.

Titles of Talks

1. Die behoud van ons natuurlike bronne. 2. Ons water. 3. Ons grond. 4. Die veld. 5. Beweiding. 6. Ploeglande. 7. Bosbou. 8. Die behoud van die Natuurskoon. 9. Die storie van 'n vallei.

Illustrations

Eight photographs, three diagrams, and one map. All clear and effective.

(The Education Gazette, 10th January 1946, Vol. XLV, No. 1, pp. 48-57.)

26. Europa - Die Land van ons Herkoms, deur Mej. W. E. Serton en Prof. P. Serton (In Afrikaans.)

Information about Miss Serton and Prof. Serton

(See series of talks "Lande in die Verre Ooste" which they gave in the 2nd. Quarter of 1945.)

Days and times when talks were given

Every Tuesday, 11.15-11.38 a.m.

Titles of Talks

The first three talks are historical, and the seven remaining ones geographical. Geographical talks: 1. Die bou van Europa. 2. Die Klimaat. 3. Plantegroei en Produkte. 4. Die Nywerhede. 5. Die Landbou en Veeteelt. 6. Bekende Riviers. 7. Vermaarde Stede.

Illustrations

Seven clear photographs.

(The Education Gazette<sup>10th Jan.,</sup> 1946, Vol. XLV, No. 1, pp. 28-35.)

Second Quarter, 1946

No talks.

Third Quarter, 1946

27. A trip round North America, by Prof. W. T. Baxter (In English.)

Information about Prof. Baxter

"Professor Baxter is professor of Accounting at the University of Cape Town, and in these talks he tells the children what they would see, hear, and eat, if they went on a motor tour round the United States of America. It would be of great assistance if the teachers could provide a map of North America during the talks."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. New York. 2. Washington. 3. The South. 4. To the edge of the Spanish Main. 5. The Wild West. 6. The Pacific Coast. 7. Through the Rockies to Chicago. 8. Quebec and New England.

Illustrations

Ten clear photographs.

(The Education Gazette, 27th June 1946, Vol. XLV, No. 15, pp. 868-876.)

Fourth Quarter, 1946

28. Series of talks on products, by Mr Pieter de Waal (In Afrikaans.)

Information about Mr de Waal

Mr de Waal is associated with the S.A. B.C., Cape Town.

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Die Romantiese verhaal van tee. 2. Koffie, die drank van miljoene. 3. Mielieboerdery in Suid-Afrika. 4. Die blink steentjie van Suid-Afrika. 5. Die blink steentjie van Suid-Afrika (vervolg). 6. Die dramatiese verhaal van goud.

Illustrations

Eight clear photographs.

(The Education Gazette, 26th September 1946, Vol. XLV, No. 22, pp. 1226-1230.)

Talks given during the year 1947First Quarter, 1947

29. Our Neighbours, by Mr H. Wicht (In English.)

Information about Mr Wicht

"Mr H. Wicht is resident in Durban. In this series of talks, he will tell something about the other states in Africa: the Colonies, Protectorates and Mandates that share the Continent with us. Mr Wicht, who has travelled widely in East, West and Central Africa, speaks as an observer."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. South-West Africa. 2. Mozambique (Portuguese East Africa). 3. The Rhodesias. 4. Angola (Portuguese West Africa). 5. Nyasaland Protectorate. 6. The Belgian Congo. 7. Tanganyika Territory. 8. Uganda Protectorate. 9. Kenya Colony.

Illustrations

Seven clear photographs and one map.

(The Education Gazette, 9th January 1947, Vol. XLVI, No. 1, pp. 33-45.)

Second Quarter, 1947

30. The Balance of Nature, by Dr. C. L. Wicht (In English.)

Information about Dr. Wicht

See the series of talks which he gave during the First Quarter of 1946 - "Die behoud van ons natuurlike bronne".

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. The relation between plants, animals, soil and water. 2. The living soil. 3. The water cycle. 4. The veld. 5. Man's rule over nature. 6. Forestry. 7. Pasturing. 8. Cultivation. 9. Wild nature preserved. 10. The story of a South African valley.

Illustrations

Eight clear photographs, three diagrams, one map and one drawing.

(The Education Gazette, 27th March 1947, Vol. XLVI, No. 9, pp. 580-590.)

Third Quarter, 1947

31. Ons Nywerhede, deur deskundiges (In Afrikaans.)

Information about the experts concerned

"Aan hierdie nuwe reeks programme het etlike van ons vernaamste wetenskaplikes meegewerk. In die praatjies word die belangrikheid van elke betrokke industrie beklemtoon en interessante historiese gegewens oor die opbloei daarvan word verskaaf. Die medewerkers is as volg:

Professor J. H. Neethling: "Ons Graanindustrie".

Mr. F. J. Labuschagne: "Die Merinoskaap- en Wolnywerheid".

Mr. J. P. Scannell: "Ons Wynbounywerheid".

Mev. J. Hertslet: "Ons Suikernywerheid".

Mr. G. Vaandrager: "Ons Suiwelnywerheid".

Dr. M. W. Black: "Ons Sagtevrugtenywerheid".

Mr. M. Steyn: "Die Goudmynbedryf".

Dr. H. J. van der Bijl: "Die Suid-Afrikaanse Staalbedryf".

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. Ons Graanindustrie. 2. Die Merinoskaap- en Wolnywerheid.

3. Ons Wynbou-industrie. 4. Ons Suikernywerheid. 5.

Ons Suiwelnywerheid. 6. Ons Sagtevrugtenywerheid. 7.

Die Goudmynbedryf. 8. Die Suid-Afrikaanse Staalbedryf.

Illustrations

Thirteen reasonably clear photographs and a sketch.

(The Education Gazette, 26th June 1947, Vol. XLVI, No. 15, pp. 976-988.)

Fourth Quarter, 1947

32. Die wonderland Amerika, deur Dr. H. M. Daleboudt (In Afrikaans.)

Information about Dr. Daleboudt

"Dr. H. M. Daleboudt is hoof van die Primêre Skool, Somerset Wes. Hy het aan die begin van hierdie jaar teruggekeer van 'n uitgebreide toer in Amerika. In hierdie reeks praatjies deel hy sy waarnemings mee, en die waarde van die lesse sal verhoog word as landkaarts, prente ens. van die dele onder bespreking, vooraf aan die leerlinge getoon kan word."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. 'n Besoek aan Nu-York. 2. Van Nu-York na Niagara. 3.

Deur die Land van die Groot Mere. 4. Chicago en die

"Prairies". 5. Die Eertydse Wilde Weste. 6. Kalifornië.

7. Van Kalifornië na Textas.

Illustrations

Ten clear photographs.

(The Education Gazette, 25th September 1947, Vol. XLVI, No. 22, pp. 1466-1475.)

33. Kinders van allerlei lande, deur Mej. H. C. Olivier,  
L.P.R. (In Afrikaans.)

Information about Mej. Olivier

"Mej. H. C. Olivier, L.P.R., woon in Somerset-Strand en is teen hierdie tyd al goed bekend by die leerlinge, aangesien

sy al etlike reekse praatjies tot die skoolradioprogram bygedra het."

Days and times when talks were given

Every Wednesday, 11.15-11.35 a.m.

Titles of Talks

1. België. 2. Frankryk. 3. Italië. 4. Birma. 5. China.  
6. Japan. 7. Hawaii.

Illustrations

Four photographs, all clear save one.

(The Education Gazette, 25th September 1947, Vol. XLVI, No. 22, pp. 1490-1495.)

Talks given during the year 1948

First Quarter, 1948

34. Our Neighbours, by Mr Hein Wicht (In English.)

"Mr Hein Wicht lives in Natal. In a previous series of talks Mr Wicht discussed our near neighbours. In this series he takes the pupils further afield and tells them something about our more distant neighbours on the African Continent and also some of the islands of the East Coast of Africa."

Days and times when talks were given

Every Thursday, 11.38-11.58 a.m.

Titles of Talks

1. Egypt. 2. Abyssinia. 3. Liberia. 4. The French African Empire. 5. Nigeria. 6. The Anglo-Egyptian Sudan. 7. Islands off the East Coast of Africa.

Illustrations

Three not-very-clear photographs.

(The Education Gazette<sup>8th Jan.</sup> 1948, Vol. XLVII, No. 1, pp. 60-68.)

Second Quarter, 1948

No talks.

Third Quarter, 1948

No Talks.

Fourth Quarter, 1948

35. Geography through a shop-window, by Miss A. E. du Toit (In English.)

Information about Miss du Toit

"Miss A. E. du Toit is a teacher at the Girls' High School, Parktown, Johannesburg."

Days and times when talks were given

Every Thursday, 11.38-11.58 a.m.

Titles of Talks

1. A pound of tea. 3. Pottery. 3. Furs. 4. Toy balloons.
5. Desiccated cocconut. 6. Teak furniture. 7. Tinned fish.
8. A pound of coffee.

#### Illustrations

Eight not-too-clear photographs. (The Education Gazette, Vol. XLVII, No. 23, 23rd Sept., 1948, pp. 1465-1474.)

#### Talks given during the year 1949

##### First Quarter, 1949

36. Round the Globe: England and Scotland, by Mr E. H. Cameron McClure (In English.)

##### Information about Mr Cameron McClure

"Mr E. H. Cameron McClure is the organiser of the "A" Programmes in the Johannesburg studios of the South African Broadcasting Corporation. Last year he was sent over to England where he worked in the Drama Department of the B.B.C. and also travelled widely through the English and Scottish countryside studying methods of broadcasting used by the B.B.C. and listener reaction to programmes. Not unconnected with his broadcasting activities was the visit he paid to Stratford-on-Avon during the Shakespeare Festival."

##### Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

##### Titles of Talks

1. From Cape Town to Southampton. 2. London. 3. London (continued). 4. A visit to the Shakespeare country. 5. The English Home in the country. 6. A visit to Oxford and Bath. 7. A visit to Edinburgh. 8. Glasgow, Aberdeen and St. Andrews.

##### Illustrations

Seven clear photographs and a sketch-map.

(The Education Gazette, 6th Jan., 1949, Vol. XLVII, pp. 21-33.)

37. Know your country. The Orange Free State. By a series of people (In English. This and a parallel series in Afrikaans by slightly different people are counted as one series.)

##### Information about the experts concerned

"The programmes on the Orange Free State are the first in a new series of talks on the geography of South Africa, and will be followed by lessons on the Cape Province (second term), Transvaal (third term) and Natal (fourth term). These programmes have been written by experts and will cover as wide a field as possible - historical background, climatic conditions, agricultural pursuits, industries, etc. We are

indebted to the following persons for their assistance and suggestions:

Mr D. Marquard, Grey College, Bloemfontein.

Mr J. C. Pauw, Publicity Officer, Bloemfontein.

Mr J. P. J. van Vuuren, Senior Regional Officer, Bloemfontein.

Mr G. W. Nicholas, The Farmer's Weekly, Bloemfontein.

Mr M. B. Lloyd, The Outspan, Bloemfontein.

Mr M. C. Rykaart, Die Landbouweekblad, Bloemfontein.

Mr J. F. Jacobs, Constanza School, Paardeberg Station.

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of talks

1. Bloemfontein and environment.
2. The granary of the Free State.
3. In the maize area of the Orange Free State.
4. The Free State Goldfields.
5. The Southern Free State and its diamonds.
6. The North-Eastern Free State.
7. Soil erosion and water conservation in the Orange Free State.
8. Regional development.

Illustrations

Nine clear photographs and one map.

(The Education Gazette, 6th January 1949, Vol. XLVlll, No. 1, pp. 33-40.)

38. Ons Reis om die Wereld: Engeland en Skotland, deur

Mej. Anna Uys (In Afrikaans. Although this series is parallel to series 36, they are by different people, and hence are counted as two separate series.)

Information about Mej. Uys

"Mej. Anna Uys het so pas teruggekeer van 'n uitgebreide oorsese reis, en is tans lektrise in Afrikaans in die Fakulteit Opvoedkunde aan die Stellenboschse Universiteit.

"Die reis was in verband met 'n studiejaar wat deur 'n beurs van die British Council moontlik gemaak is. Met Londen as middelpunt, het sy skole en opleidings-inrigtings in Engeland en Skotland besoek. Sy het ook byna drie maande lank op die vasteland deurgebring."

Days and times when talks were given

Every Tuesday, 11.38-11.58 a.m.

Titles of Talks

1. Die reis na Londen.
2. Die Wêreldstad, Londen.
3. Londen (vervolg).
4. Oor Oxford na die Cotswold-Heuwels.
5. 'n Besoek aan Shakespeare se Geboorteplek.
6. 'n Besoek aan die "Swart Stede".
7. Edinburgh.
8. Oor Lochs na Glasgow.

Illustrations

Eleven clear photographs.

(The Education Gazette, 6th January 1949, Vol. XLVIII, No. 1, pp. 40-51.)

Second Quarter, 1949

39. Know your country: The Cape Province. By Dr. H. M. Daleboudt (In English.) (Parallel Afrikaans series.)

Information about Dr. Daleboudt

"Dr Daleboudt is the principal of the Somerset West Primary school. During this term the series "Know your country" will be continued by Dr Daleboudt. It is suggested that each pupil be provided with an outline map of the Cape Province and that this be completed during the series of talks. The pupils should consult the illustrations printed with the parallel Afrikaans series "Ken u Land"."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. The Cape Peninsula; Jewel of South Africa. 2. Old Cape Town. 3. The modern Cape Town. 4. The fruit districts of the Western Province. 5. A visit to Swartland and the Olifants River Valley. 6. Through the Garden Route and the Karroo. 7. The Eastern Province. 8. The North West Cape.

Illustrations

Nine clear photographs.

(The Education Gazette, 31st March 1949, Vol. XLVIII, No. 9, pp. 503-513.)

40. Round the globe: Europe. By Dr A. J. van Zyl (In English. Parallel series in Afrikaans.)

Information about Dr van Zyl

"Dr van Zyl is a well-known educationist and at present organiser of Adult Education. He has travelled widely, especially in Europe and America. During this term our voyage round the globe will be continued and Dr van Zyl will take us on imaginary visits to: Norway, Sweden, Denmark, Finland, Holland, Belgium and Switzerland. The pupils should also look at the illustrations printed with the parallel Afrikaans series "Ons reis om die wêreld"."

Directive to teachers

"A map of the different countries is essential and the notes should be discussed with the pupils beforehand. The names of famous personalities, institutions, vital statistics, etc., should likewise be written on the blackboard before the broadcast."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Norway. 2. Sweden. 3. Sweden (continued). 4. Denmark and Iceland. 5. Finland. 6. The Netherlands. 7. Belgium. 8. Switzerland.

Illustrations

Fourteen clear photographs.

(The Education Gazette, 31st March 1949, Vol. XLVIII, No. 9, pp. 513-523.)

Third Quarter, 1949

41. Round the Globe: South-Eastern Europe. By "Crusader".

(In English. A parallel version was given in Afrikaans.)

Information about "Crusader"

"The name of Crusader is well-known to many young people because he has been broadcasting "The Children's Treasure-Hunt" on Sunday afternoons for more than three years. Before he came to South Africa he lived for many years in the Balkans, and in this series he is going to describe this interesting part of Europe and some of his experiences there."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. The Balkan Peninsula. 2. Customs, Arts and Crafts in the Balkans. 3. Jugoslavia. 4. Roumania. 5. Albania. 6. Bulgaria. 7. Greece. 8. The unforgettable Balkans.

Illustrations

Thirteen clear photographs.

(The Education Gazette, 30th June 1949, Vol. XLVIII, No. 16, pp. 1081-1092.)

42. Know your country: The Transvaal. By a number of people

(In English. The parallel Afrikaans version is by slightly different people, but is precisely the same in subject-matter.)

Information about the people who prepared these talks

"The following persons are the writers of this series of talks:

Mr R. MacMillan, Normal College, Johannesburg.

Mr R. Weaver, Teacher's College, Heidelberg.

Mr V. W. Hayman, Park School Turffontein, Johannesburg.

Mr J. Lotz, P.O. Tonteldoos.

Mr D. Rousseau, Lydenburg High School, Lydenburg.

Mr J. Koen, Tonteldoos School, P.O. Tonteldoos.

Mr N. Coetzee, Pretoria Afrikaans Hoër Seunsskool, Pretoria.  
Mr M. J. Pitout, King Edward Street, Klerksdorp."

Directive to teachers

"...Teachers are kindly requested to show maps and as many pictures as possible in connection with the programme to the children before the actual broadcast takes place."

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. Johannesburg and surroundings. 2. The Witwatersrand Goldfields. 3. Pretoria. 4. The Highveld. 5. Lydenburg and District. 6. Mapochsland. 7. The Transvaal Bushveld. 8. The Kruger National Park. 9. The Western Transvaal.

Illustrations

Seventeen clear photographs, and a clear and simple map of the Transvaal.

(The Education Gazette, 30th June 1949, Vol. XLVlll, No. 16, pp. 1092-1100.)

Fourth Quarter, 1949

43. Round the globe: Around the Mediterranean Sea. By Miss G. J. van der Merwe (In English. Also a parallel version in Afrikaans by same person.)

Information about Miss van der Merwe

"Miss G. J. van der Merwe resides in Johannesburg. She has travelled extensively and stayed for a long time in the countries around the Mediterranean Sea.

"She believes that one can learn to know other countries far better when one can speak their language, and she has consequently learnt six other languages in addition to her Afrikaans and English."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Introductory talk. 2. Northern Africa. 3. Spain. 4. Portugal. 5. Sicily. 6. Italy. 7. France.

Illustrations

Seventeen clear photographs.

(The Education Gazette, 29th September 1949, Vol. XLVlll, pp. 1617-1628.)

44. Know your country: Natal. By Mr Hein Wicht (In English.)

Information about Mr Hein Wicht

"Mr Hein Wicht, who lives in Durban, needs no introduction to the pupils as he has already contributed several series

of talks to the school broadcast programme. The pupils must also look at the illustrations in the Afrikaans series "Ken U Land".

Days and times when talks were given

Every Tuesday, 11.15-11.35 a.m.

Titles of Talks

1. Northern Natal. 2. Pietermaritzburg. 3. Durban. 4. Durban (continued). 5. Zululand. 6. The sugar belt. 7. The south coast. 8. Some crops and plants of Natal.

Illustrations

Five clear photographs.

(The Education Gazette, 29th September, 1949, Vol. XLVIII, No. 23, pp. 1628-1636.)

45. Ken U Land: Natal. By Mr F. G. Smit (In Afrikaans.

This, although intended as a parallel series to No. 44, is by a different writer and hence is counted as a separate series.)

Information about Mr Smit

"Mr. Francois G. Smit is tans Onderhoof aan die Sekondêre Skool, Port Shepstone, Natal. Hy het al 'n lang diens tyd in Natal agter die rug, en gedurende daardie tyd het hy Natal kruis en dwars deurreis.

"Die leerlinge moet ook na die illustrasies kyk by die reeks, "Know your Country"."

Days and times when talks were given

Every Monday, 11.15-11.35 a.m.

Titles of Talks

1. Die Natalse Noordkus. 2. Die Natalse Suidkus. 3. Durban. 4. Durban (vervolg). 5. Pietermaritzburg en omstreke. 6. Vryheid en Noord-Zoeloeland. 7. Noordelike Natal.

Illustrations

Three clear photographs, six maps and one drawing.

(The Education Gazette, 29th September 1949, Vol. XLVIII, No. 23, pp. 1608-1617.)

Talks given during the year 1950

No talks of a geographical nature were given during this year.

Talks given during the year 1951

First Quarter, 1951

No talks.

Second Quarter, 1951

46. South African Industries, by Mr Patrick L. Gooderham  
(In English.)

Information about Mr Gooderham

"Mr Patrick L. Gooderham is the public relations officer to the Anglo-Transvaal Consolidated Investment Company Limited, a financial house, owning gold mines and industrial companies. He was born in the Tower of London and attended the Coopers' Company School, founded 1436, one of the old City of London Guild Schools. He says, 'I was born into an atmosphere of history and tradition and inevitably wanted to write. After I left school I joined Methuen, the book publishers, I had hoped as a budding author but in practice as office boy to E. V. Lucas, the brilliant and versatile essayist. Later I went to Bell's educational publishers as a writer of "blurbs" and advertising copy for school books.'

"A yearning for a more practical occupation resulted in 1933 and 1934 being sent to France and Germany undertaking a course of instruction in woollen textile mills and in the latter part of the year he came to South Africa as a wool buyer.

"Since then he has done some very important market investigation and market research and has at various times conducted surveys of many of the Union's secondary industries."

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. Why we have industry in South Africa.
2. Steel and engineering - the sinews of industry.
3. How a bicycle is made.
4. How glass bottles are made.
5. Our textile industry.
6. The Natal sugar industry.
7. The food-processing industry.
8. How rubber tyres are made.
9. The Electric Power Industry.

Illustrations

Nine clear photographs.

(The Education Gazette, 29th March 1951, Vol. I, No. 1, pp. 593-604.)

Third Quarter, 1951

47. Islands of the world, by Mr Hein Wicht (In English.)

There is also a parallel series in Afrikaans.)

Information about Mr Wicht, and about these talks

"Mr Hein Wicht has already contributed many series of talks to the school broadcast programme. In this series he

describes some of the islands and island groups of the world. Well-known as a traveller and writer, he speaks at first-hand of islands, isles and atolls. The pupils must also look at the illustrations with the series "Eilende van die Wereld".

Days and times when talks were given

Every Monday, 11.38-11.58 a.m.

Titles of Talks

1. The British Isles. 2. The West Indies. 3. The Loneliest Isle; Tristan Da Cunha. 4. The Pacific Isles. 5. Isles of the Indian Ocean. 6. The Island of Hong Kong.

Illustrations

Eight clear photographs:

(The Education Gazette, 28th June 1951, Vol. L, No. 15, pp. 1195-1281.)

Fourth Quarter, 1951

48. Our Neighbours; by Mr H. Wicht (In English. An Afrikaans version was also given.)

Information about Mr Wicht and about these talks

"Mr H. Wicht is resident in Durban. This series of talks on the neighbouring states in Africa was included in this programme some years ago. In the meantime Mr Wicht has made arrangement for the series to be published by the Afrikaanse Pers-Boekhandel so that they will appear in print in the very near future. The permission obtained from this firm of publishers to re-broadcast this series is appreciated."

Days and times when talks were given

Every Wednesday, 11.38-11.58a.m.

Titles of Talks

1. South-West Africa. 2. Mozambique (Portuguese East Africa). 3. The Rhodesias. 4. Angola (Portuguese West Africa). 5. Nyasaland Protectorate. 6. The Belgian Congo. 7. Tanganyika Territory. 8. Uganda Protectorate. 9. Kenya Colony.

Illustrations

Seven clear photographs and one clear and simple map showing the territories discussed in these talks.

(The Education Gazette, 27th September 1951, Vol L, No. 22, pp. 1787-1798.)

---

A P P E N D I X 25THREE SPECIMENS OF THE TYPES OF BROADCAST NOTES WHICH WERE GIVEN IN THE EDUCATION GAZETTE DURING 1940-1951 INCLUSIVESpecimen one

Mr H. Wicht's talk on South-West Africa which was given on Wednesday, 17th October, 1951

Entry from the Union into South-West Africa is free and unhampered by customs and immigration formalities. No passports are required for travellers passing across the borders, and the currency and the language spoken are the same in both states. It is a separate country and is represented in our Parliament. After the first World War, the Union of South Africa was granted a Mandate over South-West Africa by the League of Nations.

The first white man crossed the Orange River and entered the territory less than 20 years ago, although the early Portuguese Navigators touched at the coast, and planted a cross at the place which is now called Luderitz, in the year 1486. Owing to the disinterestedness of the Cape Government, who were constantly asked by the Native chiefs to annexe the land to the north of the Orange River, and who constantly refused, the Germans stepped in and proclaimed a Protectorate in the year 1885. On 9th July 1915 the Germans in the colony surrendered to the South African Forces.

South-West Africa is a very large territory, but is sparsely populated and consists of high-lying plains wedged in between two deserts - the Namib Desert and the Kalahari. In spite of a low rainfall, however, the central plains provide grazing for millions of cattle and sheep, and are particularly suitable for the raising of karakul sheep.

Mr Wicht takes us on an imaginary journey right through the territory from south to north, and points out to us some of the more interesting parts of the country, like the extinct volcano Mount Brukkeros, the castle-like buildings that are dotted over the territory, and the remote fortress of Namutoni which stands on the shores of the vast Etosha pan.

Specimen two

Prof. W. T. Baxter's talk on "New York" which was given on 27th June, 1946

The party of South African children whose adventures are described in these talks, land in U.S.A. at its chief port - New York. They find themselves in a very strange city, whose buildings tower up to the clouds, and whose people seem to speak in every tongue.

Some of the odd things to be noted are the "automats"

(restaurants where food is got by pressing coins into slots), the Chinese and negro neighbourhoods, the high prices charged by barbers and the cheapness of mass-produced goods.

The party visits a skyscraper, and has tea in a cafe one hundred and twenty storeys up.

Specimen three

Mr Patrick L. Gooderham's talk on "The Natal sugar industry" which was given on Monday, 28th May, 1951

Preparation for the lesson:

Examination of a piece of sugar cane where this can be bought (e.g. Native markets large cities). Climatic conditions in sugar belt. Note road and rail systems. Compare difference refined sugar and Government grade sugar.

Summary:

Where our sugar cane grows. Improved agriculture giving higher yields of sugar. Our domestic consumption is increasing. How cane is cut and sugar taken out? How sugar is refined.

Following up the lesson:

In what other industries is sugar used as raw material? What are the names of other sweet substances? Other sources of sugar in nature.

---

THE SUGGESTED FUNCTIONS AND CONSTITUTION OF THE NATIONAL  
FILM INSTITUTE WHICH WAS PROPOSED BY THE SUB-COMMITTEE  
APPOINTED IN 1935 BY THE COMMITTEE OF THE LEAGUE OF NATIONS  
FOR INTELLECTUAL CO-OPERATION

Functions

- (i) It would serve as a source of enlightenment concerning educational films in South Africa and overseas.
- (ii) It would enlighten the public about the value of both educational and recreational films.
- (iii) It would enlighten educational institutions, state departments which make use of films, and other organizations and persons, concerning films and projection apparatus.
- (iv) It would serve as a link between the film industry and the cultural and educational interests of the country.
- (v) It would encourage research in the different uses and purposes of the film.
- (vi) It would establish a central film library for the purpose of collecting, caring for and distributing educational films, and of preparing a descriptive catalogue. In return for a small membership fee to cover wear and transport costs, schools and colleges would thus be able to obtain the loan of films.
- (vii) It would certify films to be educational, cultural or scientific.

Administration and costs

- (1) The Minister of Education would be the President of the Institute.
- (2) For administrative purposes, the Institute would come under the Union Department of Education, preferably under the National Bureau for Educational and Social Research.
- (3) A competent administrative official would be placed in charge of the Institute. He would simultaneously be Secretary of the Film Advisory Board and Librarian of the Film Library. (In order to attract a person with wide educational experience and administrative ability, a salary of about from £650 to £705 per annum should be offered.)
- (4) An expert in the handling and storage of films would be appointed as chief assistant. His work would be purely mechanical and technical. (The Committee felt that according to the salary scales of those times, they ought to be able to obtain a suitable person for from £450 to £500 per annum.)
- (5) A yearly grant should be provided by the Union Education Department for the establishment and maintenance of the Institute. The main expenses would be occasioned by: (a)

the remuneration of officials; (b) the obtaining of equipment; and (c) the buying of films for the film library.

#### Representation

A Film Advisory Board would be established to further and expand the activities of the Institute and ensure that the latter functions efficiently.

(1) The constitution of the Board must make provision for the representation of the following:-

(i) State departments:

The five education departments.

The Board of Censors.

The Department of Agriculture.

The Department of Labour and Social Welfare. (At that time one department.)

(ii) The film industry:

A representative of each company.

(iii) Other educational and cultural bodies:

(a) The Federal Council of the South African Teachers' Associations.

(b) The "Federasie van Afrikaanse Kultuurverenigings".

(c) The National Council of Women.

(d) Science.

(e) The Royal Society.

(f) The National Child Welfare Society.

(g) The Press - one English and one Afrikaans representative.

(h) "Die Federale Raad van Vroueverenigings".

(i) The South African Institute of Race Relations, and any other members co-opted by the Minister of Education.

(2) The members of the Film Advisory Board would be elected for five years.

(3) The Minister of Education would be Chairman of the Board.

(4) The Board would meet at least once a year, but the financial expenses of such meetings would not be borne by the State.

(5) It was recommended that panels be appointed to provide help and guidance in special subjects.

(6) In order to certify films as required by the Convention of the League of Nations, a body consisting of three members would have to be appointed to scrutinize films. A member of a panel could be co-opted for films on special subjects or topics. (Translated from the functions and constitution as given by S. L. van Wijk in "Die Film as Opvoedkundige Hulpmiddel", pp. 118-119.)

A P P E N D I X 27JUNIOR CERTIFICATE SYLLABUS IN GEOGRAPHY, PUBLISHED IN  
THE EDUCATION GAZETTE OF 17TH DECEMBER, 1921

Physical Geography - Day and night; the seasons; latitude and longitude; time; zones of climate; tides and currents.

Practical Work - Observations of sun and moon; finding of direction; problems in longitude and time; map-reading, including calculation of distances and areas from scale, and the drawing of sections from a contour map.

Geography of Africa, especially south of the Zambesi, and of Europe broadly considered, with reference to the following:-

- (a) Physical relief.
- (b) Climate and rainfall.
- (c) Natural regions.
- (d) Resources - plants, animals, minerals, products and industries.
- (e) Political divisions or control.
- (f) Communications (by land and sea), trade and commerce.

(The following topics are of special importance in the treatment of South Africa; distribution of rainfall; contrast of east and west in climate and products; railways; economic dependence on certain minerals; relatively slight development of industries (other than mining). The general trade relations of South Africa should be dealt with - not merely those with Europe or other parts of Africa.)

---

A P P E N D I X 28

THE GEOGRAPHY SYLLABUS FOR JUNIOR CERTIFICATE WHICH WAS PUBLISHED IN THE EDUCATION GAZETTE OF 13TH FEBRUARY, 1930, P. 35, AND WHICH SUBSEQUENTLY CAME INTO FORCE

A.- Regional and Economic Geography

(i) A general survey of the World, based on a study of the Major Natural Regions; their climate, vegetation, products, peoples, industries, etc.

(ii) An elementary knowledge of the distribution of the natural products of the World: Foodstuffs, raw materials for industry; sources of power.

(iii) The main forms of transport; inland navigation; rivers, canals; railways; motor-transport; ocean-routes; air-routes.

(iv) The geography of Africa, especially south of the Zambesi, and of Europe, broadly considered with reference to: (a) physical relief, (b) climate, (c) natural regions, (d) resources, plants, animals, minerals, products and industries, (e) political divisions or control, (f) communications (by land and sea), (g) trade and commerce.

B.- Physical Geography Day and night; the seasons; latitude and longitude; time; causal relationships between temperature, pressure, wind, rainfall; distribution of the main climatic types; tides and currents.

C.- Practical Geography Observations of sun and moon; finding direction; problems in longitude and time; map-reading, including calculation of distances, and areas from scale and the drawing of sections from a contour map.

NOTE.- The syllabus is divided into three sections, viz., Regional and Economic, Physical and Practical Geography, for convenience of reference only. The sections should not be treated independently, but should, as far as possible, be intimately co-ordinated at every stage.

---

JUNIOR CERTIFICATE SYLLABUS IN GEOGRAPHY WHICH WAS FIRST PUBLISHED IN THE EDUCATION GAZETTE OF 1st NOVEMBER, 1945, PP. 1136 AND 1137

A. - Practical Geography. - Observations of the sun as a basis for the study of the seasons (time and position of rising and setting sun at intervals during the year; height of midday sun at different seasons by means of a shadow-stick); finding direction (by means of shadow-stick, watch and stars); location of places on maps by latitude and longitude; calculation of distances on maps from scale; reading of relief maps; keeping of temperature, pressure, wind direction and rainfall charts for a month in summer and a month in winter.

B.- Physical Geography. - Seasonal variation in length of day and night in different latitudes; the seasons; latitude and longitude; time; elementary knowledge of the distribution of temperature and rainfall from a study of world maps; distribution of the main climatic and vegetational types.

C.- Regional and Economic Geography. -

(i) A general survey of the Major Natural Regions of the world - their climate, natural vegetation, chief products and the relationship between natural conditions and human activities in each region.

(ii) An elementary knowledge of the distribution of the following minerals and sources of power: ores of iron, copper, tin, aluminium; coal, petroleum, hydro-electric power. The chief regions of production of the following foodstuffs and raw materials, with special reference to climatic and other geographical conditions affecting production; wheat, maize, rice, meat, tea, coffee, cocoa, sugar, cotton, wool, rubber, timber.

(iii) The main ocean routes of the world and chief air routes serving South Africa.

(iv) (a) A general survey of Africa, following the scheme as indicated in C(i).

(b) More detailed study of the Atlas Lands, the Nile Basin, Kenya, and Uganda, Nigeria, the Belgian Congo.

(c) Southern Africa (south of the Kunene and Zambesi Rivers): relief, distribution of chief minerals (asbestos, chrome ore; coal, copper ore, diamonds, gold, iron ore, manganese ore); climate and its influence on the distribution of the chief crops and kinds of livestock; location of the chief industries and the geographical factors that have influenced their development; distribution of

population (statistics of population density are not expected); communications, towns and ports; overseas trade.

(v) Europe: A broad survey of relief, climatic regions, natural vegetation and cultivated crops; chief coalfields and their influence on the distribution of industries; chief ports - their import and export trade with reference to communications serving them.

(vi) Industrial North-Eastern United States of America; A broad survey, with special reference to industrial development, particularly the localisation of iron and steel industries.

(vii) South and East Asia: A broad survey of climate and other geographical conditions affecting the distribution of the chief crops and the density of population (statistics are not expected) in India, the North China Plain, the Yangtse Basin, Java.

Fifty marks will be allocated to a compulsory map question including map reading and/or the insertion of physical features, towns, etc., on a blank map. The paper will be so set that candidates will not be able to select all their questions from a restricted portion of the syllabus.

---

A P P E N D I X 30FIVE EXAMINATION PAPERS SET ON THE J.C. GEOGRAPHY SYLLABUS  
PUBLISHED IN THE EDUCATION GAZETTE OF 17TH DECEMBER, 1921Paper for December, 1925

Time 2 hours. Five questions to be attempted.

From Section A answer Question 1 and any one other question. From Section B answer Question 5 and any two other questions.

Section A

1. Examine the following data and state the type of climate represented in each case. Summarise shortly the climatic conditions experienced during the year in each place, accounting for the changes of temperature, the amount of rainfall, and the season during which rainfall occurs:

(a) Algiers:

	J	F	M	A	M	J	J	A	S	O	N	D
Temp. (F)	53.4	55.4	57.6	61.0	65.8	71.4	77.0	77.5	74.8	68.5	62.4	55.6
Rain. (")	4.2	3.5	3.5	2.3	1.3	0.6	0.1	0.3	1.1	3.1	4.6	5.4

(b) Bombay:

Temp. (F)	74.5	74.8	78.0	82.1	84.6	82.4	79.5	79.4	79.4	80.7	79.3	76.4
Rain. (")	0.1	0	0	0.1	0.5	20.6	24.6	14.9	10.9	1.8	0.5	0.1

(c) Wellington (N.Z.):

Temp. (F)	62.4	62.2	61.0	57.4	52.9	49.6	47.5	48.8	51.5	54.0	56.8	60.8
Rain. (")	3.6	3.2	3.1	4.1	4.6	5	5.9	5.0	4.2	3.9	3.6	3.3

(d) Budapest:

Temp. (F)	28.2	31.6	39.9	51.1	60.1	66.7	70.3	68.5	61.0	51.1	39.0	30.6
Rain. (")	1.5	1.2	1.8	2.3	2.9	2.9	2.1	2.0	2.0	2.6	2.1	1.9

(e) Timbuctu:

Temp. (F)	71.1	73.6	83.1	91.6	94.5	93.7	89.2	86.5	89.2	88.9	80.8	71.1
Rain. (")	0	0	0.1	0	0.3	0.9	3.5	2.8	1.1	0.4	0	0

2. (a) How are day and night caused? At Cape Town on June 21st the sun rises at 7.52 a.m. and sets at 5.43 p.m., while on December 21st sunrise and sunset are at 5.33 a.m. and at 7.55 p.m. respectively. Comment on these facts.

(b) What is the length of day and night at the Poles and at the Equator? Illustrate your answer by diagrams.

3. With the help of a sketch-map give an account of the system of ocean-currents of the North Atlantic Ocean.

What is the relation between their direction and that of the prevailing winds? How do ocean currents affect the climate of South Africa?

4. (a) A is a place on the Equator. B is another place 3,450 miles due East of A. When it is 8 p.m. at B, what time is it at A?

(b) Draw a map, with contour-lines at intervals of 100 ft. to represent the following:

A peak 800 ft. high lies to the North-West of a broad

topped hill 600 ft. high and is connected with it by a ridge 400 ft. high. The South-Eastern side of the hill is steep and is cut by a deep ravine, but the other sides are of gentle slope. The peak has steep sides, but the side which faces the hill is less steep than its other sides.

Section B

5. Draw a sketch-map of South Africa showing -

- (a) Regions which have a fairly heavy annual rainfall.
- (b) Regions with a moderate rainfall.
- (c) Regions with little or no rainfall.

Draw a second sketch-map of South Africa showing -

- (a) The region in which most rainfall occurs in winter.
- (b) The region in which most rainfall occurs in summer.
- (c) The region in which rain falls all the year round.
- (d) The region in which rainfall seldom occurs at all.

What are the main causes of the scanty rainfall that occurs over a large part of South Africa? What means are employed or suggested to improve conditions in regions of scanty or uncertain rainfall in South Africa?

6. What are the chief exports of the Union of South Africa? From what parts of the country do they come, and to what countries are they sent? Give some idea of their relative value.

7. Discuss any one of the following regions under the heads of relief, climate, productions, means of communication, political control: (a) Nyasaland, (b) Kenya Colony, (c) South-West African Protectorate, (d) Nigeria.

8. To what extent have geographical conditions made communication easy in Europe? Contrast Europe and Africa in this respect.

9. What geographical factors contribute to the importance of any five of the following? The Suez Canal, Glasgow, Milan, Manchester, Marseilles, Cologne, Malta, Vienna, Odessa, Brussels.

10. Show how geographical conditions have affected the mode of life of the people of one of the following countries: Norway, Holland, Switzerland.

J.C. paper for December, 1926

Time 2 hours.

Five questions to be attempted. From Section A answer Question 1 and any one other question. From Section B answer Question 4 and any two other questions.

Section A

1. <u>Place</u>	<u>Mean Temp. (F)</u>		<u>Mean annual rain. (ins)</u>
	Hottest month.	Coldest month.	
Durban	76	64	40
Pietermaritzburg	73	58	36
Bloemfontein	72	47	22
Kimberley	76	50	18
Port Nolloth	59	53	2

Although the above places are roughly the same distance from the equator their climatic conditions, as indicated by the statistics, are very different. Give reasons for the differences (a) in temperature and (b) in rainfall.

2. (a) What is meant by Latitude and Longitude?

(b) What is the latitude of a place where the sun is directly overhead at midday on December 21st? What is the longitude of this place if its sun time is 9.20 a.m. when it is 1 p.m. at Greenwich? In what land mass would you expect this place to be?

(c) What is the distinction between sun time and clock time?

3. (a) What is meant by saying that at any place the sun rises at a certain time and sets at a certain time?

(b) Describe a method of discovering the true North and South - (i) when times of sunrise and sunset are known. (ii) when times of sunrise and sunset are not known.

#### Section B

4. (a) What are the characteristics of the type of climate known as "Mediterranean"?

(b) In what parts of Africa and Europe is this type of climate found?

(c) Give some account of (i) the natural vegetation and (ii) the products of cultivation associated with such a climate.

5. What are the outstanding features of a "population" map of South Africa? Give as many reasons as you can for the distribution and density of the population.

6. Name the most important seaports of South Africa. Account for their position.

What do you know of the export and import trade of each port?

7. In a sketch-map of Africa mark the following: (a) Tropical forests. (b) Deserts and semi-deserts. (c) Tropical grasslands. (d) Temperate grasslands.

What are the animal and vegetable products of each region?

8. Write notes on any three of the following, making use of diagrams or sketch-maps wherever possible: (a) The Great Rift Valley of Africa. (b) The dissected plateau of Scandinavia. (c) The Gulf Stream. (d) The Rhine Valley. (e) Cobham's flight from London to Cape Town.

9. (a) Name three important coalfields in Europe. State the manufactures carried on in each, and name the chief towns engaged in these manufactures.

(b) Account for the fact that South Africa, although rich in minerals, is not to any great extent a manufacturing country.

J.C. paper for December, 1927

Time 2 hours.

Five questions to be attempted. From Section A answer Question 1 and any one other question. From Section B answer Question 5 and any two other questions.

Section A

(For question one temperature graphs are drawn on squared paper.)

1. The above diagram shows the mean temperature during each month of the year for 5 places in Africa. The curves marking the temperature are called A, B, C, D, E. The 5 places are Cape Town, Port Nolloth, Durban, Cairo, and New Antwerp (Belgian Congo).

(a) Say which temperature curve belongs to which place.

(b) Name the hottest and coldest month in each place. (Give temperatures). State the annual range of temperature of each place.

(c) What do you know about the rainfall of each of the given places?

2. (a) In places between the Tropics, the midday shadows point sometimes to the North, sometimes to the South. How do you explain this?

(b) Why is that part of Norway which lies within the Arctic Circle known as the "Land of the Midnight Sun"? Illustrate your answer by a diagram.

3. (a) Discuss the relation between Longitude and Time.

(b) The results of a cricket match played in Sydney (Australia) are cabled to South Africa at the end of the day's play. Explain how it is that these results are known in South Africa about noon on the same day.

(c) What time is it in California, and what day, when it is Sunday 8 a.m. in South Africa? (South African and Californian time are reckoned from 30 degs East and 120

degrees West respectively.

4. (a) With the aid of a sketch-map (or sketch-maps) give an account of the system of ocean currents in the Indian Ocean.
- (b) By means of diagrams distinguish between spring tide and neap tide. (No written explanation is required for (b)).

#### Section B

5. (a) Draw a sketch map of South Africa and mark in the great trunk railway-routes of the Union of South Africa from the ports to Johannesburg, indicating the chief towns and junctions through which the railways pass.
- (b) What geographical factors have influenced the position and development of the railways in South Africa?
6. What are the chief regions of the Union of South Africa engaged in the production of the following: wool, maize, sugar, cotton, citrus-fruits, grapes? What natural conditions favour the production of each?
7. What geographical factors contribute to the growth of large ports? Name three important seaports in Europe (excluding the British Isles) and give reasons for their importance.
8. Discuss any one of the following regions under the heads of relief, climate, productions, means of communication: (a) The Swiss Alps. (b) The Lombardy Plain. (c) Holland. (d) The Rhone Valley. (e) The Highlands of Scotland.
9. "Rivers form natural highways." Discuss this statement with reference to the rivers of Africa and Europe.

#### J.C. paper for December, 1928

Time 2 hours.

From Section A answer Question 1 and any one other question. From Section B answer Question 5 and any two other questions.

#### Section A

1. The accompanying diagram represents a contoured map of a certain district.
  - (a) Describe the features of the district represented on the map.
  - (b) Draw a section along the line ABC in which the vertical scale is four times the horizontal scale.
  - (c) Without actually drawing the sections, state how sections along AE and AE' would differ from the section you have drawn along ABC.
2. Explain clearly the distinction between "sun" time and

"standard" time. Where is "standard" time in South Africa taken from? Why? Taking the longitude of Cape Town as 18 degrees East, what is the difference between "sun" time and "standard" time in Cape Town?

3. (a) Show clearly how day and night are caused. Why is the daily period of daylight at your home longer in summer than in winter? Illustrate your answer by means of a diagram.

(b) In London, Amsterdam, and Berlin the daily period of daylight is longer in summer, but shorter in winter than in any place in South Africa. Account for this.

(c) Would the adoption of "summer" time be of the same value to South Africa as to European countries? Give reasons for your answer.

4. An eclipse of the sun was visible in South Africa on May 19th. Show how an eclipse of the sun is caused. Illustrate by means of a diagram. The eclipse as seen in South Africa was a "partial" one. What is meant by this? What other types of eclipse may occur?

#### Section B

5. (a) Maize, wool, diamonds, fruit, wheat, coal, are all produced in the Union of South Africa. Draw sketch-map of South Africa, and indicate on it which parts of the Union these products are to be found.

(b) Which is the more important product in South Africa, wheat or maize? Give reasons for your answer.

6. With what countries does South Africa trade? Indicate the nature of the trade carried on with each, and the routes by which commodities are transported.

7. Write an account of any one of the following regions under the headings, relief, climate, productions, industries: (a) The Plains of Lombardy and Piedmont. (b) The Ruhr Basin. (c) The Seine Basin. (d) The Rift Valley of Scotland. (e) The Lowlands of the Baltic Coast (Eastern).

8. Contrast the relief of Europe with that of Africa. Show the effect in each continent of the relief on the nature, direction and commercial value of the rivers.

9. Take one important industrial district in England, and one in Germany (not the Ruhr). Describe the industries carried on in each of the districts you choose. Name the chief towns in which the industries are carried on, the chief sources of supply of raw materials, and the chief ports from which the manufactured goods are exported.

Time 2 hours.

Five questions to be answered. From Section A answer Question 1 and any one other question. From Section B answer Question 4 and any two other questions.

Section A

1. The accompanying contoured map represents a certain district.

(a) Describe the features of the district represented.

(b) Draw a section along the line XY, making the vertical scale 1 inch equals 1,000 ft.

(c) Describe the scenery as viewed from the point A.

2. (a) What exactly is meant by saying that Berlin is 53 degrees North Latitude and Johannesburg 26 degrees South Latitude?

(b) The circumference of the Earth is roughly 25,000 miles. Calculate to the nearest mile the length of 1 degree latitude.

(c) State the latitudes of (1) The Equator, (2) The Tropic of Cancer, (3) The Tropic of Capricorn, (4) The Antarctic Circle, (5) The North Pole.

3. Name the three chief temperature belts of the world. Explain clearly why there are differences. Through which of these belts does the Union of South Africa stretch?

Section B

4. Gold and diamonds are minerals in the production of which South Africa comes first in the world.

(a) Draw a rough sketch map of South Africa south of the Zambesi, showing where these minerals are found.

(b) Explain clearly the effect of the discovery of these minerals on (1) railway development, (2) agricultural development.

(c) Describe clearly a method of mining one of these minerals.

5. Discuss one of the following regions of South Africa in respect of build, climate, products, industries:-

(1) The "East Coast" region of the Union of South Africa.

(2) The Great Karroo.

(3) The wetter Eastern part of the plateau (the rain-shadow of the Drakensberg).

6. South Africa trades with Britain and Germany. Name the six most important products South Africa sends to and receives from these countries. Name any other country (not in Europe or Africa) with which South Africa trades, and explain the nature of the trade carried on with it.

7. What countries are included in the "Mediterranean" region of Europe? What climatic conditions of (1) temperature, (2) rainfall, do we find in the Mediterranean region? Name any part of the Union of South Africa which has similar conditions. Mention some products of this region in South Africa which are similar to those of the Mediterranean region of Europe.

8. Choose any one of the following industrial districts of Europe, and discuss it under the heads: build, climate, products, industries, population:-

- (1) The Lancashire or Yorkshire coalfields of England.
- (2) Holland and Belgium.
- (3) The Rhine Valley.
- (4) The Silesian Coalfield.

A rough sketch map will enhance the value of the answer.

9. South Africa is a large country with a small population. France and Germany are small countries with larger populations. Why is this so? Explain with reference to climate, vegetation, products, and industries.

(Note: All the above examination papers have been taken from Departmental collections of the papers in bound volumes entitled "Examination Papers".)

---

A P P E N D I X 31FIVE EXAMINATION PAPERS SET ON THE J.C. GEOGRAPHY SYLLABUS  
PUBLISHED IN THE EDUCATION GAZETTE OF 13TH FEBRUARY, 1930J.C. paper for December, 1941Part 1 (250 marks)

Answer Question 1 and any four other questions.

1. On the map of South Africa provided mark clearly the position of the following:-

- (a) The direction of the Benguella Current by means of an arrow.
- (b) Delagoa Bay, Cape Agulhas.
- (c) Aughrabies Falls, Victoria Falls, Matopo Hills.
- (d) The Tropic of Capricorn.
- (e) The Caledon River, Van Reenen's Pass.
- (f) British Bechuanaland, Mashonaland, Mozambique, Swaziland, Zululand.
- (g) An important area for each of the following:- wine, mealies, sugar.
- (h) The railway from Johannesburg to Beira.
- (i) The main road from Bloemfontein to Bulawayo.
- (j) Kimberley, Mafeking, Windhoek, Cradock, Lourenco Marques. (50)

2. On the map of Europe provided mark clearly the following:-

- (a) The Baltic Sea, the Aegean Sea, the Adriatic Sea, the Dardanelles, the Strait of Messina, Dogger Bank, Bay of Biscay, Cape Finisterre.
- (b) Corsica, Malta, Cyprus.
- (c) The Rhine, the Po, the Danube, the Guadalquivir.
- (d) The Steppes.
- (e) Finland, Rumania, Esthonia, Sweden, Yugoslavia.
- (f) An important region for each of the following:- maize, beet sugar, citrus fruit, petroleum, gold.
- (g) Oslo, Leningrad, Hamburg, Brest, Seville, Genoa, Odessa, Warsaw. (50)

3. (a) Describe irrigation in the Union of South Africa under the following headings:- Kinds of irrigation methods, with examples. Why irrigation is necessary. Difficulties to be faced. (41)

(b) Name three other very important irrigating countries and name one scheme in each country. (9)

4. Draw a large sketch map of either England or Germany and show on it four important coalfields. Name the coalfields and mark and name the chief towns on each.

Describe fully the industries on two important coalfields, selecting one from England and one from Germany. What are the chief uses of coal? (50)

5. (a) Describe the distribution, climate, natural vegetation and occupations and productions of the Cool Temperate Oceanic Regions (Western Margins only) of the world. (44)

(b) Both London and Bloemfontein receive an approximate average annual rainfall of 23 inches. Yet, judging by the vegetation of the two places, Bloemfontein appears to be much drier than London. Account briefly for this difference. (6)

6. Discuss citrus fruit farming in the Union of South Africa under the following heads:- Climatic conditions. Packing. Distribution. Marketing.

Name four other important citrus producing countries (excluding Europe) in the world. (50)

7. Give an account of the relief, climate, productions and industries of one of the following:- The Atlas Regions. Belgium. The Rhone Valley.

Illustrate your answer with a large sketch map; your map should show the chief mountains, rivers and towns of the region or country selected. (50)

8. (a) Give an account of one good method for finding direction (North-South line) at your school. How could you check the accuracy of your method? (36)

(b) On the map of South Africa provided, find the distance from Johannesburg to Port Elizabeth. Show your calculation in full. (14)

Part 11 (50 marks)

1-12. What numbers on the map stand for Buenos Aires? Vancouver? Accra? Cuba? Cape Verde? Colombo? Fremantle? Auckland? Singapore? Java? the Philippines? Calcutta?

13. Name the prevailing wind at 1 in July.

14. In which season does 10 get most of its rain?

15. Name a very important product from the island 2.

16. Name the chief industry of 6.

17. Name an important export of 7.

18. Name an important product of 12.

19. Name the current D.

20. Is this current D a warm or a cold current?

21. Which of the three places I, J, K, has the highest annual rainfall?

22. Which of the three places F, G, H has the highest average July temperature?

23. What type of natural vegetation is found at B?
24. What type of natural vegetation is found at E?
25. Name a month when heavy rains fall at G.
26. Name the line XX.
27. If it is winter at H, what season is it at M?
28. If it is 10 p.m. at L, what time is it at London?
29. If it is 6 a.m. at A, what time is it at the place G?
30. Give the latitude of the place C.

In the following statements, numbers within brackets indicate missing words. Write down the missing words.

The greater part of the atmosphere consists of (31) gas.

The low pressure belt around the Equator is called the (32).

Hemp is used in the manufacture of (33).

The chief source of power used in Switzerland is (34) power.

South Africa imports large quantities of soft timber from (35).

Trieste is an important port on the (36) sea.

Wood-pulp is chiefly used in the manufacture of (37).

Hamburg is on the river (38).

The Standard Time of South Africa is taken from (39) degrees East Longitude.

The Stanley Falls are on the river (40).

- In each of the following sentences choose from among the words within brackets the word or words that will make the statement true. Do not write out the sentences.
41. Many artesian wells are found in (New Zealand, Canada, Holland, Australia).
  42. The world's chief producer of rubber is (The Amazon basin, Malaya, Cuba, India).
  43. A great rice exporting country is (India, Burma, Japan, China).
  44. The chief industry of South West Africa is (Copper mining, cattle farming, crop farming, fishing).
  45. The chief export from Southern Rhodesia to the Union of South Africa is (coal, tobacco, maize, oil seeds).
  46. The greatest world producer of maize is (South Africa, Mexico, Argentine, United States of America).
  47. The capital of Rumania is (Sofia, Belgrade, Budapest, Bucharest).
  48. (Maize, rubber, the vine, rye) grows in regions with a high average annual temperature and a heavy rainfall throughout the year.
  49. The average yearly rainfall of Port Nolloth is (15 ins., 25 ins., 2.5 ins., 40 ins.)
  50. The population of Johannesburg is about (2,000,000; 90,000; 150,000; 5000,000).

J.C. paper for December, 1942Part 1 (250 marks)

Answer Question 1 and any four other questions.

1. On the map of South Africa provided, indicate the following:-

- (a) Luderitz Bay, Delagoa Bay, Saldanha Bay.
- (b) The Namib, the Kruger Game Reserve (K.G.R.).
- (c) Southern Rhodesia, Bechuanaland Protectorate, Zululand.
- (d) The prevailing wind at Cape Town in January, by means of an arrow. Name this wind.
- (e) The line of 34 degrees South Latitude.
- (f) Complete the boundary of the Orange Free State by means of an ink dotted line.
- (g) The Breede river, Great Fish river, Swarteberg, Montagu pass.
- (h) Van Rhyneveld pass dam, Lake Arthur, Vaal-Hartz dam.
- (i) The railway from Port Elizabeth to Durban. (Mark only Port Elizabeth and Durban. No other towns need be marked).
- (j) Ladysmith, Keetmanshoop, Barberton, Rustenburg. (50)

2. From which parts of the world are the following products obtained? Give three important regions for each product:- Petroleum, mealies, coffee, cotton, copper, rubber, wood-pulp, sugar-cane. Describe briefly the climatic conditions suitable for the successful production of rubber.

What will a cargo ship on its way to Europe load at each of the following ports?:- Melbourne, Wellington, Kingston (Jamaica), Havana, New Orleans (two important products from each port). (50)

3. Give a description of the Temperate Grasslands of the world under the following headings:- distribution, climate and productions.

Explain briefly how the climate influences the natural vegetation in the Equatorial forest and the Coniferous forest regions of the world. Name two important products from each of these two regions. (50)

4. Give an account of the relief, climate, productions and industries of one of the following:- Egypt, The Peninsula of Italy, Scotland.

Illustrate your answer with a large sketch map; your map should show the position of the country (or region) selected and the chief towns. (50)

5. (a) Name three important "Sources of Power" and state their respective uses.

What sources of industrial power are chiefly used in

France, Norway, Germany, Switzerland?

To what geographical factors do you attribute the industrial development of the Ruhr region? (42)

(b) Name the manufactures associated with the following places in the Union of South Africa:- Modderfontein, Robertson, Knysna, Estcourt. (8)

6. Draw a large sketch map of the North Atlantic Ocean, and on it show the ocean currents (by means of arrows); also indicate which currents are warm and which are cold. Name the currents. What are the effects of ocean currents on the climates of the following:- Coast of Norway, Port Nolloth (South Africa). (50)

7. (a) Give a short account of the influence of relief (build) on the climate of the Union of South Africa. (10)

(b) Give the approximate average annual rainfall, the season when the rain falls, the natural vegetation and an important farming product from each of the following districts:- Vryburg, Beaufort West, Moorreesburg, Pietersburg, Durban. (Tabulate your answers in columns). (40)

8. Explain what is meant by the "Mean Sun Time" and the "Standard Time" of a place.

What is the difference between the mean sun time and clock time of Cape Town (18½ degrees E.)?

When it is 5 p.m. in South Africa, what time is it at New York (75 degrees W.)?

A ship takes 10 days 5 hours from Durban to Calcutta (90 degrees E.). If the ship leaves Durban on Friday, 5th June at 9 a.m., when will it arrive at Calcutta? Give the day, date and time of arrival. (Show your calculations for all the above problems in full.) (50)

Part 11 (50 marks)

A map of the world is provided. Questions 1 to 26 refer to this map.

1-12. What numbers on the map stand for San Francisco, Halifax, Dakar, Kharkov, Los Angeles, Santos, Freetown, Rangoon, Shanghai, Java, Nigeria, Angola?

13. In which season does 1 get most of its rain?

14. Name an important export of 2.

15. Name an important export of 14.

16. Name the natural vegetation of B.

17. Name the country 7.

18. Name the river 5.

19. Name the river 6.

20. Name the mountain range 8.

21. Name a typical animal of B.

22. Name an important mineral product near 9.
23. Name the line XX.
24. What is the direction of the rainbearing wind at 14?
25. Give the approximate longitude of the town LL .
26. Which of the three places A, B, C is the highest above sea-level?

In the following statements, numbers within brackets indicate missing words. Write down the missing words.

The standard railway gauge in the Union of South Africa is (27)

The main form of transport between Europe and the United States is by (28)

The most important industry of the Yorkshire Coalfield is (29)

Jute is mainly used in the manufacture of (30)

The rainbearing wind of Portugal is the (31)

Brussels is the capital of (32)

Genoa is an important port of (33)

An important product of Norway is (34)

The Kiel canal is in (35)

The mineral mined at Postmasburg is (36)

The high tide at New Moon is called (37)

An important agriculture product from the Danube countries is (38)

The Victoria Falls are on the river (39)

The temperate grasslands of Argentine are known as the (40)

In each of the following sentences choose from among the words within brackets the word or words that will make the statement true. Do not write out the sentences.

41. The natural vegetation of Southern Rhodesia is (tropical grasslands, evergreen forests, desert, shrub).

42. The total European population of the Union of South Africa is about (15,250,000; 1,100,000, 10,200,000; 2,250,000).

43. The average summer temperature of Bloemfontein is about (41 degrees F.; 60 degrees F.; 73 degrees F.; 104 degrees F.).

44. An important river of Natal is the (Tugela, Riet, Limpopo, Crocodile).

45. The chief coal port of South Africa is (Cape Town; Port Elizabeth, Lourenco Marques, Durban).

46. The greatest world producer of wool is (South Africa, Australia, New Zealand, Argentine).

47. Tides are mainly caused by (winds, currents, the moon, pressure).

48. At midday on 21st June the sun's vertical rays are over (23½ degrees S.; 66½ degrees N.; the Equator; 23½ degrees N.).

49. The chief port of Kenya is (Mombasa, Dar-es-Salaam, Port Sudan, Mozambique).

50. A large port on the river Rhine is (Amsterdam, Rotterdam, Antwerp, Hamburg).

J.C. paper for December, 1943

Part 1 (250 marks)

Answer Question 1 and any four other questions.

1. On the map of South Africa provided, indicate the following:-

(a) False Bay, St. Helena Bay, Port Natal, Cape of Good Hope. (8)

(b) The direction of the Benguella Current, by means of an arrow. (2)

(c) By shading: a region where it rains throughout the year. (2)

(d) The line of 30 degrees East Longitude. (2)

(e) Great Berg river, Riet river, Sneeuberg, Auhrabies Falls. (8)

(f) Bechuanaland Protectorate, Griqualand East(G.E.), Swaziland, Namib. (8)

(g) The main railway line from Durban to Bulawayo. (No other towns need be marked). (4)

(h) Two important areas for Citrus fruit farming (Cit.)(4)

(i) Windhoek, Upington, Calvinia, De Aar, Kimberley, Harrismith. (12)

(50)

2. Describe the Mediterranean Regions of the world under the following headings:- Distribution, climate, natural vegetation and productions. (50)

3. Name five important irrigation dams in the Union of South Africa, naming also in each case the river on which it is situated, and the nearest town. (Tabulate your answers in three columns.)

What are the chief causes of soil erosion in the Union of South Africa? Name three quite separate natural regions in the Union of South Africa. (5) (50)

4. Give an account of the relief (build), climate, and productions of one of the following:- The Belgian Congo, The Steppes of European Russia, Sweden. Illustrate your answer with a large sketch map; your map should show the position of the country (or region) selected and the chief towns. (50)

5. Describe the climatic conditions of Monsoon countries in the wet season and in the dry season. Illustrate your answer

with two sketch maps of a Monsoon country (e.g., India). Name six typical productions of monsoon regions.

Briefly describe the natural vegetation of the Savanna regions of the world. (50)

6. Draw a large sketch map of either the Nile Basin or the Rhine Basin and on it mark and name:- The chief tributaries, the boundaries of the countries through which these rivers flow, the most important towns and the chief productions.

Which is the more important waterway, the Nile or the Rhine? Give your reasons. (50)

7. The sun rises at Port Elizabeth ( $24\frac{1}{2}$  degrees E.) at 6.25 a.m.; when does it rise at Cape Town ( $18\frac{1}{2}$  degrees E.) on that day?

If the reading of the barometer at sea-level is 30 inches, find its approximate reading at Bloemfontein, 4,600 feet above sea-level.

Account for the fact that the reading of the barometer at Cape Town is not always 30". Explain and give your reasons.

Draw two separate diagrams to show the tides on the earth at New Moon and at First Quarter. The relative positions of the Sun, Earth and Moon must be shown in each case. (50)

8. (a) Why are the gold mines of the Transvaal so important to the Union of South Africa? Give five reasons. (15)

Name five important coal mining centres (towns) in the Union of South Africa. (10)

(b) Describe the climatic and soil conditions that favour the growth of wheat in the Western Province. (16)

Name three important areas where tobacco is cultivated in the Union of South Africa. (9) (50)

#### Part 11 (50 marks)

A map of the world is provided. Questions 1 to 32 refer to this map.

1-10. What numbers on the map stand for Cuba, Buenos Aires, Baku, Yokohama, Wellington, Melbourne, Iran(Persia), Colomba, Chicago, Vancouver?

11-15. Name important exports of 1, 2, 4, 5, 10.

16-18. What types of climate have 1, 4, 7?

19. Name the natural vegetation around 4.

20. Name the line XX.

21. Give the approximate latitude of the town 1.

22. Name the river 11.

23. Name the river 12.

24. Name the mineral mined at A.

25. Name the mineral mined at D.

26. Name the mineral mined at F.
27. Name the ocean current B.
29. Name the ocean current C.
30. Is the current C a cold or a warm current?
31. Name the rain-bearing wind of E.
32. Name a month when heavy rains fall at D.

In the following statements, numbers within brackets indicate missing words. Write down the missing words.

- The capital of Libya is (33)  
 The chief seaport of Denmark is (34)  
 An important product of Uganda is (35)  
 The chief river of Italy is the (36)  
 The capital of Rumania is (37)  
 The chief manufactured product of Yorkshire is (38)  
 The chief seaport of Kenya is (39)  
 The mines of Rio Tinto (Spain) produce (40)  
 Glasgow is on the river (41)  
 The industrial region of Belgium lies along the river (42)

In each of the following sentences choose from among the words within brackets the word or words that will make the statement true. Do not write out the sentences.

43. On the 21st June the sun's vertical rays are over (23½ degrees S.; 66½ degrees N.; 0 degrees; 23½ degrees N.)
44. The average July temperature of Cape Town is about (34 degrees F.; 95 degrees F.; 55 degrees F.; 79 degrees F.)
45. The height of Mount Aux Sources is about (11,200 feet; 4,500 feet; 25,800 feet; 6,000 feet).
46. Waves are chiefly caused by (temperature, pressure, winds, the moon).
47. Essen is famous for (tyres, steel, pottery, paper).
48. The Apennines are in (Italy, France, Spain, England).
49. The mountains separating Spain from France are called (Alps, Caucasus, Pyrenees, Sierra Nevada).
50. The Don flows into the (Black Sea, Caspian Sea, Mediterranean Sea, Sea of Azov).

J.C. paper for December, 1944

Part 1 (250 marks)

Answer Question 1 and any four other questions.

1. On the map of South Africa provided, indicate the following:-

- (a) Mark and name South Africa's most important fishing ground. (2)
- (b) Graaff-Reinet(G.R.), Vereeniging(Ver.), Port Elizabeth (P.E.), Paarl(P), Port Nolloth(P.N.). (10)

- (c) Great Namaqualand (Nam.), Kalahari(Kal.), Matabeleland(Mat.), Mozambique(Moz.). (8)
- (d) The rivers Caledon, Limpopo, Shire, Tugela.(8)
- (e) Cape Agulhas, Durban.(4)
- (f) A line in a N.W. direction from Port Elizabeth representing 200 miles. (2)
- (g) The main railway-line from Kimberley to Windhoek. (No other towns need be marked). (4)
- (h) Shade horizontally an area receiving rainfall throughout the year. (2)
- (i) Shade vertically an area where angora goats are chiefly reared. (2)
- (j) Shade black an area producing large quantities of sugar cane. (2)
- (k) Indicate by letter T an area producing large quantities of Virginia tobacco. (2)
- (1) The Malutis, Nieuweveld Mountains. (4). (50)
2. (a) Explain how the seasons are caused. (4)
- (b) Briefly explain the terms "equinox" and "solstice" and say when they occur. (12)
- (c) What is meant by "pressure of the air"? Explain why winds blow towards an area of low pressure. (12)
- (d) Explain what is meant by the "Mean Sun Time" and the "Standard Time" of a place. (12)
- (e) Why are most of the hot deserts of the world found in the trade wind latitudes? Name three hot deserts. (10) (50)
3. (a) What is an ocean current? (2)
- (b) What is a drift? (2)
- (c) How are ocean currents caused? (6)
- (d) Port Nolloth and Durban are nearly on the same line of latitude, yet there is a difference in the climate of these places. Why is this? How does the climate of these two places differ? (10)
- (e) Copy from your map of the world a large sketch map of the South Atlantic Ocean and on it show the direction of the ocean currents by means of arrows, and name the chief ocean currents, indicating which are warm and which are cold.(30)
4. (a) Describe the climatic conditions found in each of the following regions: Equatorial Rain Forests, Mediterranean Areas. (28)
- (b) Give a list of at least six animal and six vegetable products for each of these two regions. (12)
- (c) Mention the main areas of the world in which these two regions are found. (10) (50)
5. (a) Describe carefully two methods of finding direction

without the help of a compass. (40)

(b) How can you calculate the area of a country, if you are provided with a map of the country, and also the scale on which the map is drawn. (10)

6. (a) Name one area or town in the Union of South Africa associated with the cultivation of each of the following crops:- vine, mealies, winter-wheat, sugar cane, oranges, tobacco(Virginian), apricots, pineapples. (8)

(b) Describe the climatic conditions which favour the successful cultivation of these crops in the places mentioned. (32)

(c) Explain how the Union Government is attempting to protect and increase our forest reserves. (10)

7. (a) What are the chief industries of the following areas:- Lancashire, Norway, The Ruhr, Switzerland. (24)

(b) Mention three cities in each of these four areas and indicate their positions on sketch maps. (26)

8. (a) Give an account of the relief, climate and occupations of the people in one of the following areas:- The Nile Basin, The Plain of Lombardy, Holland. (34)

(b) Illustrate your answer with a large sketch map. Your map should show at least the position of the country or region selected and the chief towns. (16)

Part 11 (50 marks)

A map of the world is provided. Questions 1-26 refer to this map. Write your answers in the spaces provided on the right-hand side of the question paper.

1-12. What numbers on the map stand for Odessa, Berlin, Malta, the Meseta, New York, the Azores, Tokio, Singapore, Kenya, Lagos, Leopoldville, Sydney?

13. What is the name of the bay marked 21?

14. What is the name of the sea marked 19?

15. What is the name of the island marked 17?

16. What is the name of the river marked 15?

17. What is the name of the country marked 13?

18. What is the prevailing wind at A in July?

19. What type of natural vegetation is found at B?

20. About what date is the sun overhead at noon, at places on the line X-X?

21. If it is 1 p.m. at a town marked 14, what time is it at a town marked 16?

22. If it is summer at 18 what season is it at 20?

23. Name the current C.

24. In which season does D get most of its rain?

25. Name the chief export of E.

26. Name an important product of F.

In the following statements numbers within brackets indicate missing words. Write down the missing words.

The chief mineral obtained at Witbank is (27)

When there is hardly any difference between ebb and flow, the tide is called (28) tide.

The warm wind which blows from the Alps towards Switzerland is the (29)

The natural region in which rice is grown on a large scale is the (30)

The sea port for Uganda is (31)

Danzig is at the mouth of the river (32)

The railway between Natal and the Orange Free State passes over the pass of (33)

Artificial silk is made from (34)

Bradford is an important centre for the spinning and weaving of (35)

The Madeira Islands belong to (36)

The driest area of Southern Africa is the (37)

The oil-palm grows in (38)

The chief river of Italy is (39)

The capital of Rumania is (40)

In each of the following sentences choose from among the words within brackets the word or words that will make the statements true. Do not re-write the whole sentence.

41. One of the passes over the Alps is (St. Gotthard, Khyber, Crows Nest, Montagu).

42. Vanadium is a (fibre, fruit, metal, oil).

43. Newcastle on Tyne exports (carpets, coal, codfish, coffee).

44. Part of the boundary between France and Germany is the river (Elbe, Loire, Volga, Rhine).

45. The Ripon Falls are on the river (Zambesi, Niger, Senegal, Nile).

46. The country from which the Union of South Africa imports most of her goods is (Canada, the United States of America, Great Britain, India).

47. The greatest collecting and distributing centre of Europe is (Paris, London, Edinburgh, Oslo).

48. A typical product of Mediterranean countries is (wool, stone-fruits, rubber, sugar).

49. Simonstown is situated on (Table Bay, Algoa Bay, Mossel Bay, False Bay).

50. The maize triangle of the Union of South Africa is situated partly in (the Southern Transvaal, Natal, the Northern Cape Province, Basutoland).

J.C. paper for December, 1945Part 1 (250 marks)

Answer five questions, one of which must be Question 6 or 7 or 8.

1. Choose any two of the following Natural Regions: Savannas, Tundra, Temperate Grasslands, Monsoon Regions. State the chief parts of the world where they are found and give short descriptions of their climate, natural vegetation and products. (50)
2. (a) For each of the following products name three countries or regions that are important producing areas: meat, tea, wheat, rice, cotton, wool, woodpulp, copper, petroleum, coal. (30)
  - (b) Name two areas in Europe where hydro-electric power is largely used in industry. (2)
  - (c) A cargo ship leaves Durban for Marseilles via the Red Sea. Name two exports which she might take on board as cargo at each of the following ports: Durban, Beira, Zanzibar, Mombasa, Alexandria, Palermo. (18)
3. (a) Why do direct rays of the sun give more heat than oblique rays? Illustrate by means of sketch. (14)
  - (b) What observations have you made on the direction of the rising and setting of the sun in June, September and December? (12)
  - (c) Why is there a difference between the length of the day on the 21st of December and the 21st of June at Cape Town? Illustrate by means of a sketch. (24)
4. (a) Draw a map of South Africa and on it mark the areas of production of: gold, wool, diamonds, coal, maize. (12)
  - (b) Give one mineral associated with each of the following places and indicate the places on the map drawn in connection with 4(a): Postmasburg, Messina, Thabazimbi, Selukwe, N'dola. (15)
  - (c) Write a short account of the fruit industry in the Union of South Africa. (23)
5. On the map of Southern Africa provided indicate the following:-
  - (a) The positions and names of the chief coaling-port, the administrative capital, the legislative capital of the Union of South Africa.
  - (b) Lake Ngami(Ng), Aughrabies Falls(AF), Hartebeestpoort Dam(Hd).
  - (c) Swaziland(Sw), Transkei(Tr), Basutoland(Ba).
  - (d) The Drakensberg(D), Outeniquas(O).
  - (e) Bulawayo(B), Mafeking(Ma), Lourenco Marques(LM),

Upington(U), Port Elizabeth(PE), East London(EL), Aliwal North(AN), Bloemfontein(B1).

(f) Tropic of Capricorn, the meridian 30 degrees E.

(g) Highveld of the Transvaal(HT), Great Karoo(GK), Namib desert(ND), Bushveld(Bv).

(h) (i) an area producing large quantities of wine;(W)

(ii) an area producing wattle-bark(Wb). (50)

6. Give a brief account of the relief, vegetation, climate and occupations of one of the following areas. Illustrate your answer with a large sketch map. Your map should show at least the position of the area and the chief towns: The Congo Basin, The Atlas Region, Southern Rhodesia, South West Africa. (50)

7. (i) On the map of Europe supplied -

(a) indicate by their initial letters the Danube(D), Elbe(E), Volga(V), Rhine(R);

(b) insert and name the Greenwich Meridian;

(c) shade and name the Ukraine(U), the Tula coalfields(T), the Urals(Ur), the Saar Basin(SB);

(d) indicate by their initial letters; Straits of Gibraltar (D), Kiel Canal(K);

(e) indicate by dots and name as shown in the brackets: Gdynia(Gd), Hamburg(Ha), Antwerp(A), Lisbon(L); (30)

(ii) Give a short account of one of Britain's most important industrial areas. (20)

8. Describe briefly, with reasons, the general weather conditions (in summer and winter) experienced in the following climatic regions of Europe: North-West coastlands; Mediterranean Lands; Central Europe. (50)

Part 11 (50 marks)

A map of the world is provided. Questions 1-25 refer to this map. Write your answers in the spaces provided on the right-hand side of the question paper.

1. Name the canal marked 1.

2. Name the river marked 2.

3. Name the wind marked 3.

4. What is the natural vegetation of 4?

5. Name the mountain range marked 5.

6. Name the sea marked 6.

7. Name the sea marked 7.

8. What is the natural vegetation of 8?

9. Name the chief mineral product of 9.

10. Name the current marked 10.

11-20. Which numbers of the map stand for Milan, Belgrade, Moscow, the Crimea, Murmansk, Port Sudan, Elizabethville,

Freetown, Cairo, Vancouver?

21. Which of the towns marked 25, 26, 27, has the lowest average winter temperature?
22. Which number shows the winter route between Liverpool and Halifax?
23. At what time of the year will an observer see the sun directly overhead at 23?
24. Name the line marked 24.
25. Give the approximate longitude of the town marked 23.

In each of the following sentences choose from among the words within brackets the word or words that will make the statement true. Do not rewrite the sentences:-

26. Most of the world's supply of jute is produced in (India, Burma, China, Java).
27. A country which exports large quantities of mutton is (Russia, India, New Zealand, Canada).
28. Argentina exports large quantities of (palm kernels, wheat, rice, coffee).
29. The Gold Coast is chiefly important for its production of (tea, sugar, coffee, cacao).
30. The world's chief producer of coffee is (Brazil, Kenya, Ceylon, India).
31. (Maize, rubber, rice, wheat), grows well in regions where a cool rainy season is followed by a season of heat and drought.
32. (Maize, rubber, vine, wheat), requires great heat and rain throughout the year.
33. The Atacama desert produces (dates, nitrate salts, wheat, palm oil).
34. Los Angeles is important for its (oil, iron, hydro-electricity).
35. The Po is a river in (France, Poland, Italy, Holland).
36. England is chiefly an (agricultural, pastoral, industrial) country.
37. An important port on the east coast of England is (Newcastle, Liverpool, Bristol, Plymouth).
38. Glasgow is on the river (Mersey, Thames, Severn, Clyde).
39. The only important port of the Union of South Africa situated at a river mouth is (Cape Town, Mossel Bay, East London, Port Elizabeth).

In the following sentences words are missing. Write down the missing words:-

40. Ploesti produces
41. The capital of Finland is
42. The capital of Poland is
43. The capital of Scotland is

183.

44. The Victoria Falls are in the course of the river.
  45. The source of the Tugela River is in the            mountains.
  46. Lagos is a port in
  47. A degree of latitude measured along a meridian is approximately            miles.
  48. The parallel of latitude  $66\frac{1}{2}$  degrees North is called the
  49. When it is 4 p.m. standard time in South Africa, the time at New York (75 degs W.) is
  50. If sunrise at Cape Town ( $18\frac{1}{2}$  degrees E.) is 6.24 a.m., sunrise at East London (28 degs E.) on the same day will be
-

A P P E N D I X 32FIVE EXAMINATION PAPERS SET ON THE J.C. GEOGRAPHY SYLLABUS  
PUBLISHED IN THE EDUCATION GAZETTE OF 1ST NOVEMBER, 1945J.C. paper for December, 1947

The paper consists of three sections. From Section A answer two questions, from Section B answer three questions; Section C is compulsory.

Section A Answer any two questions.

1. (a) Explain what you understand by the following terms: South African summer solstice, equinoxes, rotation of the earth, an inch of rain. (20)

(b) Explain how you would find (i) true North by using a shadow stick, (ii) direction by night from the Southern Cross. Illustrate your answers with diagrams.

2. (a) (i) What are meridians of longitude? (32)

(ii) Explain the relationship between longitude and time. (32)

(b) If sunrise at Grahamstown,  $26\frac{1}{2}$  degrees E., is 6.34 a. m. South African standard time, what time will the sun rise at Cape Town,  $18\frac{1}{2}$  degrees E., and Durban, 31 degrees E., on the same day? Calculations to be shown fully. (10)

(c) What observations have you made during the year on the position of the rising or the setting sun? (8)

3. (a) Give a description of the Tropical Grasslands or the Temperate Grasslands or the Hot Dry Deserts of the world under the following headings: (i) distribution; (ii) climatic conditions; (iii) natural vegetation; (iv) economic activities as determined by natural geographical conditions. (36)

(b) Arrange the following places in three groups: (i) those that get most of their rain in the warm season; (ii) those that get most of their rain in the cool season; (iii) those whose rainfall is spread over the year:- Calcutta, Paarl, Bergen, Bloemfontein, Perth (Australia), Morocco, South Island (New Zealand). (14)

Section B Answer any three questions.

4. (a) Give a short account of one of the following industrial areas under the headings: (i) a sketch-map of the area selected, indicating its position and chief towns only; (ii) three reasons for its importance; (iii) a description of its chief industries:- Lancashire, Southern and South Eastern Transvaal, the coalfield of Belgium and North-East France. (32)

(b) Name three towns in the U.S.A. on or near Lake Erie and account for their importance (as a group). (18)

5. Give a geographical description of Nigeria or Southern Rhodesia or Java under the following headings: (i) build; (ii) climatic conditions; (iii) products and occupations. Draw a large sketch-map of the country selected, indicating its position and chief towns only. (50)

6. (a) Draw large sketch-maps of the Yangtse and Ganges rivers. On your maps:- (i) indicate the mountains of origin and the sea (or ocean) into which the river flows; (ii) insert 3 agricultural products along the upper and 3 along the lower course of each river; (iii) insert four important towns in the basin of each river. (32)

(b) Write notes accounting for the density of the population in each of these two river basins. (18)

7. (a) Describe the natural conditions under which each of the following can be cultivated successfully: Tea, Coffee, Cacao. Name three important producers of each. (29)

(b) (i) For each of the following products name three regions that are important producers: Tin, copper, aluminium, wine, rubber.

(ii) Name three important pipe-lines along which petroleum is led. (Name the producing centre first and then the town or port to which the petroleum is led.) (21)

8. (a) Describe two different methods by which diamonds are obtained in South Africa. Name three places where each of these two methods is applied and three places where diamonds are cut in South Africa. Name also three purposes for which diamonds are used. (26)

(b) Give an account of the cane-sugar industry in the Union of South Africa under the following headings: (i) where cultivated; (ii) factors promoting the cultivation; (iii) by-products of the industry; (iv) marketing of the sugar. (24)

9. (a) On the map of Europe provided -

(i) indicate the following coalfields (by means of a ring and initial letter): Ruhr(R), Northumberland(N), Donetz(D), Silesia(Si), Saxony(Sa); (10)

(ii) indicate two areas with heavy rainfall, say over 50 inches, and one area with very low rainfall, say under 10 inches per year; (6)

(iii) from Moscow (marked M on the map) draw a line in a south-easterly direction and on it mark off a point 800 miles away from M; (4)

(iv) indicate the following mountain ranges (by means of a heavy line and initial letter): Urals(U); Pyrenees(P); Juras(J). (6)

(b) (i) What are the characteristic climatic features of

the countries of Europe bordering on the Mediterranean Sea?

(ii) Account for these characteristics.

(iii) Name four important products that are typical of these regions and show how they are related to climate. (24)

Section C (Compulsory)

10. (a) A map of the world is supplied. Indicate the following on it, using initial letters where given:-

(i) The ocean route from Southampton(SH) to Madras(M) with two intermediate ports of call. (6)

(ii) The ocean route from Lisbon(L) to Vancouver(V) with two intermediate ports of call. (5)

(iii) The regular air route between Britain and South Africa; name the two termini and indicate two intermediate airports. (7)

(b) (i) Mark with an X the following three positions: Lat. 30 degrees N., Long. 30 degrees E.; Lat. 30 degrees N., Long. 120 degrees E.; Lat. 30 degrees S., Long. 30 degrees E.; and insert (on map) a town near each position marked. (9)

(ii) insert and name: the White Sea, the Black Sea, the Yellow Sea, the Red Sea. (4)

(iii) Insert and name: the Sunda Strait, the Strait of Magellan, the Mozambique Channel, the Panama Canal. (4)

(c) In your answer-book write down the numbers 1-15 below one another and next to them the answers to the following questions:-

(1)-(5) What numbers on the map stand for Casablanca? Singapore? Kisumu? Karachi? Chicago?

(6) During which season does "11" get its heaviest rainfall?

(7) What type of natural vegetation is found at "12"?

(8) What wind blows at "3" in June?

(9) What is the name of the island marked "13"?

(10) What type of climate is experienced at "14"?

(11) On what date do the rays of the sun fall vertically at "4"?

(12) What mineral is exported on a large scale from "14"?

(13) What mineral is obtained on a large scale at "1"?

(14) What type of climate is experienced at "15"?

(15) Which place has the greater range of temperature, "16" or "1"? (15)

J.C. paper for December, 1948

From Section A answer 2 questions; from Section B answer 3 questions; from Section C answer all the questions.

Section A

1. (a) Describe and account for the Monsoon type of climate. Illustrate your answer with two sketch-maps of a typical

example, e.g. India. (20)

(b) Describe and account for the cool temperate oceanic type of climate (western marginal type). Name six countries in which it occurs. (20)

(c) Name five typical agricultural products for each of the above mentioned climatic types. (10)

2. (a) Why do the direct rays of the sun give more heat than the oblique rays? Illustrate by means of a sketch. (14)

(b) Why does frost occur frequently at Bloemfontein and hardly ever at Port Elizabeth? (8)

(c) What do you understand by the following terms: contour lines, tropic of Capricorn, "midnight sun", standard time, movements of the earth? (28)

3. (a) The index of an atlas tells you that a place (X) is 20 degs S., 120 degs E. Explain what this means, and say how you would fix the position of this place on a map. (12)

(b) The circumference of the earth is approximately 25,000 miles. Explain how you would find the distance in miles between two successive parallels of latitude. Can the distance in miles between two successive meridians of longitude also be determined? What approximately is the distance in miles between the two tropics? (12)

(c) When it is 6 p.m. on Sunday by South African Standard Time at Kimberley (25 degs E. Long.) what time is it (sun time) at New Orleans (90 degs W.), at London, and at Canberra (150 degs E.)? Calculations to be shown. (12)

(d) George and Oudtshoorn are not very far apart, but the average yearly rainfall of George is 35 ins and that of Oudtshoorn 10 ins. How do you explain the difference? The average yearly rainfall of Durban is 40 ins, while that of Port Nolloth in the same latitude is 2 ins. Account for this difference. (14)

#### Section B

4. (a) Give a geographical description of either the Atlas Lands or the Belgian Congo, under the following headings: (i) Build, (ii) climatic conditions, (iii) products and occupations. (40)

(b) Account for the economic backwardness of the Belgian Congo. (10)

5. (a) Name four important industries in each of the following regions: the Indus Plain, the Plain of Lombardy, Yorkshire, the Donetz Basin, the Ruhr. (20)

(b) Account for the importance of three of the following: New York, Chicago, Southampton, Shanghai, Port Elizabeth. (30)

6. (a) What products would you expect a tramp steamer, on

its way from the Far East to London, to load in large quantities at each of the following ports (2 products per port): Hong Kong, Batavia, Calcutta, Bombay, Port Sudan, Marseilles. (12)

(b) Name 3 important producing areas for each of the following: wool, timber, coffee, iron-ore, maize, cane-sugar, beet-sugar, beef. (24)

(c) Describe the natural conditions under which cotton can be cultivated successfully. (14)

7. (a) Describe the Maize industry in South Africa under the following headings: (i) climatic conditions, (ii) producing areas, (iii) uses, (iv) transport and marketing. (35)

(b) Write a brief account of the vine industry in South Africa. (15)

8. On the map of South Africa provided, indicate the following:

(a) The railway line from Calvinia to Cape Town. (5)

(b) One producing centre for each of the following (initial letter and name of place): Manganese(M), chrome(ch), copper(co), pine apples(P.A.), ostrich feathers(O.F.), iron-ore(I) (12)

(c) Five important sea-ports. (5)

(d) Prevailing winds at (i) Cape Town in January, (ii) Durban in January (arrows and names). (4)

(e) Irrigation dams: (i) On the Vaal River, (ii) on the Riet River, (iii) on the Sundays River, (iv) on the Breede River, (v) on the Crocodile River. Name the dams. (10)

(f) A straight line from Walvis Bay to Bulawayo, indicating the distance between the two places in miles. (5)

(g) Etosha Pan, Lake Ngami, Damaraland, Windhoek, Luderitz Bay, Victoria Falls, Mafeking, Keetmanshoop, Untali. (9)

9. Write notes on four of the following:-

(a) The importance of the Nile to Egypt.

(b) The importance of plentiful sources of power to the development of N.E. U.S.A.

(c) The importance of air transport to-day.

(d) The main North Atlantic ocean routes.

(e) The importance of cold storage in the transportation of food.

(f) World production and consumption of rice. (50)

### Section C

10. (a) A map of the world is provided. Questions 1 to 25 refer to this map.

(1)-(6) What numbers on the map stand for Astrakan? Bordeaux? Dakar? Melbourne? Mombasa? Colombo?

- (7) Which has the bigger average temperature range, 13, or 17?
- (8) Which has the heavier rainfall average, 7 or 37?
- (9) Name the prevailing wind at 14 in June.
- (10) From what wind does 20 get its chief rains?
- (11) What large river enters the ocean at 15?
- (12) What large river enters the ocean at 19?
- (13) What is the most important port of the island marked 22?
- (14) What type of natural vegetation is found at C?
- (15) What type of natural vegetation is found at 8?
- (16) What type of natural vegetation is found at C?
- (17) What type of natural vegetation is found at D?
- (18) On what date do the direct rays of the midday sun fall on line X-X?
- (19) During which season does 16 get most of its rain?
- (20) When it is winter at 17, what season is it at 14?
- (21) What product is obtained in large quantities at 18?
- (22) From which place, 7 or 11, is palm oil exported in large quantities?
- (24) From which place, 7 or 11, is rubber exported in large quantities?
- (24) Where is meat tinned in large quantities, at 6 or at 21?
- (25) In what latitude (approximately) is Cape Agulhas situated?
- (b) Indicate the following on the map of the world provided:-
1. Madagascar, Newfoundland, Falkland Islands, Java.
  2. Four ocean routes from Melbourne to Southampton with one important port of call on each route.
  3. Four areas with a "China Type" of climate (warm temperate east margin).
  4. The Meridian of Greenwich, the Antarctic Circle, the Tropic of Cancer, the International Date Line, the Meridian 120 degs W. (Names to be written along the lines). (50)

J.C. paper for December, 1949

The paper consists of 3 sections. Answer 2 questions from Section A, answer 3 questions from Section B; Section C is compulsory.

Section A

1. (a) Describe the climate and the vegetation of the equatorial lowlands of the world. (30)
 

(b) Name 5 regions with an equatorial climate where important products are grown in plantations. Give at least one product for each region. (20)
2. (a) What do you understand by the terms "rotation" and

"revolution" of the earth? (16)

(b) What do you understand by the terms "solstice" and "equinox"? When do they occur? Draw a diagram to illustrate the rays of the sun as they fall on the earth on the 22nd December. (22)

(c) Show how you would find your direction in the Southern Hemisphere by means of the stars. (12)

3. (a) Explain, with the help of a diagram, why days are longer than nights in summer and nights longer than days in winter. (14)

(b) The following climatic details are given for three places, A, B, C. In which hemisphere is each place situated? Give, with reasons, the type of climate that each place has:-

Place	Av.Temp. (F) Jan.	Av.Temp. (F) July	Av.Rain. inches	When rain falls
A,	54	73	32	Oct. to March
B,	74	85	72	June to Oct.
C,	57	42	37	All seasons. (36)

#### Section B

4. (a) Draw a sketch-map of the River Nile, showing:-

(i) Its 2 main sources of water-supply. (ii) Where the cataracts are. (iii) The situation of Khartoum, Aswan, Cairo, Port Said and Alexandria. (iv) The railway system serving the Nile Basin. (26)

(b) Describe the two main types of irrigation practised along the lower course of the river and give the chief crops which are produced. (24)

5. (a) What part of South Africa has a Mediterranean climate? Describe and account for the kind of farming carried on in this region. (20)

(b) Give the manufacturing industries and their localities, which are dependent on the farming carried on in this region. (16)

(c) Explain how farming in the Great Karoo differs from that carried on in the Mediterranean region. (14)

6. Give the situation of one important coalfield, and an account of the industries carried on there, in four of the following countries: Russia, Germany, France, Belgium, Scotland, U.S.A. (50)

7. (a) (i) Give the geographical factors necessary for the cultivation of cotton and name 4 important cotton-producing areas.

(ii) Name 3 important producing areas of each of the following: wheat, maize, wool, tea. (25)

(b) Give 5 areas (not countries only) where iron-ore is produced on a large scale. (10)

(c) Write a note on hydro-electricity as a source of power. Give 5 countries where it is used to a great extent. (15)

8. On the map of South Africa provided, indicate the following:-

(a) Walvis Bay(W.B.), Luderitz(L.), Alexander Bay(A.B.), Mossel Bay(M.B.), Port Elizabeth(P.E.), Durban(D), Lourenco Marques(L.M.), Pretoria(P.), Kimberley(K.) Mafeking(M.).(10)

(b) The railway line running from Port Elizabeth to Durban with 3 important towns along the route. (5)

(c) A line in a N.W. direction from Port Elizabeth representing 200 miles. (4)

(d) A straight line indicating the Tropic of Capricorn. (5)

(e) Zululand(Zul.), Swaziland(Swa.), Mashonaland(Mas.), Matabeleland(Mat.), Basutoland(Bas.). (5)

(f) Producing regions of asbestos, chromium, iron-ore, manganese, copper, sugar(one each). Give also the town which is the centre of the producing region in each case. (12)

(g) Three ocean currents along the coast, giving direction and showing whether warm or cold. (9)

9. Write notes on three of the following:-

(a) The situation and export trade of Durban and Port Elizabeth.

(b) The climate and productions of Kenya.

(c) Rice production in India.

(d) The Yangtse Basin in China.

(e) The situation and trade of New York. (50)

### Section C (Compulsory)

10. (a) A map of the world is provided. Questions 1 to 25 refer to this map:-

(1)-(6) What numbers on the map stand for Bombay? Shanghai? Accra? Dakar? Buffalo? Madras?

(7) What type of natural vegetation is found at A?

(8) What type of natural vegetation is found at B?

(9) What type of natural vegetation is found at C?

(10) What type of natural vegetation is found at D?

(11) Name the prevailing wind in December at 1.

(12) " " " " " " " 13.

(13) " " " " " " " 8.

(14) " " " " " July " 14.

(15) Name one important export from 9.

(16) " " " " " 10.

(17) " " " " " 3.

(18) " " " " " 1.

(19) On what lake is 2 situated?

- (20) On what river is 5 situated?  
 (21) On what river is 13 situated?  
 (22) Name the canal at 16.  
 (23) To what country does island E belong?  
 (24) What is the name of island E?  
 (25) What is the name of island F? (25)

(b) Indicate the following on the blank map of the world provided:-

(1) One important oilfield in South America; one in U.S.A.; two in Asia; two in Europe (write O in the correct position).  
 / (6)

(2) Three important copper-producing areas in Africa (write C in the correct position). (6)

(3) The tin-producing region in Africa, north of the equator (T in the correct position) and the seaport from which it is mainly exported. (2)

(4) The air route most commonly used from Cape Town to London, with five important aerodromes along the way. (8)

(5) The line of longitude where it is 10 p.m., when it is 4 p.m., at Greenwich - what line of longitude is this? (3)

J.C. paper for December, 1950

The paper consists of three sections. Answer two questions from Section A, answer three questions from Section B; Section C is compulsory.

Section A

1. (a) Describe the climate that causes each of the following types of vegetation:- Temperate Grasslands; Evergreen shrubs; Deciduous forests. Name two regions or countries for each type. (35)

(b) Give a list of 5 vegetable or animal products for each of the 3 vegetation types named in (a). (15)

2. (a) Explain how you would find a true north and south line; illustrate by means of a diagram. (20)

(b) The circumference of the earth is approximately 25,000 miles. Show how you can obtain the length in miles of one degree of latitude. Can the length of a degree of longitude also be obtained? What is approximately the distance in miles between the two tropics? (15)

(c) When it is 6 p.m. on Saturday by S.A. Standard Time at Cape Town, what time is it (sun time) at Sydney (150 degs E.), at London, and at Buenos Aires (60 degs W.). (15)

3. (a) Explain by means of diagrams and short explanatory notes why the direct rays of the sun fall on the Tropic of Cancer at one time of the year, and on the Tropic of Capricorn at another time. (20)

(b) Give reasons why it is hotter at the equator than at the poles. Illustrate by means of a sketch. (20)

(c) Explain why the midday sun is sometimes directly overhead at places in the Northern Transvaal and never directly overhead at Cape Town. (10)

#### Section B

4. Write a geographical account of the Belgian Congo or Nigeria. (50)

5. The Transvaal can be divided into 3 natural regions, the High, Middle and Low Veld. Describe briefly the relief and climate of each of these regions and give an account of the farming carried on in each. (A sketch-map will increase the value of your answer.) (50)

6. What manufacturing is carried on in each of the following coalfields:- Lancashire; Black Country of England; Meuse-Sambre Valley (Belgium); the Valley of the Clyde. Mention also the important cities of each region in your description. / (50)

7. (a) A ship leaves Sydney for London, passing through the Suez Canal. Give the names of six seaports it could profitably call at along the route and give 2 important cargoes it might load at each port. (30)

(b) Give two important producing regions (not countries only) for each of the following products: soft timber, tea, rice, beef, rubber. (20)

8. On the map of South Africa provided, show the following:-

(a) The six leading seaports. (12)

(b) The railway line from Cape Town to Durban, via De Aar, Kimberley, Bloemfontein and Kroonstad. (6)

(c) Four regions where citrus fruit is produced on a large scale. (Write a C in the correct position for each, together with the name of the region.) (8)

(d) Coal in South Rhodesia(Co.); Alluvial diamonds in Cape Province(D); Manganese in Cape Province(M); Copper-ore in S.W.A.(Cu.); Ground Nuts in O.F.S.(G.N.). (Give letters and name of place.) (10)

(e) The rivers: Caledon, Tugela, Crocodile, Harts. (8)

(f) The prevailing winds at Cape Town in July and at Durban in January (names and arrows). (6)

9. Write notes (10 to 15 lines) on three of the following:-

(a) The Climate and Products of Java. (b) The Ganges Basin.

(c) The manufacturing industries carried on at Pittsburgh in U.S.A. State where the raw materials mainly come from.

(d) The Rhine as a waterway. (e) The origin of the floods of the Nile. When do they occur? Name 5 crops produced in

the Nile Valley. (50)

Section C (Compulsory.)

10. (a) A map of the world is provided. Questions 1 to 25 refer to this map:

- (1) What number on the map stands for Chicago? (2) for Lisbon? (3) for Aden? (4) for Tokyo? (5) for Copenhagen? (6) for Leningrad?
- (7) Eleven and 13 are about the same distance from the equator. Which has the greater rainfall?
- (8) Which has the colder winter: 8 or 10?
- (9) Which has the greater average temperature range, 1 or 4?
- (10) What type of natural vegetation is found at 13?
- (11) What type of natural vegetation is found at 7?
- (12) " " " " " " " " 16?
- (13) " " " " " " " " 17?
- (14) &
- (15) What 2 important products are loaded at 4 for transport across the Great Lakes?
- (16) No. 14 indicates a place where an important sporting event took place at the beginning of this year. Name this place.
- (17) On what river is 17 situated?
- (18) What important falls are near to 16?
- (19) What is the prevailing wind at 13 in January?
- (20) What is the prevailing wind at 15 in July?
- (21) In what country is 10 situated?
- (22) On what sea is 10 situated?
- (23) Near the mouth of which river is 7 situated?
- (24) In what country is 6 situated?
- (25) What cultivated product is exported from 6? (25)

(b) Indicate the following on the blank map of the world provided:-

- (1) Tasmania, Ceylon, Sumatra, Iceland, Cuba. (5)
- (2) The air route most commonly used from Cape Town to London, with 5 important aerodromes along the way. (8)
- (3) The Tropic of Capricorn; Meridian 90 degs W., Antarctic Circle; The meridian from which S.A. takes her time. (4)
- (4) Rio de Janeiro, Buenos Aires, Valparaiso, Montreal. (4)
- (5) Two tin-producing and two petroleum-producing regions (not in U.S.A.). (4)

J.C. paper for December, 1951

The paper consists of 3 sections. Answer 2 questions from Section A, and 3 questions from Section B. Section C is compulsory.

Section A

1. (a) Give a description of either the Tropical Grasslands or the Temperate Grasslands of the world, under the following headings: (i) distribution; (ii) climatic conditions; (iii) natural vegetation; and (iv) products and industries.

/(36)

(b) Give the situation of the Hot Dry Deserts of the world. Explain why they are found in those regions. (14)

2. (a) Durban and Port Nolloth are in the same latitude, but their climates differ considerably. State how and why their climates differ. (14)

(b) The following climatic details are given for three places A, B and C. In which hemisphere is each place situated? Give, with reasons, the type of climate that each place has:-

Place	Av.Temp. (F) Jan.	Av.Temp. (F) July	Av.Rain. ins	When rain falls
A	69	54	24	May to Sept.
B	80	82	65	All seasons
C	21	76	30	April to Oct. (36)

3. (a) Show how you would find direction by means of a watch. (15)

(b) Explain what you understand by the following terms: an inch of rain; standard time; solstices; equinoxes; rotation of the earth. (30)

(c) What observations have you made during the year on the position of the rising or the setting sun? (5)

#### Section B

4. Give an account of (a) the relief, (b) the climate and (c) the products of and occupations in one of the following regions: the Atlas lands or Kenya and Uganda. Illustrate your answer with a large sketch-map of the region selected.

/(50)

5. Take either Southern Rhodesia or South West Africa and describe it under the following headings:- (a) relief; (b) climate; (c) farming; (d) distribution of chief minerals; (e) overseas trade. Draw a sketch-map of the region selected and on it show clearly the chief towns and railways. (50)

6. Select 4 of the following ports: Rotterdam, Liverpool, Marseilles, Genoa, Glasgow, Cape Town, and in the case of each - (i) draw a sketch-map indicating its position; (ii) mention 3 reasons that have contributed to its importance, (iii) name 1 important import and 1 important export. (50)

7. (a) Give a description of the maize industry of South Africa, noting especially:- (i) Producing areas; (ii)

climatic conditions under which produced; (iii) uses; (iv) storage and transport. (35)

(b) Write a brief account of the manufacturing industries of the Southern Transvaal. (15)

8. In the North-Eastern United States of America rich supplies of coal and iron-ore are found. (a) Give some account of these supplies. (b) Describe some of the industries that have developed there as a result of these minerals. (50)

9. Write notes on three of the following:-

(a) The causes and characteristics of the Monsoon type of climate, as experienced in India. (b) World production of petroleum. (c) The North Atlantic ocean routes. (d) The Indus Basin. (e) Hydro-electric power-conditions necessary for developing and where especially used. (50)

#### Section C

10. (a) A map of the world is provided. Questions 1-25 refer to this map. In your answer-book, write down the numbers 1-25 below one another and next to them the answers to the following questions:-

(1)-(7) What numbers on the map stand for Montreal? Madras? Kano? Buenos Aires? Oslo? Melbourne? Mombasa?

(8) and (9) Town 20 is situated nearer to the equator than 18. Which has the hotter climate? Why?

(10) Which has the hotter climate 21 or 22?

(11) What type of climate is experienced at 14?

(12) " " " " " " " 8?

(13) " " " " " " " 15?

(14) " " " " " " " 4?

(15) What is the new name of 14?

(16) In which country is 9 situated?

(17) In what way is 3 handicapped for the greater part of the year?

(18) Give an important export of 18.

(19) " " " " " 1.

(20) " " " " " 24.

(21) " " " " " 16.

(22) " " " " " 13.

(23) At the mouth of which river is 2 situated?

(24) At the mouth of which river is 5 situated?

(25) Which ocean current influences the climate of 5? (25)

(b) Indicate the following on the blank map of the world provided:-

(i) The Strait of Magellan, the Strait of Malacca, the Gold Coast, the Kiel Canal, Korea. (5)

197. 

(ii) The Red Sea, the North Sea, the Black Sea, the Yellow Sea. (4)

(iii) Pekin (Peiping), Hankow, Tokyo, Panama Canal, Vancouver. (5)

(iv) Mark with an X the following three positions: 90 degs W., 30 degs N.; 120 degs E., 23 $\frac{1}{2}$  degs S.; 150 degs E., 45 degs N. (3)

(v) The regions having a Mediterranean type of climate. (8)

---

A P P E N D I X 33

GEOGRAPHY SYLLABUS FOR THE UNIVERSITY JUNIOR CERTIFICATE, 1918 (Taken from "Junior Certificate examination. Regulations and syllabuses and special subjects for 1918 and 1919, p. 15.)

Physical

The Earth and the Solar System in general: the form and size of the globe. Its movements. Day and Night. The Seasons. Latitude and Longitude. Chief climatic Zones.

The Earth's surface: distribution of land and water: the relief of land areas and the floor of oceans.

The Sea: Its movements (waves, currents, tides, etc.)

The Land: Its movements; earthquakes and volcanoes, their phenomena and distribution.

The Work of Water in its various forms: (rain, glaciers, rivers, etc.).

Political and Commercial

The Geography of Africa south of the Equator. (Attention should be given to: The chief features of the land-relief (watersheds, river-basins, plains, etc.); coastal outlines; prevailing winds, and other climatic conditions; distribution of animal and plant life; Political divisions; towns and people; Trade, industries, commerce, and means of communication; government.)

The rest of the world similarly studied, but in less detail.

Practical

Map-drawing. Candidates are expected to be able to identify maps without names, and to insert upon such maps the position of geographical features; also to work problems as to local and standard time.

---

SYLLABUS IN GEOGRAPHY FOR THE UNIVERSITY J.C. WHICH CAME INTO FORCE FROM DECEMBER, 1936

(Taken from the "Junior Certificate Examination Handbook, 1948", pp. 29-30.)

Physical Geography:

The form and size of the earth; its movements; day and night; the seasons; latitude and chief climatic zones; longitude and time.

Climate: temperature, pressure of the air, winds and wind systems; rainfall; vegetation. Distribution of the main climatic types and typical products. Desiccation; causes and means of removal. Tides and ocean currents.

Regional and Economic Geography:

The geography of Africa, especially south of the equator, with reference to physical relief, climate, natural regions, products (plant, animal and mineral), industries, political divisions and chief towns, communications (land, sea and air), trade and commerce.

The rest of the world, similarly treated, but in less detail, with special reference to Europe, the United States of America, Canada, Argentina, Australia, India and Eastern Asia.

The world distribution of foodstuffs, raw materials and sources of power.

The main trade routes of the world: international trade.

Practical Geography:

Practical work required in connection with the section on physical geography: observations of the sun, finding direction; problems in longitude and time. Map-reading, including the calculation of distances and areas from scale.

Candidates are expected to be able to draw outline or sketch maps, and to insert on such maps the position of geographical features, towns, trade routes, etc.

---

A P P E N D I X 35GEOGRAPHY SYLLABUS WHICH CAME INTO EFFECT AFTER 1948 FOR THE UNIVERSITY J.C.

(Taken from the "Junior Certificate Examination Handbook for 1948", pp. 30-32.)

1. Physical Geography.

The solar system and its place in the universe. The shape and size of the earth. Reasons for believing that the earth is not flat. The cause of the seasons, and day and night. Reasons for the difference in length of days: (a) From the equator to the poles. (b) In summer and winter. The meaning and cause of the solstices and equinoxes. Important lines of latitude (equator, tropics, circles and poles) and what they demarcate. True and magnetic norths, with simple shadow methods of finding true north. Longitude and time. Time zones. International date line. (N.B. In questions involving time sums, the international date line will not be included.) Characteristics of spring and neap tides and when they occur. The effect of tides and currents on shipping. The influence of latitude on climatic zones.

2. Climatology

The meaning and measurement of temperature, pressure and rainfall (using maximum and minimum thermometer, barometer and rain gauge). Factors affecting them. The cause of the winds. Ferrel's Law, the swing of the wind system and its effect on the distribution of rainfall. Ocean currents, their cause (wind) and their influence on the climates of the countries past which they flow. The meaning of "Climate" and of "Weather". Factors affecting climate. Chief types of climate, their characteristics and distribution.

(Only the following well-defined types to be studied: equatorial, tropical (Sudan), tropical monsoon, sub-tropical (China), hot and temperate desert, Mediterranean, temperate oceanic, temperate continental, arctic and cold desert types. Special reference to the causes of monsoon and Mediterranean types only.)

3. Regional and Economic Geography

(a) The typical vegetation, cultivated crops, and occupations of the peoples of the major natural regions of the world. (Only the following distinctive types to be studied: Equatorial forests, tropical savannahs, tropical monsoon, hot and temperate desert, mediterranean, deciduous forest and pasture-land, temperate grasslands or steppe, coniferous forest, tundra.)

(b) World distribution of iron, copper, tin, gold, diamonds, coal, petroleum, hydro-electricity. The chief

regions of production of the following foodstuffs and raw materials, with special reference to climatic and other geographical conditions affecting large-scale production, and reasons for the importance of the chief producing areas: wheat, maize, rice, tea, sugar (cane and beet), coffee, cocoa, fruit, meat, fish, tobacco, cotton, wool, rubber, timber.

The main air and sea routes of the world, and the chief types of goods carried from one continent to another.

The physical relief of the continents and the effect thereof on the distribution of climate, vegetation and population.

(c) An amplification of (a) and (b) with emphasis on the factors affecting climate, chief occupations, industries, products and towns of the regions. Students should be able to give simple sketch maps to show the position and importance of the towns given in brackets. All important towns in the regions specified should be mentioned in class-work, but sketch maps will be expected only for those given in brackets.

Europe: A short general regional survey with a more detailed study of the following countries only: British Isles, France, Holland, Belgium, Germany, Italy, Russia. (Milan, Marseilles, Paris, Hamburg, Vienna, Birmingham, Liverpool, London, Genoa, Rotterdam, Glasgow, Moscow.)

North America: The north-east quadrant of the U.S.A. The St Lawrence Basin. The Mississippi Basin, California Valley, Prairies of Canada, British Columbia. (New York, Chicago, San Francisco, Montreal, Winnipeg, Vancouver, Pittsburgh, New Orleans.)

The Panama Canal and the West Indies.

S. America: The Pampas, Eastern Brazil, the Amazon Basin, Central Chile (Buenos Aires, Rio de Janeiro, Valparaiso).

Australia: The whole continent excluding the northern territories and the desert. (Melbourne, Sydney.)

New Zealand: North and South Island. (Wellington.)

Asia: India, River basins of China, Japan, East Indies, Palestine, Syria, Iraq (Bombay, Delhi, Calcutta, Singapore, Shanghai), The Suez Canal.

Africa: The Nile Valley, Atlas Lands, Guinea Coast, East Africa, Congo Basin.

Africa, South of the Zambesi, in more detail. Relief, distribution of chief minerals (gold, coal, diamonds, iron, asbestos, copper, manganese, chrome): Factors influencing climate, and the effect of climate on the distribution of the chief crops (maize, fruit, tobacco, wheat, sugar, the vine) and the kinds of livestock farmed.

The chief natural regions. Location of the chief industries. Position of the Union among world producers of maize, wool, wheat, gold. Communications and chief towns. Trade of the chief ports, including Beira and Lourenco Marques; Overseas trade.

The problem of Soil Erosion in South Africa; its causes and prevention.

Irrigation schemes.

The work of Onderstepoort and other Agricultural centres in fighting diseases of animals and plants and pests.

Tourists in the Union and S. Rhodesia.

The Union's public utilities: I.S.C.O.R. and E.S.C.O.M.

---

A P P E N D I X 36FOUR EXAMINATION PAPERS SET ON THE 1918 GEOGRAPHY SYLLABUS FOR THE UNIVERSITY J.C. (All of 3 hours duration.)University J.C. paper for 1921

The following map is supplied, viz:- Transvaal Province. Each candidate should write his or her examination number on the map and place it inside the answer-book before handing it in.

Note.- Answer questions 1, 2, 3, and 4, and not more than three other questions.

1. (a) In the map provided indicate -
  - (i) the chief natural regions, and their general height above sea-level;
  - (ii) one line of latitude and one longitude;
  - (iii) the Witwatersrand: a bold line;
  - (iv) the chief diamond centre: a cross.
 (b) Give a brief account of the chief main railway lines of South Africa. By means of a simple sketch map indicate the railway line from Capetown to Beira, and mark in four of the most important towns on this line.
2. State how your private reading of books, magazines, newspapers, etc., has assisted you during the year in your study of geography. Mention any four facts of particular interest that you have noted, and write brief notes on them.
3. Write an account of the climates of the United States of America. What do you consider the most remarkable characteristics of the climate of the central region? Explain this.
4. Explain the causes of the great change from the long days of December to the short days of June, and to the days and nights of equal length in March and September. Draw a diagram showing the position of the earth in midsummer and midwinter.
5. Write a short composition (about 25 lines) on one of the following:- The Ganges, the work of water, methods of transport in Africa, the wild flowers of the Cape Province.
6. Give a brief account of either the fauna of South Africa or the fauna of Australia.
7. Why has South America been called "the Continent of Plains"? Give a short account of the plains of this continent, and indicate their positions on a simple map.
8. Write notes on five of the following:- (a) Versailles, (b) the Culebra Cut, (c) the Gulf Stream, (d) the Loess Country, (e) the Hot Lake District of North Island (N.Z.),

(f) Delhi, (g) Washington.

9. From what meridian is South African time taken? What is the difference between sun time and clock time at Capetown (Capetown 18 degs 30 mins E.L.). Explain the terms tropics, meridian, longitude, solstice, with appropriate diagrams.

(Taken from "Junior Certificate Examination. Examination papers, 1921", pp. 95-96.)

University J.C. paper for 1924

The following map is supplied: South Africa.

Note.- Answer both questions in Section A, two from Section B, and two from Section C.

Fifty marks will be allowed for each question.

Section A

1. On the map of South Africa supplied insert:-

- (a) The Zambesi, Orange, Vaal, Limpopo.
- (b) The chief ports.
- (c) The chief mineral areas.
- (d) The routes by which these minerals are conveyed to the coast.

2. Give a general account of the build of South Africa, and explain the influence of the build on climate and communications.

Section B

3. (a) Explain clearly the relation between longitude and time.

(b) If a cablegram were dispatched from London at 1.15 p.m., and took three hours in transmission, at what time would it be received at Capetown by South African standard time?

4. How do ocean currents affect the climate of:-

- (a) The east coast of Canada.
- (b) The west coast of Europe.
- (c) The east coast of South Africa.
- (d) The west coast of South Africa.

In each case name the current.

5. Describe the work of rivers in the different parts of their courses, illustrating your answer as far as you can by reference to South African rivers.

6. What is meant by the "Mediterranean" type of climate? How do you account for it? Name the chief areas of the world with this type of climate, and the products associated with it.

Section C

7. Describe the sea route from London to Hong-Kong via the Suez Canal, and name the chief ports of call on the way. Could a ship return by any other route?
8. What are textile fibres? Name the chief vegetable and animal fibres and the principal areas of the world where they are produced.
9. Give a geographical description of one of the following:-  
 (a) The plains of Northern India.  
 (b) The prairies of Canada.  
 (c) Japan.  
 (d) The Amazon basin.
10. Name the coalfields of Northern England. State the industries connected with them, and say why those industries have developed there.

University J.C. paper for 1925

The following map is supplied: South Africa.

Fifty marks will be allowed for each question.

Section A (Answer question 1 and one other from this Section.)

1. On the map of South Africa supplied, indicate the regions of (a) summer rains, (b) winter rains, (c) rain at all seasons, (d) little or no rain.

On your map insert the following towns: Capetown, Knysna, Port Elizabeth, Durban, Bloemfontein, Kimberley, Johannesburg, Walvis Bay, Port Nolloth, Beaufort West. Indicate by arrows the direction of the chief rain-bearing winds for each of these places.

2. Divide Natal into natural regions, and describe the climate and productions of each.

3. Name the chief minerals of South Africa and the areas where they are worked. Describe as fully as you can what influence the discovery of minerals has had on the development of South Africa.

Section B (Answer two questions from this Section.)

4. Where are the great equatorial forests of the world? How do you account for them? What commercial products do they yield?

5. Explain clearly why a place near the equator is usually hotter than a place in a high latitude; e.g. why is Singapore hot, and Sweden cold? Give sketches.

6. Explain fully, giving sketches, the causes of day and night. The latitude of London is 52 degs N.; the latitude

of Capetown is 34 degs S. In which place is the sun longer above the horizon during summer? Give reasons.

7. Explain how the tidal movements of the oceans are probably caused. What is meant by (a) high tide, (b) low tide, (c) spring tide, (d) neap tide?

Section C (Answer two questions from this Section.)

8. North-western Europe, Eastern U.S.A., and South-eastern Asia are densely populated regions. Give as fully as you can the reasons for the density of population in each of these regions.

9. Describe and account for the distribution of the rainfall in India during the "wet" season and during the "dry" season.

10. Describe the Canadian Pacific Railway, dealing with -  
 (a) the natural regions through which the railway passes;  
 (b) the chief industries carried on in the regions traversed;  
 (c) the towns on the railway.

11. Say what you know of four of the following:-

(a) The Norwegian fisheries; (b) the Landes; (c) the Black Earth region of Russia; (d) the Rhine Rift Valley; (e) the Ruhr; (f) the Danube as a waterway; (g) Danzig.  
 (Taken from "Junior Certificate Examination. Examination Papers, 1925", pp. 103-104.)

University J.C. paper for 1928

The following map is supplied: The World.

Fifty marks will be allowed for each question.

Section A (Answer two questions from this section.)

1. Explain with the help of diagrams: (a) why summer days are longer and warmer than winter days; (b) why day and night are of equal length at the Equator throughout the year.

2. Explain the following terms: high tide, low tide, spring tide, neap tide. Illustrate your answer with diagrams.

Write a note on the importance of tides.

3. (i) Name five articles of food and three fibres obtained from tropical lands; four cereals obtained from the cool temperate zone; three fruits from the warm temperate zone. Name one country or region from which each of the products you name is obtained.

(ii) Give the chief products obtained from temperate forests and from tropical forests.

Section B (Answer question 4 or 5 and two others from this section.)

4. Explain how and why the following regions differ in climate and products: (a) The South-West Region of the Cape Province; (b) The Karroo; (c) Mozambique; (d) South-West Africa.
5. Write a geographical description of either Rhodesia or Belgian Congo.
6. Write notes on five of the following: The Rhine Rift Valley; Landes; Dogger Bank; Straits of Gibraltar; Wheat Lands of Europe; Suez Canal; the Alps.
7. Write an account of either British Columbia or the Prairie Provinces of Canada, dealing with relief, climate, products, industries, communications, towns.
8. Give a general description of Upper Guinea (Nigeria, Gold Coast, etc.), dealing with climate, natural vegetation and cultivated crops, communications, economic development.
9. (a) Give two exports from each of the following ports: Liverpool, Para, Buenos Aires, Calcutta, Odessa, East London, Beira, Newcastle-on-Tyne, Rosario, Lagos, Swansea, Rangoon, Belfast, Colombo, Marseilles.  
(b) State briefly why Great Britain is mainly dependent on other countries for its food supplies.

#### Section C

10. On the map of the World provided indicate the position of: Chile, New Orleans, the Plate River, Brisbane, Sweden, Banks of Newfoundland, Vladivostock, Aswan, Brenner Pass, Khyber Pass, Kenya, Persian Gulf, the Canadian Pacific Railway and three towns on the route, Texas, Hankow, the Rhone, the Yangtse-kiang, Vienna, Chicago, Rio de Janeiro, Milan, Singapore, the Atlantic Drift, Tokio, Niagara Falls, Berlin, the Baltic Sea, Pittsburg, Wellington (N.Z.), the Atlas Mountains.
-

A P P E N D I X 37.ONE PAPER SET ON THE UNIVERSITY J.C. SYLLABUS IN GEOGRAPHY WHICH CAME INTO EFFECT IN DECEMBER, 1936University J.C. paper for December, 1938Section A (Answer two questions from this section.)

1. (a) Explain briefly the meaning of the terms "rotation" and "revolution" of the earth. (6)
  - (b) Why do direct rays of the sun give more heat than oblique rays? (10)
  - (c) Explain by means of diagrams and short explanatory notes why the sun's direct rays fall on the Tropic of Cancer at one time of the year, and on the Tropic of Capricorn at another time. (20)
  - (d) When would an observer at a place on the Equator see the sun directly overhead at noon? (4)
  - (e) Briefly explain the terms "equinox" and "solstice", and say when they occur. (10)
2. (a) What is the relation between pressure of the air and wind? (10)
  - (b) Draw a diagram to illustrate the world's chief pressure belts and the direction of the trade winds and the anti-trades. Account for the direction of these winds. (28)
  - (c) Explain why the chief hot deserts of the world are to be found in trade wind latitudes; name three of these hot deserts. (12)
3. (a) What are the main differences between "Cool temperate oceanic" and "Mediterranean" climates? How do you account for these differences? (20)
  - (b) Describe the natural vegetation of each of these climatic types. (10)
  - (c) Give the chief farming industries and the typical crops of each. (20)
4. (a) Explain how you would find a true north and south line; illustrate by means of a diagram. (20)
  - (b) Explain the relationship between longitude and time. / (10)
  - (c) If it is true noon in Durban (30 degs E.), what will be the sun time in London, Cape Town (18 degs E.), San Francisco (122 degs W.), Christchurch (173 degs E.), Dublin (6 degs W.). (20)

Section B (Answer three questions from this section, selecting them as indicated i.e. 5 or 6, 7 or 8, 9 or 10.)

5. (a) Draw a large sketch map of Africa, and on it show as accurately as possible:-

- (i) The Equator and the Tropics, naming them.
- (ii) By dotted lines the boundaries of Ethiopia; Nigeria; Kenya; Algeria. (Put E, N, K, A respectively within the boundaries.)
- (iii) The courses of the Rivers Nile, Congo, Niger, Zambesi, showing and naming one important tributary of each.
- (iv) Mountains Kenya and Milimanjaro.
- (v) Lakes Victoria(V), Tanganyika(T), Nyasa(N), Chad(C), Rudolf(R). (Write down given letters only at correct positions.)
- (vi) Areas of tropical grassland (savannas). (35)
- (b) (i) Write brief notes on navigation on the Nile and the Congo.
- (ii) Write a short note on the economic importance of the savannas. (15)

OR

6. Write a geographical account of one of the following regions:- Belgian Congo; Nile Basin; British East Africa. / (50)

7. Contrast the Southern Transvaal and the Coastal Region of Natal in respect of relief; climate; products and industries. (A sketch map will increase the value of the answer).

OR

8. Describe the geography of South West Africa, under the headings:-

(a) Build. (b) Climate. (c) Farming and Minerals. (d) Rail and air transport.

(A sketch map will increase the value of the answer.)

9. Discuss any three of the given seaports under the following headings:-

(a) Situation, indicated either by means of a sketch or a description.

(b) Reasons for their importance.

(c) The trade passing through them.

Buenos Aires; Yokohama; Bombay; San Francisco; Montreal. / (50)

OR

10. Show how geographical conditions influence human occupations in any two of the following:- Ganges Basin; Murray-Darling Basin; Japan; Maritime provinces of Canada; Plain of Lombardy; Mississippi. (50)

Section C (Compulsory.)

11. On the map of the world supplied, show the following:-

(a) Peruvian, Kuro Sivo, Benguela, and Labrador Currents, giving their names, direction, and indicating whether they

are hot or cold.

(b) The two most commonly used ocean routes from Sydney to London, marking on them the terminal and the important intermediate ports.

(c) Two important producing regions of coffee, tea, silk, soft timber, iron, silver. (C, T, SK, ST, I, SL in the Correct positions).

(d) The Canadian Pacific Railway, with four towns along the route.

(e) Halifax (H), Shanghai (S), Karachi (K), Lobito (L), Bergen (B), Melbourne (M). Give only a dot and the letter.

(f) Western Ghats, Rockies, Great Dividing Range. (50)  
(Taken from pp. 178-179 of A. S. Webster's thesis, "The aim and scope of geography teaching in secondary schools in South Africa".

---

A P P E N D I X 38FOUR PAPERS SET ON THE UNIVERSITY J.C. SYLLABUS IN GEOGRAPHY WHICH CAME INTO EFFECT AFTER 1948University J.C. paper set for December, 1948

Section A (Answer Question 1 and one other question from this section.)

1. Answer any four of the following:-

(a) Draw a diagram to represent the Earth and fill in the following:-

(i) The position of the Earth's axis in relation to the sun on 21st June.

(ii) The rays of the sun falling upon the Earth (by arrows.).

(iii) The Tropics, with names and degrees.

(iv) The Arctic Circle and the Antarctic Circle, with names and degrees.

(v) The line separating the hemisphere of light and the hemisphere of darkness.

(b) (i) Name two geographical facts associated with each of the following:- 22nd December, 21st March, the Earth's axis.

(ii) When it is 5 a.m. on May 10th at Denver (long. 105 degs W.) what time is it at Greenwich, and at Karachi (long. 67 degs E.)?

(c) Explain briefly, with the help of a diagram, how you would find a true North-South line.

(d) What do we mean by:- (i) relief rain, (ii) time zones, (iii) range of temperature?

(e) What do we mean by neap tides? How are neap tides caused? How are neap tides related to the phases of the moon?

(f) (i) What do we mean by the climate of a region?

(ii) What would be the probable weather conditions in three of the following places in December?:- Cape Town, Southern Italy, Moscow, Sydney, Winnipeg.

(g) Give two causes of ocean currents. Name a few facts to show the importance of the Labrador Current or the North Atlantic Drift. (50)

2. Write an account of either Monsoon regions or Mediterranean regions under the following heads:-

(a) Where they are situated. (10)

(b) Their climate. (10)

(c) Natural vegetation and cultivated plants. (20)

(d) Human occupations. (10) (50)

OR

3. (a) Write down the following regions with the name of the climatic type associated with each of them:- The Amazon basin; the Ganges basin; the Murray-Darling basin; Greece; Holland; Northern Chile; Tasmania; Patagonia; Greenland; Southern Rhodesia. (20)

Example: The Namib (a trade wind desert.)

(b) Give an account of the Temperate Grasslands OR the Warm Temperate E. Margin (China type) lands under the following heads:- (i) Where they are situated. (8)  
(ii) Their climate. (7) (iii) Their general products. (15)

Section B (Answer either Question 4 or Question 5; either Question 6 or Question 7; either Question 8 or Question 9.)

4. (a) Give natural and other reasons for drought conditions in the Union of South Africa. (15)

(b) What means can be employed to make the best use of our rainfall? (10)

(c) Give an account of the mineral wealth of the Union of South Africa. (25)

OR,

5. Show how human occupations and general products are related to natural conditions in two of the following:-

(a) The south coast region of the Cape Province (Knysna region). (25)

(b) The Orange Free State. (25)

(c) The Eastern Cape Province. (25)

6. (a) Draw a large sketch map of Australia and insert the following:-

(i) Three rainbearing winds (mark by arrows and name them.) (6)

(ii) Three wheat-producing areas (write "wheat"). (6)

(iii) Perth, Port Darwin, Melbourne, Sydney. (8)

(iv) Mark five Australian states by dotted lines and write the names. (5)

(b) Give a short account of the relief and climate of Australia. (25)

OR

7. (a) Rice, silk, petroleum, cotton, iron ore, rubber, hard wood, mutton, tea, olive oil.

Write down each of these products with the names of three countries or regions where the product is produced on a large scale. (30)

(b) Discuss briefly the industries of either Italy or France. (20)

8. (a) Name three densely populated areas (one in U.S.A., one in Europe, and one in Asia) and give reasons for the

213.

dense population in each area. (30)

(b) Name three areas of very sparse population (outside the Union of South Africa) and give reasons for the sparse population in each area. (20)

OR

9. Give an account of the natural regions, farming products, chief towns and communications of either the Argentine or Canada. (50)

Section C (Compulsory)

10. Show the following on the map of the world supplied:-

(a) Four important timber-producing areas (write "timber"). (4)

(b) Burma, Honshu, Persia, Alaska, Tibet, Iraq. (6)

(c) The ocean currents along the coast of South America (mark directions by arrows, and state whether they are cold or warm and give the names.) (9)

(d) Calcutta, Basra, Odessa, New Orleans, Liverpool, Hamburg. (6)

(e) Five desert areas in the N. Hemisphere. (Write "desert".) (5)

(f) Five areas with exceptionally high rainfall (write "rain"). (10)

(g) The Philippines, Madagascar, Iceland, Cuba, Tasmania. (5)

(h) The shortest sea route from New York to Valparaiso with one important port on this sea route. (5)

University J.C. paper set for December, 1949

Section A (Answer Question 1 and one other question from this section.)

1. Answer any four of the following:-

(a) (i) Name the two movements of the Earth. Give three results of each of these movements.

(ii) Name two facts associated with the Earth's axis. (12)

(b) (i) Draw a circle representing the Earth at the summer solstice of the Southern Hemisphere and mark on it the equator, the tropics and the line separating the hemisphere of light and the hemisphere of darkness. (Write the names and degrees opposite each).

(ii) State what you can learn from your diagram about the length of day and night within the Arctic and Antarctic circles; in the northern and southern hemispheres; at the equator. (12)

(c) (i) Calculate the local time in Tokio (140 degs E.) when it is 4 a.m. in London.

(ii) When it is 2 a.m. (standard time) in Kimberley

the local time of a place X is 11 a.m. On what meridian is X situated? (12 )

(d) (i) What do we mean by the climate of a region?

(ii) Name one geographical factor that may influence the climate of each of the following regions or places:- Kimberley, Java, Liverpool, Labrador. (Give a different geographical factor for each place). (12)

(e) By reference to the Union of South Africa show how climate is influenced by ocean currents (Warm and cold). Write about twelve lines. (12)

(f) Explain briefly how a winter monsoon is caused. Name regions where monsoon winds are experienced. (12)

(g) Discuss briefly the effect of tides and ocean currents on shipping. Write about 10 lines. (12)

2. (a) Explain briefly how a Mediterranean type of climate is caused. (12)

(b) Name the chief characteristics of a Mediterranean type of climate. (8)

(c) Name five trade wind deserts. (10)

(d) Give a brief account of the agricultural products of a typical monsoon region. (20)

OR,

3. (a) Write down the following regions with the name of the climatic type associated with each of them:-

The Congo basin; the region bordering on the north of the Black Sea; Holland; Southern Italy; the eastern coastal region of Australia; Central California; Northern Rhodesia; the Atlas region; Northern Greenland; the Deccan plateau.

(Example: the Murray-Darling basin (Temperate Grassland).

(20)

(b) By reference to either Equatorial Forests or Tropical Grasslands show how natural vegetation, cultivated plants and animal life depend on climate. (30)

Section B (Answer either Question 4 or Question 5; either Question 6 or Question 7; either Question 8 or Question 9.)

4. Describe a journey by train from Durban to Kimberley via Ficksburg-Modderpoort, dealing with the following points:- Natural regions through which you would travel, relief of the land, a mountain pass, three important railway centres and farm products of the different regions.

OR,

5. (a) Draw a large sketch map of the Union of South Africa and insert the following:-

(i) Cape Agulhas, Cape Town, Port Elizabeth, Durban,

Kimberley. (5)

(ii) Four important industrial areas (write "industry").(4)

(iii) Four important irrigation areas (write "irrigation").

/(4)

(iv) Four areas where tobacco is produced (write "tobacco").

/(4)

(v) Three diamond-producing areas (write "diamonds"). (3)

(b) Give a short account of the relief and rainfall of the Cape Province. (30)

6. Give a short description of two of the following:-

(a) The Nile Valley.

(b) Eastern Brazil.

(c) Central California.

(d) Northern Italy. (25 each) (50)

OR,

7. Give an account of the mineral products, chief towns and industries of either (a) France or (b) any two industrial regions of the British Isles. (50)

8. (a) Name five countries or regions where hydro-electric power is used on a large scale. (10)

(b) What natural conditions are necessary to produce hydro-electric power? (10)

(c) Give the names of two important seaports on each of the following:- North Atlantic ocean; South Pacific ocean; Indian ocean; South Atlantic ocean; Mediterranean Sea. (10)

(d) Explain briefly how geographical conditions have influenced the development of any two of the seaports you have named in (c). (20)

OR,

9. (a) Name six important petroleum-producing areas.(12)

(b) What geographical conditions are suitable for the production of three of the following on a large scale:- Tea, cotton, maize, sugar-cane, fish. (18)

(c) Give a short account of the import and export trade of Australia. (20)

### Section C (Compulsory.)

10. Show the following on the map of the world supplied:-

(a) Five important wheat producing areas (write "wheat").(5)

(b) Paris, Glasgow, Montreal, Winnipeg, Moscow. (5)

(c) The course of the following rivers:- Murray-Darling, Indus, Po, Mississippi, Amazon, Name them. (5)

(d) Five areas with exceptionally high rainfall (write "rain"). (10)

(e) Five densely populated areas (write "dense"). (10)

(f) Five important fishing grounds (write "fish"). (5)

(g) Suez Canal, Panama Canal, Strait of Gibraltar, English channel, Kiel Canal. (5)

(h) Canterbury plains, Java, Atlas region, Kenia, Malta. (5)

University J.C. paper set for December, 1950

Section A (Answer Question 1 and one other question from this section.)

1. Answer any four of the following:-

(a) (i) Draw a circle representing the Earth at the summer solstice of the N. Hemisphere and mark on it the equator, the Tropics and the line separating the hemisphere of light and the hemisphere of darkness. (Write the names and degrees opposite each ).

(ii) State what you learn from your diagram about the length of day and night within the Arctic and Antarctic Circles; in the N. and S. Hemispheres; at the equator.

(b) (i) Mention four points of difference between lines of latitude and lines of longitude.

(ii) When it is 4 a.m. in London the local time of a place X is 1.20 p.m. On what meridian is X situated?

(c) (i) Name two causes of the apparent migration of the sun between the Tropics.

(ii) What do the terms equinox and solstice mean? When do they occur?

(d) (i) What are the characteristics of spring and neap tides? When do they occur?

(ii) What do you understand by the terms "ebb" and "flow" as applied to tides?

(e) What do we mean by (i) Continental Climate; (ii) rain shadow; (iii) a land breeze? Illustrate with a diagram where possible.

(f) Draw a circle representing the Earth and show by arrows the direction of the planetary winds. Name the winds.

(g) By reference to the North Atlantic Ocean discuss briefly the effect of tides and ocean currents on shipping. (50)

2. Write an account of either Tropical Grasslands or Temperate Grasslands under the following heads:-

(a) Where they are situated. (10)

(b) Their climate. (10)

(c) Natural vegetation and cultivated plants. (20)

(d) Animal life. (10)

OR

3. (a) Draw a large sketch map of Africa and on it indicate five different types of climatic regions. Name them. (10)

(b) Name one characteristic of each of these regions. (10)

(c) Give a geographical description of either the Nile Valley or the Congo Basin. (30)

Section B (Answer either Question 4 or Question 5; either Question 6 or Question 7; either Question 8 or Question 9).

4. (a) Give a short account of the distribution of rainfall in the Union of South Africa. (15)

(b) Name five irrigation schemes in the Union of South Africa. (10)

(c) Give an account of two important industrial areas in the Cape Province. (25)

OR

5. (a) Describe the relation between natural conditions and human occupations in the Orange Free State or Natal. (30)

(b) Name two important railway centres in each of the four provinces of the Union of South Africa. (8)

(c) Name the chief products of Southern Rhodesia. (12)

6. Write an account of either the Argentine or Italy dealing with climate, farming products, chief towns and communications. (50)

OR

7. (a) Draw a sketch map of the Indus-Ganges plains inserting the Tropic of Cancer, the Himalayas; the rivers Ganges, Indus, and Brahmaputra; Delhi and Calcutta; one sparsely populated area. (Write "sparsely"). (10)

(b) Give an account of the chief products of the Indus-Ganges plains in relation to climatic conditions. (30)

(c) Write a note on the manufactures carried on at Calcutta and Bombay. (10)

8. (a) Write down the name of the town and, in brackets, the name of one important industry with which each town is associated:- Osaka, Bordeaux, Glasgow, Birmingham, Lille, Winnipeg, Leeds, Chicago, Paarl (S.A.), Pittsburgh. (20)

(b) Explain briefly how geographical conditions have influenced the development of any two of the following sea-ports: Sydney, Liverpool, San Francisco, Yokohama. (20)

(c) Name five important farming products of the Mississippi basin. (10)

OR

9. (a) What natural conditions account for the fact that certain areas of the world are important as fishing-grounds? (10)

(b) Name five of these fishing-grounds. (10)

(c) Give a few facts to show the importance of the Panama Canal. (5)

(d) Give a short account of the import and export trade of either Canada or Australia. (25)

Section C (Compulsory)

10. Show the following on the map of the world supplied:-

- (a) Three important ocean currents along the coast of South America. (Give names, direction, and state whether they are cold or warm). (9)
- (b) One important producing area of each of the following: coffee, soft timber, rubber, flax, jute. (Write the name of the product).
- (c) New York, Singapore, Montreal, Hamburg, New Orleans. (5)
- (d) Four important petroleum-producing areas. (write "petroleum"). (8)
- (e) Islands: Formosa, Tasmania, Cuba, Malta, Ceylon. (5)
- (f) Iraq, Guinea Coast, Syria, Chile, Florida. (5)
- (g) Five regions where a Mediterranean type of climate is experienced. (Write "Med."). (10)
- (h) Croydon, Karachi, Port Darwin. (3)

University J.C. paper for December, 1951

Section A (Answer Question 1 and one other question from this section.)

- (a) (i) What is meant by Midnight Sun? Illustrate with a diagram.
- (ii) Calculate the difference between local time and standard time at Johannesburg (28 degs E.).
- (b) Give a short account of a shadow method for finding a true north-south line.
- (c) With the aid of a diagram explain how latitude influences temperature.
- (d) (i) Explain briefly the difference between weather and climate.
- (ii) What would be the probable weather conditions at three of the following places in January? Rome, Korea, San Francisco, Rio de Janeiro, Montreal.
- (e) (i) What is the latitude of the North Pole?
- (ii) What is the longitude (approximately) of the International Date Line?
- (iii) What is the shortest distance in miles (approximately) between the Tropics?
- (iv) Why is Halifax (Nova Scotia) the chief winter port of Canada?
- (v) Why has Vancouver, on the west coast of Canada, a warmer winter than Winnipeg?
- (vi) Why is the noon sun never directly overhead at Bloemfontein?
- (f) Draw a sketch map of South Africa and show (by arrows) the ocean currents along the coast. Give names, and state whether they are cold or warm. Say briefly how they influence the climate of South Africa.

(g) Name three desert areas in the Northern Hemisphere. Give one reason for the low rainfall in each of those areas. / (50)

2. (a) Write down the following regions with the name of the climatic type associated with each of them:- Southern Rhodesia; Java; west coast region of South Africa; Central Chile; west coast of Canada; the Ganges basin; the Congo basin; Southern Italy; Northern Greenland; Tasmania. (Example: The High Veld - Temperate Grassland). (20)

(b) Give an account of the agricultural products of a typical Monsoon region, relation to climatic conditions. (20)

(c) Give five agricultural products of the Nile basin. (10)

OR

3. Write an account of either Mediterranean regions or Sub-tropical regions (China Type) under the following heads:-

(a) Where they are situated. (10) (b) Their climate. (10)

(c) Natural vegetation and cultivated plants. (10) (d)

The chief industries carried on in any one region having the type of climate you select (i.e. Mediterranean or Sub-tropical). Name the region. (20)

Section B (Answer either question 4 or question 5; either question 6 or question 7; either question 8 or question 9.)

4. Give an account of the relief, communications and mineral products of the Union of South Africa.

OR

5. (a) Give a short account of the import and export trade of the Union of South Africa. (20)

(b) Name five farming products of Southern Rhodesia. (10)

(c) Name four important industrial areas in the Union of South Africa. (8)

(d) "When compared with other countries, the rivers of South Africa are not of great importance." Give reasons for this. (12)

6. (a) Tea, sugar cane, cotton, wool, flax, iron ore, fish, wheat. Write down each of the products with the names of three countries or regions where it is produced on a large scale. (24)

(b) Give a short account of the industries of either Northern England or France. (16)

(c) Give a few facts to show the importance of the St. Lawrence and the great lakes of North America. (10)

OR

7. Describe the relation between natural conditions and human occupations in two of the following:-

(a) The Mississippi basin. (b) Eastern Brazil. (c)

Northern Italy. (d) Holland. (50)

8. (a) North Atlantic Ocean; Indian Ocean; North Pacific Ocean; South Atlantic Ocean; Mediterranean Sea.

Write down the names of these oceans with the names of two important seaports on each of them, opposite the name. (10)

(b) Explain briefly how geographical conditions have influenced the development of any two of the seaports you have named in (a). (20)

(c) Name five geographical factors which may influence the climate of Honshu (Japan). (10)

(d) Give reasons for the density of population in Honshu. (10)

OR

9. (a) Give a geographical description of either North-Eastern U.S.A. or South-Eastern Australia. (25)

(b) Russia, Italy, Australia, Canada, New Zealand. Write down the names of these countries with the name of the capital opposite each of them. (10)

(c) State the nature of the cargo likely to be transported along the North Atlantic sea route to Western Europe. (15)  
Section C (Compulsory.)

10. Show the following on the map of the world supplied:-

(a) Three winds bringing rain to South America (give names and mark directions by arrows). (6)

(b) The course of the following rivers: Elbe, Volga, Murray-Darling, Indus, Po. Name them. (5)

(c) Five important rice-producing areas (write "rice").  
/(10)

(d) Melbourne, Calcutta, Odessa, Glasgow, Chicago. (5)

(e) Canterbury plains, Ukraine, California, Atlas region, Deccan Plateau. (5)

(f) Five regions or places where the rainfall is exceptionally high (write "rain"). (10)

(g) Three important ocean currents along the coast of Australia. (Give names, directions (by arrows), and state whether they are cold or warm). (9) (50)

A P P E N D I X 39

SENIOR CERTIFICATE GEOGRAPHY SYLLABUS, PUBLISHED IN "THE EDUCATION GAZETTE" OF 17TH DECEMBER, 1921. ALSO AS GIVEN IN "SECONDARY SCHOOL COURSES. JUNIOR AND SENIOR CERTIFICATE HANDBOOK" FOR 1925, PP. 83-84.

A. PRACTICAL GEOGRAPHY.

- (1) The use of meteorological instruments (mercurial and aneroid barometers; rain-gauge; thermometers.)
- (2) The construction and interpretation of thermometric, barometric and rainfall charts.
- (3) The use of the aneroid, clinometer, and plane-table to estimate heights and distances.
- (4) The principle of triangulation; ordnance-survey maps; methods of obtaining data for cartographical purposes; conventional signs.

B. PHYSICAL GEOGRAPHY.

- (1) The general facts of wind and water circulation; the representation on the map, by isometric lines and in other ways, of climatic facts.
- (2) Elementary knowledge of the origin of common materials of the earth's crust; topographical features, e.g. mountains, valleys, rivers, lakes, plains, deserts, plateaux, etc; forces which contribute to the formation of scenery.

C. REGIONAL GEOGRAPHY.

A general study of the world under the following heads:-

- (a) Position, importance and world-relationship of the principal countries.
  - (b) Climatic and vegetation regions.
  - (c) Occupations of the inhabitants and localisation of industry.
  - (d) Commerce.
  - (e) Communications in relation to - (i) the sea; (ii) relief; (iii) areas of production and consumption.
-

A P P E N D I X 40

SENIOR CERTIFICATE SYLLABUS IN COMMERCIAL GEOGRAPHY AND HISTORY, PUBLISHED IN "THE EDUCATION GAZETTE" OF 17TH DECEMBER, 1921. ALSO AS GIVEN IN "SECONDARY SCHOOL COURSES. JUNIOR AND SENIOR CERTIFICATE HANDBOOK" FOR 1925, PP. 77-78.

A. TRANSPORT. - The great trade routes before the 19th century; the revolution in methods of transport during the 19th century; canals; sea and land routes, and their relative merits; present-day methods of transport.

B. COMMODITIES. - A general knowledge of the sources, export and import, uses and commercial importance of wheat, rice, tea, coffee, sugar, wine, tobacco, flax, hemp, cotton, wool, jute, silk, rubber, timber, coal, petroleum, gold and iron.

C. AFRICA. - Commercial geography of Africa, south of the Equator, with special attention to the products and manufactures of the country as dependent on natural conditions, to localisation of industries, to exports and imports, and to transport in connection with home and foreign markets.

D. LEADING FEATURES OF THE ECONOMIC HISTORY OF EUROPE FROM THE AGE OF DISCOVERY.

(1) The era of great discoveries and the subsequent expansion of trade.

(2) Enterprise of British, French and Dutch Chartered Companies, and the resulting conflicts in Canada, India and the East Indies.

(3) The Navigation Acts.

E. THE INDUSTRIAL REVOLUTION IN ENGLAND AND ELSEWHERE; ASPECTS OF NINETEENTH CENTURY PROGRESS.

(1) The great inventions. - Introduction of machinery; revolution in the iron trade, the textile industry and in industry generally; effect upon coal mining; large-scale enterprise.

(2) Growth of working class movement. - The question of hours and a minimum wage; Trades Unionism.

(3) Reaction from "laissez faire" in industry. - Factory legislation; inspection; employers' liability and workmen's compensation.

(4) Growth of free trade movement.

---

A P P E N D I X 41

SENIOR CERTIFICATE SYLLABUS IN HISTORICAL GEOGRAPHY AS SUGGESTED IN "THE EDUCATION GAZETTE" OF 8TH JUNE, 1922; AND ALSO AS GIVEN IN "SECONDARY SCHOOL COURSES. JUNIOR AND SENIOR CERTIFICATE HANDBOOK" FOR 1925, PP. 85-90

Introductory note given in "The Education Gazette", 8th June, 1922

The syllabus printed below is published for discussion. It has been suggested that such a syllabus would be welcomed by some teachers as an alternative to the existing syllabuses in history and geography. It is not proposed that either history or geography be deleted from the course, but simply that historical geography be added to the list of subjects from among which a choice is to be made. If the new subject is introduced, it will be made available at the 1924 examination.

Historical Geography

(NOTE. - As the name "historical geography" implies, the relation and interaction of geography and history have to be considered throughout from two points of view: (1) that of the influence of geographical conditions on man and his history, and (2) that of the effect of human effort on geographical conditions. The second point of view is of only slight importance if we are dealing with the earlier evolution of man, but increases in importance as we come to later historic times and have to take account of applied science and a world-wide civilization.

Under the first head should be considered the various ways in which man and his life have been influenced and moulded by natural environment and by change of environment (migration) - as shown, for instance, in physical type, in habits of living (food, dress, etc.), in degree of vitality, in type of society, in moral and intellectual qualities, in migrations and changes in type following on migration. But it will be necessary to concentrate in the main on relatively recent "historic" times, in relation to which the geographical factors of outstanding importance are:-

- (a) Climate and relief, as affecting commerce, industry and national character.
  - (b) Easy communications and accessibility of markets.
  - (c) Fertility of soil and mineral resources.
  - (d) Supply of the forms of power (e.g. labour, coal, water-power, electricity) required in industry.
- These factors are in the main "economic".

Under the second head there are two outstanding matters to consider:-

(a) The ways in which man has reclaimed soil and put it to effective use - e.g., by forest-clearing, drainage, irrigation, prevention of erosion, the use of better implements and of fertilisers.

(b) The ways in which man has succeeded in "abolishing distance" - e.g., by means of roads, wheeled vehicles, ships, canals, railways, motor traction, aviation, the telegraph and telephone, wireless.

It might be well to introduce the course by giving a few simple, well-chosen examples of causal relation between geography and history, as above indicated. Some of the best examples for this purpose could be taken from the life of primitive man - e.g., the dependence of man for food and type of food on his geographical environment, over-pressure on food-supply as a cause of migration, the effect of unvarying conditions of life (e.g. in deserts) in retarding civilization.)

#### A. GREAT CIVILIZATIONS, CLASSIFIED GEOGRAPHICALLY

- (1) River civilizations - e.g., Egypt.
- (2) Steppe and desert civilizations - e.g., Arabia.
- (3) Sea civilizations - e.g., Greece, Carthage.
- (4) Ocean power, e.g., Holland, Britain.

#### B. EXAMPLES OF CONNECTION BETWEEN GEOGRAPHY AND HISTORY

N.B. The Section on Africa and South Africa should be studied with special care.

##### 1. General.

- (a) Clearing of early forests - agriculture and stock-raising, beginnings of civilized life.
- (b) Frontiers - physical, political, racial, economic.
- (c) Rivers, caravan routes, roads and sea-ways - their role in trade and in political control.
- (d) Causes which have determined the position and growth of towns - e.g., Alexandria, Rome, Venice, London, Amsterdam, Manchester.
- (e) Industries and Industrialism, following the coal and iron belt across Europe, and resulting in great cities dependent on the outer world for raw materials, food supply and markets for produce. Trade rivalry and the Great War.
- (g) Religious and political persecution as affecting migration both of population and of industries.

##### 2. South Africa and Africa.

###### (A). South Africa

- (a) Position on sea-route to India. Its possession decided by sea-power.
- (b) Difficulties of communication - mountain barriers; no navigable rivers. Discoveries of minerals, and railways.

- (c) Permanent importance of agriculture and pastoral pursuits. Mining; slight development of other industries.
- (d) Varieties of climate and products, and of conditions and habits of life. Contrasts of east and west, and of coast belt and semi-desert inland plateaux.
- (e) A meeting place of African immigrants (from the equatorial area) and of European immigrants. Effect on ideals of labour. Importance of continued European immigration.
- (f) Expansion of trade and population to the North. Rhodesia. The Cape-to-Cairo railway and air route.

(B). Africa

- (a) Exploration of Africa - due to various motives, of which the economic grew steadily in importance.
- (b) Occupation by European peoples - precise division determined partly by proximity (e.g., France in Algeria, Italy in Tripoli), partly by sea-power (e.g. Britain in Egypt and earlier at the Cape). Survey of political distribution, especially since the Great War.
- (c) Importance of tropical zones as reservoir of raw materials. International competition. Interests of South Africa.
- (d) Communications - need for railways. Labour employment of native peoples. European trusteeship for subject peoples. Difficulties of acclimitization for Europeans in the tropics.

3. India.

- (a) Inhospitable coast and lack of harbours, tending to insularity.
- (b) Importance of Himalayas: (1) as a climate barrier; (2) as a bulwark against invasion; (3) as a source of water-supply and fertility to Northern India.
- (c) Vulnerability of north-west frontier - Khyber and Bolan Passes; Aryan and Mohammedan invasions.
- (d) Discovery of Cape route to the East, and subsequent French and British occupation of India.
- (e) The British Empire in India: how it grew and how it is maintained; its justification.

4. Australasia.

- (a) Remote position as accounting for the lateness of discovery and exploration.
- (b) The Australasian Alps as a barrier; the "Great Dividing Range".
- (c) Wool and gold as the foundations of Australian prosperity.
- (d) Coincidence of agricultural settlements with areas of sufficient rainfall.
- (e) The future of Australia in relation to other powers of

the Pacific.

(f) The abnormal growth of towns: its causes and its dangers.

---

A P P E N D I X 42

THE SENIOR CERTIFICATE SYLLABUS IN GEOGRAPHY WHICH CAME INTO FORCE AT THE SENIOR CERTIFICATE EXAMINATION, 1935. THIS SYLLABUS WAS FIRST PUBLISHED IN "THE EDUCATION GAZETTE" OF 15TH FEBRUARY, 1934, P. 147.

A. - Regional and Economic Geography

(i) A general survey of the World, based on a study of the Major Natural Regions; their climate, vegetation, animal life, products and human activities as conditioned by geographical environment.

(ii) An elementary knowledge of the distribution of the natural products of the world; foodstuffs; raw materials; sources of power. Distribution of the principal manufacturing industries and the factors determining their localisation; geographical inertia.

(iii) Geographical factors affecting the growth of ports and other towns; entrepot trade. The main forms of transport: inland navigation, railways, motor transport, ocean routes, air routes.

(iv) The geography of the following countries: the British Isles, France, Holland, Belgium, Germany, Italy, European Russia; the United States of America, Canada; Argentine, Brazil, Chile; India, China, Japan; the Union of South Africa, Australia, New Zealand.

Candidates will be required to show a more detailed knowledge of the Union of South Africa than of the other countries in this list.

B. - Physical Geography

(i) The general facts of wind and water circulation, types and causes of rainfall; world distribution of rainfall and temperature.

(ii) Topographical features, e.g., mountains, valleys, rivers, lakes, plains, basins of inland drainage, deserts, plateaux, etc., forces which contribute to their formation.

C. - Practical Geography

(i) The use of meteorological instruments (mercurial and

aneroid barometers; rain-gauge; thermometers).

(ii) The construction and interpretation of temperature, pressure, and rainfall charts; the drawing on a map of isobars, isotherms, and isohyets from given data.

(iii) Graphical representation of given data, e.g., products, population, trade, etc.

(iv) Representation of relief; reading of large-scale relief maps and drawing sections from such maps; drawing of contour maps from given data.

#### A P P E N D I X 43

THE SENIOR CERTIFICATE SYLLABUS IN GEOGRAPHY WHICH WAS FIRST PUBLISHED IN "THE EDUCATION GAZETTE" OF 30TH NOVEMBER, 1944, P. 1147 FF., AND WHICH SUBSEQUENTLY CAME INTO EFFECT

(The syllabus consists of four sections. At the examination 4 questions, of which 2 must be answered, will be set on Sections 1 and 2 combined, and 8 questions, of which 4 must be answered, will be set on Sections 3 and 4 combined).

Pupils should be trained in the habit of making the fullest use of a good school atlas, and should be made aware of the distortion and errors inherent in map projections commonly used in atlases.

##### Section 1. - Practical Geography.

(1) The use of meteorological instruments; mercurial and aneroid barometers, rain-gauge, maximum and minimum thermometer, wet and dry bulb thermometer; determination of humidity of air by means of hygrometrical tables; the keeping of meteorological records, including records of wind direction.

(2) The construction of climatic graphs; the interpretation of climatic graphs and maps.

(3) Graphical representation of given data, e.g. products, population, trade, etc.

(4) Representation of relief; reading of large-scale relief maps and drawing of sections from such maps; drawing contour maps from given data.

##### Section 2. - General Geography.

(1) Elementary Climatology;

Temperature; its relation to insolation and terrest-

rial radiation, causes of diurnal and seasonal variations; effect of the distribution of continents and oceans upon actual temperature distributions; relation of mean temperature distributions to barometric pressure distributions at the solstices and equinoxes.

Circulation of the Atmosphere; relation of wind to pressure gradient and to the deflective force of the earth's rotation; convectional circulation in low latitudes; cyclonic circulation of middle latitudes; seasonal changes in the distribution of pressure and wind systems.

PRECIPITATION; causes of rain, snow and hail; cyclonic, convectional, and relief precipitation, regional and seasonal distribution of precipitation explained in terms of moist air supply and conditions causing condensation and precipitation.

Climatic Regions of the World; characterisation of each in terms of seasonal temperatures and seasonal distribution of precipitation.

(2) Elementary Plant Geography; world distribution of vegetation types and chief crops considered in terms of their climatic requirements and adaptations, and their relationship to the major climatic regions.

(3) Oceanic Circulation; the chief ocean currents and their relation to prevailing winds and configuration of coasts; elementary facts regarding tides. Relation of winds and currents to the 15th and 16th century voyages of discovery.

(4) Elementary Geomorphology; rock types and their origins (igneous, sedimentary, metamorphic rocks); earth movements; simple geological structures (folds, faults, igneous intrusions and extrusions). World distribution of young folded mountains and occurrence of earthquakes, older fold systems, and ancient shields considered in a broad survey of (1) the relief of the continents and (11) the distribution of coal and petroleum.

Weathering; transportation and deposition of weathered material by running water, glaciers and wind; chief types of land forms due to denudation and deposition, considered in relation to their economic importance.

### Section 3. - Regional Geography.

This will comprise a study, in more detail than for the J.C., of the major natural and economic regions of the world as a background to the political units associated with these regions. It is left to the teacher to choose either natural regions or political units as the basis of treatment, but whichever basis is adopted the relation between the two points of view should be stressed. No country should be

treated without reference to the natural regions that form part of its territory. No study of natural regions is complete without due regard to the political frontiers that cut across them and for the way in which parts of the different natural regions combine to form the territories of individual states.

Whichever treatment is followed the world will be covered in outline, but emphasis should be laid on the study of the following countries; the British Isles, France, Holland, Belgium, Germany, Sweden, Italy, U.S.S.R., U.S.A., Canada, Argentine, Brazil, Chile, India, China, Japan, the East Indies, Malaya, Australia, New Zealand, Egypt, S. Africa. In each of these countries attention will be given to position, climate, relief, natural vegetation, products, principal towns, industries, transport. In each country those natural regions that are economically the most important will receive special attention. Candidates will be expected to show a more detailed knowledge of South Africa as outlined below;

South Africa (South of the Kunene and Zambesi Rivers);  
Structure in relation to (a) relief; (b) occurrence and distribution of the leading mineral products. Climate and its effect upon the distribution of (a) natural vegetation; (b) water resources; (c) types of farming, chief crops and kinds of stock.

Geographical conditions affecting the development of (a) the mining industry, (b) the railway system, (c) manufacturing industries. Distribution of European, Native and other Non-European population; the chief towns and ports, factors favouring and impeding their development; overseas trade.

Natural and Economic Regions

As different writers adopt different regional delimitations, the scheme given below or any similar logical well-founded scheme of major regional divisions may be followed. These are to be treated in terms of relief and climatic conditions and their relation to farming, forest industries, mining, fishing, and to modes of life and density and distribution of population, including position and importance of chief towns. Special attention is to be given to the regions italicised. (Given in capital letters here).

Equatorial Forest Lands; Amazon and East Brazilian rain-forests. Central and West Africa. EAST INDIES AND MALAYA. Monsoon Lands of Asia;

Relief, climate, and their effect on the distribution of the chief crops in INDIA, CHINA, AND JAPAN. Irrigation in

India. Rice production and rice export trade of Burma, Thailand, and Indo-China. Silk production of China and Japan. Factory industries exemplified by textile manufactures of Bombay, Calcutta, Shanghai, and Osaka. Overseas trade of India, China and Japan.

Tropical Grasslands and Tropical Highlands;

Orinoco Llanos and Interior Brazil. The Sudan, Angola, Northern and SOUTHERN RHODESIA. Tropical grasslands of northern Australia. The East African Highlands. The SAO PAULO PLATEAU of Brazil.

Tropical Oases;

Egypt. Iraq. The lower Indus plain. Peruvian coastlands. Lands of Summer Drought and Winter Rains;

The Mediterranean basin, with special attention to ITALY. CALIFORNIA with special reference to production and marketing of fruit and vegetables. "Mediterranean" region of AUSTRALIA, CHILE, and of the CAPE PROVINCE.

Humid Sub-tropical Lands;

SOUTH EASTERN UNITED STATES OF AMERICA. EASTERN AUSTRALIA. NATAL AND ADJACENT COASTLANDS. Mid-grasslands and Continental Interiors;

INTERIOR GRASSLANDS AND FARMLANDS OF NORTH AMERICA - climatic conditions; agricultural and pastoral regions. Distribution of coalfields; localisation of industries (with special reference to the iron and steel industries); distribution of population. Positions and functions of Chicago, Buffalo and New York in inland and overseas commerce.

GRASSLANDS OF THE SOUTHERN U.S.S.R. Pampas of ARGENTINA and the Patagonian steppe. The AUSTRALIAN GRASSLANDS. The SOUTH AFRICAN GRASSLANDS.

Mid-latitude margins of the Pacific;

NEW ZEALAND. Tasmania. Farmlands of S. Chile. BRITISH COLUMBIA, Washington and Oregon.

Northern Forest Lands;

Eurasian Coniferous Forests: economic development in SWEDEN and Finland. North American Coniferous Forest lands; economic development of EASTERN CANADA AND NEW ENGLAND.

Agricultural and Industrial Lands of Europe:

EASTERN EUROPE and southern Baltic lands; production of agricultural foodstuffs and forest products. Recent development and distribution of industries in the U.S.S.R.

INDUSTRIAL EUROPE: industrial development and the localisation of industries in relation to supplies of raw materials, power, suitable labour, and to home and export markets for manufactures, as exemplified in the textile industries of Flanders, Yorkshire and Lancashire, in the

metallurgical industries of South Wales, the north of England, the Ruhr and Belgium, and in the modern industrial development of northern Italy. Intensive farming as a response to the needs of dense population.

Industrial Europe as the chief focus of world commerce; overland and overseas trade of the United Kingdom, Germany, France, Belgium and the Netherlands; their main sources of staple foodstuffs and the more important industrial raw materials - wheat, maize, meat, dairy produce, cane and beet sugar, cotton, wool, petroleum, rubber, timber and pulp products, vegetable oils and oil-seeds.

Section 4. - Commercial Geography.

The main currents of world trade in staple foodstuffs and in important industrial raw materials (as listed under Industrial Europe) and in Manufactured goods. The physical and economic conditions determining (a) the main routes - by sea, rail, and inland waterways - by which these commodities are transported, (b) the sites and development of the chief ports serving this commerce. The main airways of the world.

---

A P P E N D I X 44FIVE EXAMINATION PAPERS WHICH WERE SET ON THE S.C. SYLLABUS  
IN GEOGRAPHY WHICH CAME INTO EFFECT IN 19231925 paper on S.C. Geography

Time: 3 hours.

(Answer six questions - three from Section A; and Question 6 and two other questions from Section B.)

Section A

1. Temperature and rainfall statistics for two South African towns are given below. (Refer to them in your answer as Place A and Place B.)

(a) On the squared paper provided construct a temperature chart and a rainfall chart for either of the two places.

(b) Write a short note on the climatic conditions of each place. In what part of the country, approximately, might each place be situated?

Place A.

	J	F	M	A	M	J	J	A	S	O	N	D
T.(F)	69	70	67	64	61	59	57	58	60	62	64	67
R.(")	1.1	0.8	1.4	2.5	2.2	1.1	2.3	2.5	2.1	1.4	1.9	1.6

Place B.

T.(F)	66	64	62	59	55	48	49	53	59	61	63	65
R.(")	5.9	4.5	3.7	1.3	0.7	0.1	0.1	0.3	0.8	2.5	4.0	4.2

2. In what different ways are mountains formed? Illustrate your answer by means of diagrams, and give examples from among the chief mountain-systems of the world.

3. Describe and account for the characteristics of the Mediterranean climate. Enumerate (a) the chief regions of the world where this type of climate occurs, and (b) the chief vegetable products of Mediterranean regions.

4. Discuss the utility of isobars and isotherms drawn on a map. Describe the general character of the isotherms over South Africa. Why do they not conform in direction with parallels of latitude?

5. For map-making purposes the height of a particular point may be estimated in a variety of ways. Describe two of these methods. What instruments would be used in each case, and how would they be employed?

Section B

6. On the map of the world provided indicate:

(a) Vancouver, Delhi, Shanghai, Mombasa, Valparaiso, Adelaide, Batavia, Lagos, New Orleans, Rangoon.

(b) The Cape and Suez steamship routes between Britain and Australia, with the chief terminal and intermediate ports.

- (c) The great regions of coniferous forest.
- (d) The overseas possessions of Holland and France.
- (e) The Andes, the Philippine Islands, the Yenisei, Cape Horn, Mauritius, the Great Barrier Reef, Korea.

7. What types of natural vegetation occur in the Continent of Africa? Draw a rough sketch map to illustrate your answer.

What are the chief economic vegetable products derived from each of these regions of natural vegetation?

8. Select any three of the following areas, and discuss the main factors that have contributed to the density of their population: The Plain of Lombardy, South Lancashire, The Ruhr district, Pennsylvania, Belgium.

9. Describe the route and estimate the importance of either the Canadian Pacific Railway or the Trans-Siberian Railway. Illustrate your answer by means of a sketch-map.

10. Discuss the relative importance, both in the past and at present of farming and mining as factors in the economic development of South Africa.

11. Write brief answers to any five of the following questions:

(i) Why is the diamond-cutting industry carried on in Amsterdam?

(ii) Why are Britain's imports greater than her exports?

(iii) Why is cotton-growing in South Africa a more promising industry than in Australia?

(iv) Why do the people of Switzerland make clocks and watches?

(v) Why is Genoa, in the commercial sense, very largely a German port?

(vi) Why is Chicago an important meat-market?

(vii) Why does Swansea smelt tin and copper, the ores of which are not found in Britain to any extent?

(viii) Why does Singapore import almost the same articles that it exports?

#### S.C. Geography Paper for 1926

Time 3 hours.

(Answer six questions; at least two from Section A, and at least three from Section B).

#### Section A

1. Suppose you had to make meteorological observations extending over one month in any district. State what observations you would consider it most important to make, what instruments you would use, and what records you would keep.

2. Write short notes on five of the following:- Rift-valleys; the Kuro-shiwo; fjords; metamorphic rocks; headstream-erosion; folded mountains; the Sargasso Sea; ice-sheets; volcanoes.

3. Describe and account for the climatic conditions prevailing in the following places during the month of January:- Algiers, Madras; Chicago; Port Darwin (North Australia); Rio de Janeiro.

4. Give some account of the plane-table as an aid to map construction. Indicate how the plane-table might be used to make a map of part of the course of a winding river.

#### Section B

5. Analyze the effect of the situation and structure of Australia upon its economic development.

6. Discuss the importance of any five of the following towns, and show by means of sketch-maps how situation has contributed to their growth:- Genoa; Colombo; Lourenco Marques; Winnipeg; Vienna; Singapore; Glasgow; New York; Constantinople.

7. Give some account of the following South African industries:- the cultivation of sugar-cane; the iron and steel industry; sheep-farming; maize-cultivation; diamond-mining. Indicate the importance of these industries in comparison with their importance in other parts of the world.

8. Discuss the control exercised by relief over the principal railway routes of the Continent of Europe.

9. Illustrate the relation of climate to natural vegetation in (a) Chile, (b) the Congo Basin, (c) the Russian Steppes, (d) Southern Rhodesia.

10. "Nature has denied nothing to South Africa except wood and water." Discuss this statement.

11. Write an essay on one of the following subjects:- (a) The cultivation of cotton. (b) Changes in the political map of Europe since 1914. (c) The Dutch East Indies.

#### S.C. Geography Paper for 1927

Time 3 hours.

(Answer two questions from Section A., and four questions from Section B., six questions in all.)

#### Section A

1. What are the essential characteristics of each of the three types of climate known as Maritime, Continental, and Monsoon? Select any town or place as an example of each type, and draw for each of the three places graphs showing the

general character of the rainfall and temperature conditions throughout the year. (The graphs should show particularly the seasonal variations in temperature and rainfall; it is not expected that actual figures be given.)

2. What are contour-lines? Suppose you were to visit a small island, of which you possessed a map showing the coastline and the principal physical features; describe, in detail, the steps you would take to draw on the map contours representing 100 foot intervals.

3. Analyse the distribution of rainfall along the west coast of South America, and connect it with the world system of wind-circulation.

4. Write short descriptions of five of the following, wherever possible giving examples, and illustrating your account by means of sketches:- Escarpment, distributaries, continental shelf, dolerite, alluvial plain, poort, moraines, earthquake, mangrove swamp.

#### Section B

5. Examine the relationship between physical conditions and human occupations in two of the following:- (a) Norway; (b) The coastal plain of Natal; (c) Alberta; (d) The Kirghiz Steppe; (e) The West Riding of Yorkshire.

6. What geographical conditions favour the production of the following:- Wool, cane-sugar, rice, rubber, maize. Name regions where each is extensively produced.

7. What principles would you observe in dividing a country into a number of regional units? Illustrate your answer by means of a regional sub-division of either the Cape Province or the Transvaal.

8. What natural conditions are favourable to sheep and cattle farming on a large scale? Give a comparative account of regions in the Southern Hemisphere where these occupations are carried on. Suggest reasons for the relatively undeveloped condition of the meat export trade in South Africa.

9. Explain how it comes about that a good natural harbour may not develop into an important seaport. Can you give a South African example? Discuss the geographical conditions which have led to the development of each of the following:- Shanghai, New Orleans, Durban, Marseilles.

10. Write a short essay on one of the following topics:- (a) Irrigation in South Africa; (b) The effect of insularity upon the development of Great Britain; (c) Geographical inertia; (d) The distribution of population in South Africa; (e) The industrialisation of Asia.

S.C. Geography Paper for 1928

Time 3 hours.

(Answer two questions from Section A, and four questions from Section B, six questions in all.)

1. Mean Monthly Temperatures in Degrs Fahrenheit

J	F	M	A	M	J	J	A	S	O	N	D
78.4	78.1	77.9	78.1	78.4	78.8	78.8	79.2	79.7	80.1	80.6	79.7
74.5	74.8	78.0	82.0	84.6	82.4	79.5	79.4	79.4	80.7	79.3	76.4
69.3	69.7	68.0	63.1	58.9	55.5	54.8	55.6	57.0	60.7	64.2	67.3
28.9	32.4	39.0	48.9	57.2	63.9	67.3	65.8	59.4	49.6	38.3	30.9
62.4	62.2	61.0	57.4	52.9	49.6	47.5	48.6	51.1	54.0	56.8	60.8

Mean Monthly Rainfall in Inches

9.8	9.6	11.6	13.0	7.5	5.1	3.0	1.8	1.5	3.9	6.4	10.3
0.1	0.0	0.0	0.1	0.5	20.6	24.6	14.9	10.9	1.8	0.5	0.1
0.7	0.6	0.9	1.8	3.9	4.4	3.5	3.3	2.2	1.6	1.1	0.8
1.4	1.3	1.8	2.0	2.8	2.8	2.8	2.8	1.7	1.9	1.6	1.7
3.6	3.2	3.1	4.1	4.6	5.0	5.9	5.0	4.2	3.9	3.6	3.3

From the above statistics describe and account for the climatic characteristics of the places named. (The names of the towns in Question 1 are omitted from the book from which these figures are taken.)

2. (a) Explain how an aneroid barometer is used to determine heights.

(b) Describe any form of clinometer you have seen, and explain how it is used.

3. Draw a rough sketch showing the chief ocean currents of the Atlantic Ocean. Briefly discuss the causes of the circulation and the influence the currents exert.

4. Discuss with examples the importance of deserts or mountain ranges as barriers to movement and as areas of production.

OR

Give some account of the work of crustal movements, running water, and glaciers as forces contributing to the formation of scenery.

Section B

5. Compare the economic development of the Argentine with that of South Africa.

6. Discuss the distribution of population in South Africa.

OR

Examine the relationship between rainfall and farming in the Cape Province.

7. What are the commercial advantages of the Panama Canal to the United States of America?

OR

Compare the relative advantages of railways and navigable rivers as means of transport, and discuss the importance of one of the following rivers as a commercial highway: the St Lawrence, the Mississippi, the Danube.

8. What are the chief geographical factors controlling the localisation of manufactures? Compare South Lancashire and India as cotton-manufacturing areas.

OR

Write an account of the economic development of the Canadian Prairies.

9. Work out the connection between physical conditions and occupations in one of the following regions:- Newfoundland; North Italy; The Central Lowlands of Scotland; The Plains of Northern India; Denmark.

OR

Analyse the situation of five of the following towns, and show how geographical factors have contributed to their development: Hankow, Berlin, Beira, Sydney (Australia), Chicago, Buenos Aires, Singapore.

S.C. Geography Paper for 1929

Time 3 hours.

Section A (Answer Question 1 and one other question from this Section.)

1. (a) Insert the rivers on the contoured map provided.

(b) On the squared paper provided, draw a section along the line AB.

(c) Describe the relief of the country between the two rivers.

(d) A person climbs to the top of the hill marked C. How could he roughly check the height?

2. Describe and account for the characteristics of Mediterranean and Monsoon climates. Give two examples of each climatic type, with the approximate annual rainfall of each.

OR

Describe and account for the usual climatic conditions prevailing during July at each of the following places: Vienna, Glasgow, Bombay, San Francisco, Manaus.

3. Write notes on four of the following, giving examples, and sketches where possible: Rift valley; dissected plateau; entrenched meander; volcanic pipe; poort; fold mountains.

Section B (Answer Question 4 and three other questions from this Section.)

4. On the map of the world supplied, indicate:

(a) Peking, Yokohama, Omsk, Rangoon, Chicago, Rosario, Brisbane, Marseilles, Amsterdam, Danzig.

- (b) The Suez Route between Britain and Australia, with two terminal and the chief intermediate ports.
- (c) One trans-continental North-American railway, with ports and important towns.
- (d) Two hot deserts; two areas of tropical forest; two tundra regions; two fishing grounds.
- (e) Regions where the following are produced: Coffee, cocoa, tea, sugar, rice, rubber, vegetable oil, petroleum, tin, copper.
5. Describe the situation and discuss the trade of each of the four chief ports of the Union of South Africa. Give a sketch map.
6. Briefly compare the economic resources of the regions of temperate grassland in the Southern Hemisphere.

OR

Compare, from the point of view of economic geography, those parts of South Africa and Australia which lie in similar latitudes.

7. Write an account of the cultivation and manufacture of cotton in the United States of America.
8. Select two of the following regions, name their chief towns and industries, and discuss the geographical factors contributing to the industrial importance of the regions: West Riding of Yorkshire, Belgium, the Ruhr, the North-Italian Plain.
9. Write a short essay on one of the following:  
 (a) The utilisation of water-power in industry. (b) The development of the resources of tropical lands. (c) The cultivation and transport of wheat in North America. (d) Japanese industries.

A P P E N D I X 45

FIVE EXAMINATION PAPERS WHICH WERE SET ON THE S.C. SYLLABUS  
IN COMMERCIAL GEOGRAPHY AND HISTORY

Commercial Geography and History paper set in 1925

Time 3 hours.

(Answer three questions from Part 1 and three questions from Part 2. One question at least must be answered from each Section.)

Part 1Section A

1. Discuss the conditions which favour the growth of large trading centres. Illustrate your answer by reference to any three of the world's great ports.
2. With regard to the following commodities, say:
  - (a) How they are produced.
  - (b) For what purpose each is used commercially.
  - (c) What countries are chiefly responsible for their production in the raw state and in any manufactured form: Rubber, hemp, flax, silk, jute.
3. Enumerate the chief wheat-producing regions of the world. Upon what climatic and economic conditions does wheat production on a large scale depend?

Section B

4. What raw products of South Africa could be advantageously utilised for manufacturing industries? What methods would you suggest for the fostering of such industries?
5. Describe the growth of the South African export trade during the last twenty-five years. What prospects are there of a further increase in their trade?
6. It is stated that "90 per cent. of the traffic on South African railways at the present time represents South African products". To illustrate this statement, draw a map showing the chief lines along which this traffic goes. Can you suggest where further railway development could be profitably carried out? Give your reasons.

Part 2Section A

7. Comment briefly on two of the following statements:
  - (a) France has never obtained a great colonial empire.
  - (b) The reaction of Dutch commerce on the industries of Holland led to a remarkable development of native resources of every kind.
  - (c) Much of the success of English colonies was due to those who were dissatisfied with the conditions of life at home.
8. (a) What were the "Navigation Acts"?
  - (b) How did they affect England's commercial and colonial policy during the 17th and 18th centuries?
9. Give a short account of the attempts that were made to find a North-East passage to China. What commercial results accrued from such expeditions?

Section B

10. What do you understand by the "Laissez-faire" doctrine in industry? What were some of the more important results of the abandonment of this doctrine?

11. Name some of the chief causes to which you could assign the improvement in English manufactures in the 18th and 19th centuries. Show briefly how such improvement gave a great stimulus to the English export trade.
12. Write a short essay on one of the following subjects:  
(a) "Protection" versus "Free Trade". (b) Immigration within the British Empire. (c) Imperial Preference.

Commercial Geography and History paper set in 1926

Time 3 hours.

(Answer six questions; three from Part I. and three from Part II.)

Part I

1. State concisely the chief conditions, both climatic and economic, essential to the commercial production of the following commodities:- Wool, rice, coffee, wheat, cotton. Name three important world-sources of each.
2. Discuss the chief reasons that have led to the construction of railways: (a) in Canada, West of the Great Lakes; (b) in the Congo Basin; (c) in South Africa.
3. On the map of the world provided indicate:-  
(a) Vancouver, Batavia, Wellington(N.Z.), San Francisco, Colombo, Genoa, New Orleans, Baghdad, Shanghai, Buenos Aires.  
(b) The chief ship-canals of the world.  
(c) The Trans-Siberian Railway, with the chief terminal and intermediate towns.  
(d) The shortest sea-routes from Britain to Australia and from Britain to New Zealand.
4. Discuss the relative importance of the farming, mining, and manufacturing industries of South Africa. Upon which of these three branches of industry do you consider the future economic prosperity of South Africa must be built up? Give reasons for your statements.
5. Enumerate the principal hindrances to economic development in Southern Africa (i.e., Africa, South of the Equator). Consider especially to what extent these hindrances operate in the Union of South Africa, and to what extent they are being overcome.
6. Describe three of the following regions, with reference to the industries which they carry on and the relation of those industries to natural conditions:- The S.W. Region of the Cape Province; the coastal plain of Natal and Zululand; the Witwatersrand; the Little Karroo; the Eastern Region of the Orange Free State.

Part II

7. Give some account of agricultural and manufacturing conditions in England immediately prior to the Industrial Revolution. What industries were most affected by the great inventions of the 18th Century?
8. Discuss the merits and faults of the Mercantile System, together with the reasons that led to its being abandoned in favour of Free Trade.
9. What were the great Spanish and Portuguese discoveries that took place during the 15th Century? What reasons can you assign for the gradual decline of Spanish and Portuguese trade subsequent to these great discoveries?
10. What were the respective aims of the various Factory Acts passed in England during the last century? To what extent was such legislation effective?
11. Write paragraphs on three of the following topics:- The North-West Passage; the Dutch East India Company; the Merchant Adventurers; the Peace of Paris; the Hudson Bay Company.
12. Sketch the chief land-marks in the growth of Trade-Unionism during the 19th Century. What is Syndicalism?

Commercial Geography and History paper set in 1927

Time 3 hours.

(Answer three questions from Part I., and three from Part II., six questions in all.)

Part I

1. Compare the past development and present position of the coal and iron industries in Britain, Germany, and the United States. Why is Britain the chief coal-exporting country of the world?
2. Draw a sketch-map of that part of Africa lying between the Zambezi and the Equator, and describe the region with special reference to the following:- (a) Productions as dependent upon natural conditions; (b) Internal communications; (c) Trade and ports.
3. (a) Name three important manufacturing areas in South Africa, and say what industries they carry on. Can you suggest any contrast, and reasons for such contrast, between the characteristic industries of one area and those of another?  
(b) Suggest briefly the geographical reasons for the backwardness of manufacturing industries in South Africa as compared with Canada and Australia.

4. Compare the relative advantages of Cape Town, Port Elizabeth, East London and Lourenco Marques in competing for the export trade of the South African Union. Give a detailed account of the position, import trade and export trade of one of these ports.
5. Write brief answers to any three of the following questions:-
- (a) Distinguish carefully, with examples, "raw materials" and "manufactures".
  - (b) By what different routes do products of the Transvaal reach Europe?
  - (c) What is "entrepot trade"? Illustrate your answer by reference to the entrepot trade of Great Britain.
  - (d) Enumerate the chief vegetable and animal products used in the making of clothing, and state one of the principal sources of each.
  - (e) To what extent is the commercial progress of a country affected by its coastline?
  - (f) Contrast methods of transport adopted in South Africa with those existing in Western Europe.

Part 11

6. Explain, as precisely as possible, why the industrial changes of the period 1770-1840 are properly spoken of as constituting a Revolution. Compare them from this point of view with changes taking place in agricultural methods in various parts of the world to-day. (Do not, in either case, give a mere narrative of events.)
7. Estimate the effect of railway construction abroad upon Britain's commercial and industrial position during the last 50 years.
8. Describe the scope and aims of the Navigation Acts of the period 1651-1663. To what extent would you endorse Adam Smith's dictum that the Navigation Acts "were perhaps the wisest of all the commercial regulations of England"?
9. Discuss briefly the extent to which the rivalry of the Dutch, French and British, during the 18th century, was due to economic causes.
10. Give some account of the influence of the merchant companies in extending England's foreign trade and colonial possessions during the 17th century.
11. Estimate the influence in industrial history of (a) The Factory Act of 1802; (b) The Act of 1842, prohibiting the employment of women and girls in mines; (c) The Act of 1909 empowering Trade Boards to determine minimum rates of wages.

Commercial Geography and History paper set in 1928

Time 3 hours.

(Answer question 1 and two other questions from Part I, and three questions from Part II, six questions in all.)

1. On the map of the world provided insert the following:-
  - (a) The Suez and Cape Steamship routes between London and Adelaide, and the shortest steamship route between Southampton and Auckland.
  - (b) The chief intermediate ports on these routes.
  - (c) The principal world-sources of cotton, jute, silk, rubber, petroleum, wheat, gold, iron. (Indicate these by means of the letters C, J, S, R, P, W, G, I respectively.)
  - (d) The Canadian-Pacific, Trans-Siberian, and Australian Trans-continental Railways, with the chief towns along these routes.
2. "South Africa occupies a unique position among the civilised states of the world in the extent of its dependence upon the produce of its mines for the purchase of imported "goods". Discuss, and if you wish criticize this statement.
3. What do you understand by the "hinterland" of a port? Examine the export trade of the principal ports of the Union of South Africa in relation to the products of their respective hinterlands.
4. Discuss the factors determining the usefulness of rivers as means of transport. What other purpose is sometimes served by rivers which are useless for transport? Illustrate your answer by reference to the rivers of South Africa and those of Europe.
5. Write paragraphs on three of the following topics:- The Witwatersrand as a mining and industrial region; cotton-growing in South Africa; alluvial diamonds; the Natal sugar industry; farming in Rhodesia.

Part II

6. Outline the principal features of the development of iron-smelting and coal-mining in Great Britain from the beginning of the 17th century. What effect did these industries have upon transport?
7. Write a short essay on the repeal of the navigation acts in Great Britain during the first half of the 19th century, and the reasons for their abolition.
8. Give some account of the immediate results of the introduction of machinery in England, under the headings:- (a) The rise of capitalism; (b) the migration of industry; (c) the growth of the factory system; (d) expansion in foreign trade.

9. Discuss briefly the economic reforms instituted by any three of the following:- John Bright; Pitt the Younger; Robert Owen; Richard Cobden; Robert Peel.
10. Write short explanatory paragraphs on the following topics:- (a) "Laissez-faire"; (b) Employers' Liability and Workmen's Compensation; (c) The Truck Acts; (d) Chartism.
11. Write a short essay on one of the following subjects:-  
 (a) The industrial Revolution in France.  
 (b) The progress of Germany from 1870 to the present day.  
 (c) The economic reconstruction of Russia during the 19th century.

Commercial Geography and History paper set in 1929

Time 3 hours.

(Answer three questions from Part I., and three from Part II.)

Part I

1. What are some of the considerations which determine the routes by which traffic passes? What would you consider to be the best routes for the transit of goods from: (a) Northern Germany to Italy? (b) London to Japan? (c) Port Elizabeth (wool cargo) to Bradford (England)?
2. What climatic and other conditions are required for the production of wine, sugar, coffee, and flax on a large scale? What areas of the world are chiefly responsible for the production of these commodities?
3. Briefly estimate the extent of South Africa's export and import trade with countries outside the British Empire. What prospects are there of any future development in this branch of her trade?
4. Which do you think will prove to be of more importance to South Africa in the future: The cattle or the coal industry? Give reasons for your answer.
5. Industrial and agricultural development are dependent largely on a well-organised system of transport. Discuss this statement briefly, and illustrate with reference to Africa south of the Equator.
6. What do you know of recent economic and commercial developments in tropical Africa, from the Limpopo to the Equator?

Part II

7. How was England's commercial history entirely changed by the geographical discoveries which occurred towards the close of the 15th century?

Discuss the extent to which the rivalry between the French and English in the 18th century was due to commercial causes.

9. Write a short account of Factory Legislation in England during the 19th century.
  10. Trace briefly but clearly the growth of the power of the industrial classes during the past fifty years.
  11. Give a short account of the growth of the iron and steel industry in England. Can you draw any analogy between this industry and the establishing of an iron and steel industry in South Africa?
  12. Explain briefly what you understand by: Free Trade, Protection, Rebate, Dumping, Bounty. What traces are there to-day of a tendency towards internationalism in trade?
-

FIVE EXAMINATION PAPERS IN GEOGRAPHY SET ON THE S.C. SYLLABUS WHICH CAME INTO FORCE AT THE DECEMBER EXAMINATION, 1935S.C. Geography Paper set in 1941

Three hours.

In Section A answer two questions. In Section B answer question four and three other questions.

Section A Answer any two questions.

1. (a) How are rainfall, temperature, and atmospheric pressure usually shown on maps? (15)
  - (b) How are the data for these maps obtained? (15)
  - (c) Give a short account of the instruments used. (20)
2. Write notes on three of the following, giving examples and diagrams where possible: (a) River meanders and Ox-bow lakes. (b) The formation of river deltas. (c) The characteristics of a valley which has been formed by a glacier. (d) The growth of a "volcanic mountain". Explain the terms "active" and "extinct" as applied to volcanoes. (e) The structure of a rift valley. (50)
3. (a) What are the chief causes of Ocean Currents? (15)
  - (b) Discuss the influence of ocean currents on the climate of certain lands. Give definite examples mentioning particularly the influence of ocean currents on the climate of South Africa. (35)

Section B Answer question 4 and three other questions.

4. On the map of the World provided indicate the following:-
  - (a) The Hot Deserts of the World. (8)
  - (b) Regions with an Equatorial Climate. (5)
  - (c) The main trade routes of the Atlantic Ocean with terminal ports. (10)
  - (d) The chief regions where the following are grown:- maize, rye, flax, rubber, tea. (12)
  - (e) Five important canals. (5)
  - (f) The River Rhine. (3)
  - (g) The Ukraine, the Tyrol, Iraq, the Sargasso Sea, Salonika, Manchukuo, Finland. (7) (50)
5. Give an account of the Coniferous Forest Regions of the World under the heads of:- (a) Distribution. (b) Climate. (c) Products. (50)
6. Divide Australia into climatic regions giving a short account of each. (50)
7. Describe with sketch-maps the position of five of the following towns: Chicago, New Orleans, San Francisco, St. Louis, Winnipeg, Montreal, Vancouver.

Discuss their commercial importance and show how much of

this they owe to geographical causes. (50)

8. Explain how the build and the climate of South Africa have influenced its communications. (50)

9. Name one industrial region in each of the following countries. Account for its importance and discuss the industries carried on in each. The British Isles, Germany, Union of South Africa. (50)

10. Give a geographical account of two of the following regions, showing how natural conditions have influenced human occupations. (a) The Pampas of South America. (b) The Indo-Gangetic Plain. (c) The Great Karroo. (d) The Lombardy Plain.

S.C. Geography Paper set in 1942

Three hours.

In Section A answer both questions. In Section B answer question 3 and three other questions.

Section A

1. The Meteorological Department, Pretoria, supplies the following climatic statistics for Durban:

Average January temperature 77 degs F.

Average July temperature 64 degs F.

Average annual rainfall 45.08 ins.

Describe fully how these figures have been determined. (50)

OR,

The following climatic statistics refer to Perth, Australia.

	J	F	M	A	M	J	J	A	S	O	N	D
T.(F)	73	74	71	66	70	56	55	56	58	61	65	71
R.(")	0.3	0.3	0.7	1.7	4.9	6.6	6.4	5.6	3.3	2.1	0.8	0.6

Examine the above figures and then give a description of (a) the climate of Perth, (b) the type of vegetation which you might reasonably expect in the district around Perth, (c) the possible occupations of the people of that area. (50)

2. (a) Describe the conditions necessary for the formation of (i) a delta, (ii) an estuary. Illustrate your answer by sketch maps and by reference to definite examples. (20)

(b) Write short notes on (i) fault, (ii) koppie. In each case illustrate your answer by a sketch and give a definite example. (30)

OR,

(a) Explain how the relief of a country can be effectively represented on a map. (15)

(b) Draw a contour map of the following with contours at intervals of 100 ft. (Represent 4 miles on the ground by 1

inch on your map and calculate the Representative Fraction.)

A valley running roughly north to south is 10 miles long. It is bordered by hills rising steeply on the west to 1,100 ft., and more gradually on the east to 800 ft. A river flows through the valley. After flowing for almost 5 miles it receives two tributaries which flow into it from the north-west and the north-east respectively. The main stream leaves the valley at a height of 100 ft., and then winds across a plain to the sea which is 10 miles away to the south. The river forms a delta at its mouth. (35)

### Section B

3. On the map of the world provided, indicate the following:-

(a) Three possible sea-routes from Adelaide to Liverpool with two intermediate ports for each route chosen. (12)

(b) Canadian Pacific Railway from Montreal to Vancouver with two important intermediate stations. (6)

(c) Martinique; New Guinea; Jamaica; Formosa. (4)

(d) The following rivers: Dnieper, Yangtze, Irrawaddy, Mekong, Parana-Paraguay. (5)

(e) Three regions of evergreen forest; three regions of temperate grassland; two regions of tropical grassland. (8)

(f) The chief oilfields of the world (three regions); the chief rubber-producing regions of the world (two); the chief copper-producing areas of the world (three). (8)

(g) Hamburg; Leningrad; Singapore; Pittsburg; Trieste; Port Darwin; Chungking. (7)

4. The following figures represent the density of population in each of the four provinces of the Union of South Africa. (Census 1936.)

Cape Province, 12.7 persons per sq. mile.

Transvaal, 29.9 persons per sq. mile.

Orange Free State, 15.5 persons per sq. mile.

Natal, 55.1 persons per sq. mile.

Explain carefully the geographical factors which account for the differences in density. (50)

5. Describe farming conditions in two of the following areas and show why these areas can support large agricultural populations. Illustrate your answer by sketch maps:-

(a) Argentine. (b) Deccan. (c) Highveld of Transvaal. (d) Plain of Lombardy. (50)

6. Choose four densely populated industrial regions in Europe (including the British Isles). Account for the dense population of each area. Name the most important towns and industries and illustrate your answer with clear sketch maps. (50)

7. Describe a journey from Yokohama to London through the Suez Canal. The journey takes place in July and the boat calls at at least eight important ports en route. Possible climatic conditions and cargoes taken on at the various stopping-places must be included in the description. The route, with stopping-places must be indicated on the map of the world used for Question 3. (50)

8. Draw a sketch map of the basin of the Mississippi river, inserting the principal tributaries and the chief towns. Describe the natural regions through which the rivers flow and give an account of the human occupations found there.(50)

S.C. Geography Paper set in 1943

Three hours.

Section A. Answer two questions.

1. (a) State and account for the characteristics of the Mediterranean type of climate. Explain how the natural vegetation associated with this type of climate is adapted to the climatic conditions. Say on which side of the continents and in which latitudes (approximately) this type of climate is found. (25)

(b)	Jan.degs F.	July degs F.
Bergen(Norway) Lat.60degs N.....	34	58
Leningrad(Russia)		
Lat.60 degs N.....	15	64

The above figures give the mean January and July temperatures for Bergen and Leningrad, which are almost the same height above sea-level.

(i) State clearly the facts shown by these statistics.

(ii) Account for the differences in temperature. (25)

OR,

(a) State briefly the conditions necessary for the formation of rain. Distinguish between relief rains, cyclonic rains, convectional rains. (25)

(b) Describe the climatic conditions that one might expect to find during January in:- Montreal; Singapore; Algiers.(25)

2. (a) By reference to the different stages of the course of a river describe as fully as you can the effect of river action on the surface of the earth. Illustrate your answer by reference to definite rivers. (30)

(b) Write short notes on (i) koppie, (ii) poort. In each case illustrate your answer by a sketch and give a definite example. (20)

OR,

(a) Draw contour sketches to illustrate - (i) an escarpment;

(ii) a deep kloof or canyon. (15)

(b) Study the contour map provided.

(i) Mark in the probable course of the rivers. (5)

(ii) From the position C describe the probable view looking towards A; from the position A describe the view looking south-west towards the sea. (15)

(iii) Mark the main valley and calculate its approximate length. (5)

(iv) Draw a section A-B choosing a suitable scale. (Use squared paper provided.) (10) (50)

Section B Answer Question 3 and three other questions.

3. On the map of the world provided indicate the following:-

(a) Burma, Kenya, Brazil, Chile, Malay States, New South Wales (all with boundaries). (6)

(b) Trans-Siberian railway from Leningrad to Vladivostok with two important intermediate stations. (5)

(c) Three important passes over mountains. (6)

(d) Two areas of tropical grassland; three areas of coniferous forest; three areas of small evergreen trees and shrubs. (8)

(e) River Murray with two tributaries; Si-kiang; River Danube. (5)

(f) Three important wool-producing areas; one important mutton-producing area. (4)

(g) Areas producing large quantities of cotton; cacao; sugarbeet; cane sugar (two areas for each). (8)

(h) Los Angeles; Colon; Iquique; Kharkov; Delhi; Rangoon; Osaka; Brisbane. (8) (50)

4. Compare as fully as you can the temperate grassland area of South Africa with the temperate grassland area of Canada. Your comparison of the two areas should deal with differences in (a) position, (b) relief, (c) climatic conditions, (d) farming activities, (e) transport. (50)

5. (a) What conditions are usually necessary for the development of an important industrial area? (20)

(b) Describe two of the following industrial areas and show to what extent the development of the chief industries has been influenced by the conditions referred to in (a):-

(i) The Witwatersrand. (ii) South Lancashire. (iii) The Ruhr. (iv) The Central Lowlands of Scotland. (30)

6. (a) Draw a sketch map of the Indo-Gangetic Plain. Insert the two chief rivers with at least one important tributary of each. Insert the towns of Lahore, Karachi, Delhi, Patna, Calcutta. (15)

(b) Describe farming conditions in different parts of this area and state what becomes of the products of the farmers.

7. (a) Give some account of the production of coal, iron and petroleum in the United States of America, and show on a sketch map the position of the main producing areas for each of these minerals. (30)

(b) Give as precisely as you can the position of the following towns and indicate their importance in relation to the mineral wealth of the country:- Duluth; Cleveland; Pittsburgh; Galveston. (20)

8. Describe the main occupations in two of the following areas. Show how natural conditions have influenced these occupations. Illustrate your answer with a sketch map.

(a) South Island, New Zealand. (b) Central and Northern Chile. (c) Yangtze-kiang Basin. (d) Island of Honshu, Japan. (50)

9. (a) Discuss briefly the chief ocean routes of the North Atlantic. Name four important terminal seaports on the North American seaboard and four on the European seaboard. Name the chief cargoes moving eastwards and those moving westwards by these routes. (30)

(b) Write a short account of the St. Lawrence and the Great Lakes as a commercial highway. (20)

S.C. Geography Paper set in 1944

Three hours.

In Section A answer Question 1 and one other question. In Section B answer Question 4 and three other questions.

Section A

1. The following climatic statistics refer to two towns, both in the Southern Hemisphere,

<u>Town A. - 150 feet above sea level</u>													
	J	F	M	A	M	J	J	A	S	O	N	D	YR
T.(F)	80.6	80.4	80.4	80.4	80.4	80.8	81.1	82.0	82.4	82.9	82.6	81.0	81.3
R.(")	9.2	9.0	9.6	8.5	7.0	3.6	2.2	1.4	2.0	4.1	5.5	7.7	69.7
<u>Town B. - 135 feet above sea level</u>													
	J	F	M	A	M	J	J	A	S	O	N	D	YR
T.(F)	63.7	63.1	61.3	58.1	55.6	52.3	52.3	53.1	54.1	56.7	60.1	62.4	57.7
R.(")	0.0	0.0	0.9	0.1	2.7	6.0	5.3	3.4	0.4	0.5	0.3	0.0	19.6

(a) Examine the above figures and give a short description of the climatic conditions of each of the towns. (28)

(b) Give a possible location for each of the towns. Name its type of climate and give a short description of the natural vegetation which might be found in the vicinity of each of the towns. (22)

OR

Explain as fully as you can how climatic data of the kind

supplied in Question 1 would be determined. Name and describe the meteorological instruments that would be required, and explain how each one would be used. (50)

2. (a) Name, describe and account for the planetary wind system of the Southern Hemisphere. (26)

(b) Explain how the swing of these wind belts affects the climate of South Africa. (24)

3. Describe and account for at least three different types of valleys. Draw a contour map and give a definite example of each type. (50)

#### Section B

4. On the map of the world provided indicate the following:-

(a) One region of very heavy summer rainfall; one region of very heavy rainfall throughout the year; one temperate region with very scanty rainfall. (3)

(b) Two regions of tropical monsoon climate; two regions of temperate grassland; one region of coniferous forest. (5)

(c) Mississippi river with one tributary and two large towns on the banks of the main stream; Ganges river with one large town on its banks; the river Rhine with the port at its mouth. (Names of rivers and towns must be filled in on the map.) (8)

(d) Two areas (in different countries) producing large quantities of mutton for export; two areas (in different countries) producing large quantities of rice for home consumption; one area producing large quantities of rice for export; two areas (in different countries) producing large quantities of maize for export; one area producing large quantities of maize for home consumption. (8)

(e) The ocean currents of the North and South Atlantic Ocean, indicating their directions, and whether they are warm or cold. (7)

(f) Two possible sea-routes from Auckland to London, with two intermediate ports for each route chosen. (3)

(g) The principal port of each of the following countries: Germany, Italy, Belgium, Brazil, Chile, Queensland. (6)

(h) The capital of Russia; the most important American lake-port; the most important cotton-exporting port of India; Melbourne; Buenos Aires. (5)

5. (a) Compare, as fully as you can, means of communication in Canada with those in South Africa. (30)

(b) Explain why geographical conditions in the settled part of Canada are more favourable to the development of communications than those in South Africa. (20)

6. Choose two densely populated areas in different countries in Europe (excluding the British Isles). Give a geographical

description of each area and account for the density of population. Illustrate your answer with sketch maps.

7. Name and give the position of (a) the chief woollen manufacturing area, and (b) the two most important shipbuilding areas in the British Isles. Describe two of these areas and illustrate your answer with sketch maps. (50)

8. (a) Give a short description of farming in the prairie lands of the United States. (32)

(b) Describe carefully the situation of the following American towns. Mention the chief industry found in each one and give the source of the raw material for that industry. Chicago; Detroit; Seattle. (18)

9. Give an account of two of the following regions and show how natural conditions have affected the occupations of the inhabitants. Illustrate your answer with sketch maps. (a) Deccan. (b) Pampas of South America. (c) North China. (d) Highveld of Transvaal. (50)

10. Give an account of irrigation in South Africa. Compare these methods with those usually employed in Australia or in India, and indicate the chief crops grown under irrigation in South Africa and in the country you choose. (50)

S.C. Geography Paper set in 1945

In Section A answer both Question 1 and Question 2. In Section B answer Question 3 and three other questions.

Section A

1. Statistics of the rainfall for four cities are given:-

	J	F	M	A	M	J	J	A	S	O	N	D
Bombay	0.1	0.0	0.1	0.0	0.7	20.6	27.3	16.0	11.8	2.4	0.4	0.0
Valp- araiso	0.0	0.0	0.9	0.1	2.7	6.0	5.3	3.4	0.4	0.5	0.3	0.0
Van- couver	4.6	3.5	2.5	1.8	1.2	1.0	0.8	0.9	1.8	2.8	5.3	5.6
Manaos	8.3	8.0	8.1	8.4	6.6	3.9	1.8	1.3	2.2	4.6	4.5	8.2

(a) Draw diagrams (on the squared paper provided) to illustrate these statistics of rainfall. (10)

(b) State briefly what you can deduce from these figures about the state of rainfall at each of the four places. (20)

(c) Select two of these places and account for the particular conditions of rainfall there.

OR

(a) Give full particulars, as well as an explanation, of the climatic conditions found in the low-lying regions along the equator. (30)

(b) In what respects and why do the climates of the Amazon

and Congo basins differ? (10)

(c) Describe the type of rainfall found in the regions named in (b). (10)

2. (a) Explain the characteristic features of an "old" river. Why is an "old" river valley a suitable area for habitation? What are the disadvantages in connection with living there? / (30)

(b) Why are low-lying regions most suitable for the habitation of civilized people? Is this always the case? Give examples to prove your statements. (20)

OR

(a) Explain the influence of ice on the landforms of Scandinavia. (14)

(b) Describe three types of desert which are found. Explain their origin and give examples. (36)

#### Section B

3. On the map of the world provided indicate the following:-

(a) Four cool regions which have rainfall right through the year. (4)

(b) The winds in and around Australia during July. Give their names. (6)

(c) The natural vegetation regions of Africa. Give their names. (12)

(d) The three main rivers of China; the three main rivers of South America; three important rivers of European Russia which flow southwards. (9)

(e) The four main fishing areas of the northern hemisphere. Give their names. (8)

(f) Seven important oilfields in four different continents. (7)

(g) The Trans-Siberian Railway with the two terminal cities and two cities along the route. (4)

4. You are travelling along the shortest route by train from Walvis Bay to Durban. Indicate this route on a sketch map, with the junctions through which you will pass. Describe the outstanding scenery along the route. Name and describe the different climatic regions through which you will travel. (50)

5. (a) Draw a sketch map to show the valley of the Rhine with its most important tributaries. Indicate also the division of the course of the river into four main sections. / (20)

(b) Show the situation and discuss the reasons for the importance of Cologne and Duisburg. (20)

(c) Discuss the navigability of the Rhine. (10)

6. Describe briefly the agricultural and manufacturing industries of Japan. Explain why these industries could have developed to such a degree. To what extent is the mining industry of Japan of any aid to the development of

these factories? (50)

7. Describe the production of spring wheat in Canada under the following headings:- (a) Where produced. (10) (b) Natural conditions favourable for the production. (16) (c) Methods of production and transport. (16) (d) Routes along which it is exported. (8)

8. Which parts of Australia are important for the production of sugar cane, gold, wheat, wool and dairy products? Give the factors which either favour or hamper the production of these articles. (50)

9. (a) Draw a sketch-map of Argentina and indicate on it the chief natural regions into which the country can be divided. / (10)

(b) Show the relation between the natural vegetation and the climatic conditions in each of these regions. (20)

(c) Which region is especially suitable for cattle farming and why? (20)

---

A P P E N D I X 47

FIVE EXAMINATION PAPERS WHICH WERE SET ON THE SENIOR CERTIFICATE SYLLABUS IN GEOGRAPHY WHICH WAS FIRST PUBLISHED IN "THE EDUCATION GAZETTE" OF 30TH NOVEMBER, 1944.

S.C. Geography Paper set for 1947      Three hours.

In Section A answer Question 1 and Question 2. In Section B answer Question 3 and three other questions.

Section A

1.	J	F	M	A	M	J	J	A	S	O	N	D
T.(F)	13	15	26	42	55	65	69	66	59	46	33	19
R.(")	4.1	3.6	3.5	2.1	3.0	3.5	4.3	3.5	3.5	3.1	3.9	3.8

(a) Draw diagrams (on the squared paper with which you are provided) to illustrate these data. (10)

(b) These figures refer to one of the following cities: Vancouver, Winnipeg, Montreal. Explain, giving your reasons, to which city these figures refer. Give also your reasons why, in your opinion, these facts are not applicable to the other two cities. (40)

OR

(a) Describe the method generally used in an ordinary school atlas for illustrating altitude above sea-level. (10)

(b) What are contour lines and when is this method of representing height especially used? (10)

Draw contours in order to illustrate the following:-

(i) An imaginary island with three separate hills 330, 410 and 525 feet in height respectively. (10)

(ii) A mountain pass 900 ft. high, between two mountain ranges about 1,200 ft. and 1,400 ft. in height. (10)

(iii) A Canyon. (10)

2. Give and describe the type of climate responsible for the following types of vegetation. In what parts of the world are these types of vegetation to be found? (a) Coniferous forests. (b) Evergreen forests. (50)

OR

Write short descriptive notes on four of the following:-

(a) Loess; (b) igneous rocks; (c) Atolls; (d) Moraines; (e) Meandering of a river; (g) Volcanoes; (g) Rift valley. (Give examples and sketches where possible.) (50)

Section B

3. On the map of the world provided indicate the following:-

(a) The direction and the names of the winds which bring rainfall to the following regions: Ceylon, Central Chile, North coast of Australia. (8)

(b) Cool areas where rainfall occurs in the course of the

whole year. (4)

(c) The Congo, Niger, Nile and Zambesi with one important tributary each. (8)

(d) Labrador, Victoria (state), Morocco, Turkey, Finland (each with its boundaries). (10)

(e) The Peru current; Mozambique current; Gulf Stream; East-Australian current. (Indicate in each case the direction of the current and whether it is warm or cold.) (12)

(f) Regions where rubber (2), coffee(2), citrus(3), and jute (1) are produced on a large scale. (The figures indicate how many regions of each are required. Draw boundary lines to indicate the various regions.) (8)

4. Give a full description of the mineral wealth of the Transvaal. Indicate on a sketch map of the Transvaal where the minerals are produced. Give reasons why the production of gold in the Transvaal is so profitable. (50)

5. Describe and account for the manufacturing industry of two of the following regions:- (i) Central lowlands of Scotland. (ii) Belgium. (iii) North Italy. Illustrate your description with sketch maps of these regions. (50)

6. France and Russia are two countries in Europe which are economically self-sufficient to a large extent. Discuss this assertion in connection with either of these two countries. (50)

7. (a) "Coal, iron and petroleum are found in the U.S.A. on a large scale." Discuss this assertion and, if it is true, give the regions where they are found. (30)

(b) Discuss the situation of two of the following cities and indicate the relation between the importance of the two and the mineral wealth of the country: Cleveland, Galveston, Duluth. (20)

8. What part of China has the denser population, the Hwang-ho valley or the Yang-tze Valley? Give as an answer a description which stresses especially build, climate and agricultural products. (50)

9. Describe the situation of four of the following harbours, as well as the nature of the trade that passes through them: Buenos Aires; Vancouver; Rio de Janeiro; London; Rotterdam; Yokohama; Liverpool. (The situation can also be indicated by means of a sketch map.) (50)

10. (a) South Island of New Zealand is the most important region where mutton and (b) New South Wales (Australia) is the most important region where wool is produced. Discuss the reasons why these two products are produced on such a large scale in the respective regions. (50)

S.C. Geography Paper set in 1948

Three hours.

In Section A answer question 1 or 2, and question 3 or 4. In Section B answer question 5 and 3 other questions.

Section A

1. The following climatic data refer to a place near sea-level:

	J	F	M	A	M	J	J	A	S	O	N	D
T.(F)	41	41	43	48	53	59	61	60	56	51	44	42
R.(")	2.7	2.6	2.8	2.6	2.7	2.9	3.1	3.2	2.6	2.7	2.9	3.0

(a) Examine the above figures and then name the possible climatic type with reasons for your choice. (20)

(b) Describe the natural vegetation and the possible human occupations and products you would expect to find around such a place. (30)

OR

2. (a) Describe the climate of Tokyo(Japan). (31)

(b) The av. January temperature of Winnipeg is -4 degs F. Account for these extreme temperature conditions. (15)

(c) Explain how the rainfall data given in 1(a) have been assembled. (14)

3. Write descriptive notes on the following: River Estuaries, Canyons, Folded Mts, Spring Tides. (50)

OR

4. (a) Draw two separate contour maps to illustrate (i) a volcano, (ii) a fiord. (17)

(b) Draw a diagram of the earth to illustrate the main pressure belts and the planetary winds. (21)

(c) How are these pressure belts caused? (12)

Section B

5. On the map of the world provided, indicate the following:-

(a) The direction and names of the prevailing winds along the West Coast of south America in July. (8)

(b) The Kuro Siwo Current, Benguella Current. (Show the direction and state whether warm or cold. (4)

(c) The Cool Temperate Continental regions. (10)

(d) Three regions for each of the following:- Cacao, Rubber, Petroleum, Wool. (12)

(e) Two possible sea-routes from Singapore to London, with two intermediate ports for each route. (6)

(f) Java, Shikoku, Trinidad, Formosa. (4)

(g) Rivers: Hwang Ho, Elbe, Loire. (6)

6. Give an account of the world production of cotton (use these headings: Distribution, favourable conditions, trade.)  
(50)

7. (a) Describe the factors which have favoured the development of the iron and steel industry around the Great Lakes of

U.S.A. (24)

(b) Account for the comparatively slow industrial development in the Union of South Africa before 1914. (26)

8. (a) Describe the conditions which have made farming so successful in each of the following: Pampas of Argentina, Ganges Plain. (42)

(b) For each of these regions mention two farming products important for export. (8)

9. (a) Describe the difficulties which we have to face in connection with irrigation in the Union. (20)

(b) Name six large irrigation storage dams in the Union of South Africa, naming in each case the dam, river and nearest town. (18)

(c) Discuss a large irrigation scheme (project) at present contemplated by the Union Government. Name three large irrigation dams in other countries of the world. (12)

10. (a) Draw a large sketch map of the Mississippi basin, and on it indicate the chief tributaries and towns. (24)

(b) Name four possible products carried southwards on the Mississippi. (8)

(c) Why does the river Rhine carry more trade than the main stream of the Mississippi? Which tributary of the Mississippi could be compared with the Rhine in importance? (18)

11. (a) Indicate the relief regions of Australia on a large sketch map. (26)

(b) Why is the Murray Darling Basin much better developed than the Amazon Basin? (24)

### S.C. Geography Paper set in 1949

Three hours.

In Section A, answer Question 1 or Question 2 and Question 3 or Question 4. In Section B, answer Question 5 and three other questions.

#### Section A

1. What conditions are necessary for the formation of rain? (18)  
Name the chief rainfall types. (12)

State the deflection of the planetary winds, and describe the causes of this deflection. (12)

Draw a simple diagram of the winds in a cyclone in the Southern Hemisphere. (8)

OR,

2. Describe the erosive action of glaciers. (15)

Account for the coastal forms found along the coast of Natal. (20)

Show how the natural plants adapt themselves to the climatic conditions in the Mediterranean regions. (15)

3. Draw a fully descriptive sketch of a rain-gauge. (19)

A rainfall of two inches was recorded at a certain place in one day. What is the meaning of two inches of rainfall? / (12)

The average annual rainfall of a certain place is 20". Explain why this information is insufficient for an accurate knowledge of the rainfall. (9)

If the mean atmospheric pressure in a coastal town is 30 inches, what mean air pressure may be expected on a mountain-top of 4,300 feet in the same region? (Show your calculations.) (10)

4. Study the contour map provided, and then give a description of the relief. (20) How is temperature and rainfall usually shown on maps? (21)

St. John's (Newfoundland): 48 degs N.....Jan.23degs F.

Victoria(Vancouver Island): 48 degs N.....Jan.39degs F.

The above data refer to the average January temperatures of St. John's and Victoria. Account for the great difference in temperature. (9)

#### Section B

5. On the map of the world provided, indicate the following:-

(a) The Mediterranean regions of the world. (Indicate regions by shading.) (10)

(b) Three important coalfields(C.) on the continent of Europe. (Indicate fields by shading.) (6)

(c) The prevailing winds of New Zealand in January, and of India in July. (6)

(d) The Khyber Pass, Uspallata Pass, Banks Peninsula. (6)

(e) Three evergreen hardwood forests(H.F.), and three tropical grassland regions(T.G.). (Indicate regions by shading.) (12)

(f) Manchuria, Iran, Siam, Chile, New South Wales. (All with boundaries.) (10)

6. Give an account of the world production of rubber. Use these headings: Distribution, favourable conditions, trade. / (38)

Name the chief uses of rubber. (12)

7. Draw a large sketch map of the Argentine and on it show the natural regions, the chief rivers and the towns.(26)

Give a description of the beef industry of the Argentine.(18)

Name three other countries important for the production of beef. (6)

8. "The iron and steel industry of the Union of South Africa has a great future." Discuss this statement and give your

reasons. (26) Name one mineral mined at each of the following towns: Witbank, Lydenburg, Wankie, Nababeep, Thabazimbi, Messina, Kuruman, Selukwe. (24)

9. A cargo ship leaves Hong Kong for London via the Suez Canal. Name eight possible ports where the ship would call and two important cargoes that might be loaded at each port. (40) Account for the economic importance of the Hudson-Mohawk gap in the U.S.A. (10)

10. Account for the growth of each of the following: Wellington (New Zealand), Sydney, Birmingham (Great Britain), Antwerp. (34) Indicate the position of each of the above cities on a large sketch map. (16)

11. Give a description of wheat farming in the prairies of Canada. Use the following headings:- Areas of production, Favourable conditions, Exporting harbours. (36) Name four other important wheat exporting countries. (8) Why is wheat farming not so successful on the Highveld of the Union of South Africa? (6)

12. The Northern coastlands of Australia are almost undeveloped. Why? (12) Name four possible products that could be cultivated successfully in the above region. (8) When is a river a good highway? Give your reasons. (24) Name two countries, which have some of the finest inland waterways in the world. (6)

### S.C. Geography Paper set in 1950

Three hours.

Answer six questions, two from Section A, and four from Section B.

Section A In Section A, answer question 1 or question 2 ; and question 3 or question 4.

1. (a) Explain how you would calculate the average monthly temperature of a single month, e.g. January, over a period of years e.g. 1921-1940 inclusive. (26)

(b) Draw a graph to illustrate the monthly rainfall as supplied in question 4. (Use the squared paper provided.) (24)

OR

2. (a) Describe briefly the chief ways of representing relief on a map. (16) Which method is used in your School Atlas? (4)

(b) Draw a contoured sketch map on a scale of 1/63,360 with contours at vertical intervals of 500 feet showing a volcanic island approximately 5 miles in diameter, rising to a height of 4,000 feet, and drained by a number of streams flowing through deep valleys. (30)

3. (a) Name and describe the origin of each of the three major types of rocks. Give an example of each type. (26)

(b) Explain any three of the following terms:- neap tides, artesian wells, flood plains, canyons. (Diagrams where possible.) (24)

4.	J	F	M	A	M	J	J	A	S	O	N	D
T.(F.)	50	51	55	60	63	70	73	72	68	60	54	52
R.(")	3.8	3.5	2.9	1.2	0.5	0.1	0.2	0.2	0.4	1.6	1.8	3.8

The above average monthly temperature and rainfall figures relate to a place 70 feet above sea level.

(a) Briefly describe the climate of this place from these figures. (24)

(b) In which latitudes, and in which parts of the various continents may similar climates be found? (18)

(c) Suggest a probable explanation for the relatively dry period from May till September. (8)

Section B Answer question 5 and three other questions.

5. On the map of the world provided indicate the following:-

(a) Strait of Malacca, Cook Strait, Strait of Belle Isle, Magellan's Strait. (8)

(b) Rivers: Fraser, Irrawaddy, Loire, Indus, Don. (10) / (8)

(c) Islands: The Canaries, Hawaii, the Philippines, Jamaica.

(d) The climatic regions of Chile. Name these. (6)

(e) The shortest sea route from Melbourne to Liverpool with two intermediate ports. (8)

(g) Chicago, Rio de Janeiro, Christchurch, Odessa, Rotterdam. / (10)

6. (a) Account for the economic importance of the Yangtze Kiang basin. (30) Illustrate your answer with a sketch map. / (10)

(b) Discuss briefly the factors which have retarded the economic development of China. (10)

7. (a) Why is the conservation of water so important in the Union of South Africa? Give your reasons. (18)

(b) Compare and contrast the Nile Valley of Egypt with the irrigation areas along the Great Fish river and the Sundays river with reference to:- (i) the chief methods of irrigation used; (ii) the chief crops grown on the irrigated lands. (32)

8. (a) Discuss the industrial development of either Lancashire or Yorkshire, showing how it has been affected by local natural resources, by overseas sources of raw materials, by home and overseas markets, and by other factors. (32)

(b) Name two of the most important industrial raw materials imported into each of the following:- South Wales, Northern Italy, and Japan; and name the country which is normally the chief source of each of these imports. (18)

9. (a) What factors have favoured the development of the gold mining industry of the Witwatersrand? (30)

(b) Draw a sketch map of the Transvaal and on it indicate the distribution of the chief minerals. (The town and mineral must be marked in each case.) (20)

10. (a) State briefly how local geographical factors have favoured the production of four of the following:- (i) wool in the Murray Darling basin; (ii) dairy produce in New Zealand; (iii) Coffee on the Sao Paulo plateau; (iv) Rubber in Malaya; (v) Cotton on the Deccan plateau of India. (44)

(b) What other factor, common to all the above, accounts for the rapid development and large scale of production in these regions? (6)

11. Describe the distribution of population in Australia, showing how climate and other factors have influenced the population density. (50)

12. (a) Discuss the characteristics of a good port with specific reference to New York or any other important world port (outside South Africa). (25)

(b) Explain how natural conditions have influenced human occupations in British Columbia or New England. (25)

S.C. Geography Paper set in 1951

Three hours.

(Answer six questions, two from Section A and four from Section B.)

Section A In Section A, answer question 1 or 2; and question 3 or 4.

1. (a) Describe with the aid of simple diagrams the instruments used to measure: maximum and minimum temperature, relative humidity, and precipitation. (26)

(b) Explain: (i) How each instrument is used; (18)

(ii) how mean monthly and mean annual temperatures are calculated. (6)

OR

2. (a) On a scale 1/126,720 draw a map of an area extending 12 miles E-W and 10 miles N-S. The north eastern and south western sections of the area are occupied by plateaus rising about 1,000 feet above sea-level. A river has formed a floodplain about 90 feet above sea-level and about 3 miles wide extending from N.W. to S.E. across the middle of the area. The slopes rising to the N.E. plateau are steep; those of the S.W. plateau are gentle and are drained by a tributary stream rising at a height of 700 feet. This tributary stream first flows N.E., then S.E. before joining

the main stream. Show the relief of the area by contours at vertical intervals of 100 feet. (35)

(b) Calculate the vertical exaggeration of a section drawn across this map with a vertical scale of 2,000 feet to 1 inch. (15)

3. (a) The mean monthly temperatures and precipitation figures given below refer to two South African towns. Suggest possible localities for the places and give reasons for your choice. (30)

(b) Briefly describe the kind of vegetation you would expect in the vicinity of each town and show how it is adapted to the climate.

	J	F	M	A	M	J	J	A	S	O	N	D
T.(F.)	70	70	68	63	59	56	55	56	56	61	64	68
R.(")	0.7	0.6	0.9	1.9	3.8	4.5	3.7	3.4	2.3	1.6	1.1	0.8
T.(F.)	76	76	75	72	66	65	64	66	68	70	72	72
R.(")	4.6	4.9	5.4	3.4	1.9	1.2	1.2	1.7	3.2	5.1	5.0	5.1

OR

4. (a) Describe and explain the origin of glaciated mountain valleys and fiords with the aid of neat diagrams and references to examples. Comment briefly on the economic importance of the features described. (25)

(b) Similarly discuss flood plains and deltas. (25)

Section B Answer question 5 and three other questions.

5. On the map of the world provided, indicate the following:-

(a) Sao Paulo, Melbourne, Bahia Blanca, Calcutta, Vancouver; / (10)

(b) rivers: Murray-Darling, Yenisei, Amur, Yukon, Mississippi; / (10)

(c) the chief rain-bearing winds at: San Francisco, Rio de Janeiro, Port Darwin, Auckland, Port Harcourt; (10)

(d) the shortest sea-route between Wellington (New Zealand) and London; (6)

(e) currents (state whether warm or cold): Humboldt, North Pacific Drift, Canaries and East Australia; (8)

(g) a region producing each of the following on a large scale: beef for export, cotton, phosphates. (6)

6. State how climatic conditions determine the regional distribution of major crops and types of farming in Argentina. (50)

7. Describe the sites of three of the following ports and in each case show how the extent and nature of the hinterland has influenced the growth of the port and the character of its commerce: Buenos Aires; New York; London; Sydney; Cape Town. (50)

8. Explain how (a) the agricultural resources and (b) the mineral resources, have determined the development and localization of industries in the United States of America. (50)

9. (a) Explain briefly the geological occurrence of petroleum, (4) and describe the geographical distribution of the world's chief petroleum deposits. (20)

(b) With special reference to two major petroleum-producing areas, explain briefly how petroleum is extracted, prepared for market, and distributed. (25)

10. (a) Discuss the physical, climatic and human factors which have made soil erosion in the Union of South Africa so widespread that Government action has become necessary. (25)

(b) Describe the soil conservation measures which you would recommend on (i) arable lands and (ii) grazing areas. (25)

11. Describe the farming which is characteristic of three of the following areas:- (i) The Plain of Lombardy; (ii) Southern Spain; (iii) the Swiss Alps; (iv) the Lowlands of Eastern England. (50)

12. (a) Write a systematic geographical account of one of the following areas under headings such as: Relief, climate, vegetation..., etc.:- (i) Japan; (ii) the Nile Valley; (iii) the East Indian Islands; (iv) the Belgian Congo. (36)

(b) Draw a sketch map to illustrate your answer. (14)

answer.

---

A P P E N D I X 48THE MATRICULATION SYLLABUS IN GEOGRAPHY WHICH CAME INTO EFFECT IN DECEMBER, 1920

(Taken from the Matriculation Examination Handbook, pp. 60-61. Year 1920.)

A. 1. The earth as a part of the solar system; the form and size of the earth. Day and night. The seasons. Latitude and longitude.

2. Distribution of land and water; the relief of land areas. Ocean currents and tides.

3. Distribution of sunshine, temperature, winds and rainfall in general outline. General knowledge of the distribution of vegetable and animal life; natural regions.

4. The races of mankind and their chief characteristics; distribution of population; human activities and their relation to geographical environment. Commercial products and the conditions affecting their production and distribution. (Candidates will be expected to make a practical study of their own districts in relation to the various points dealt with above.)

B. 1. A general knowledge of the geography of the various continents.

2. The geography of Africa south of the Zambesi in detail.

Practical

1. Finding the meridian and local midday by a shadow method.

2. Carrying out of a simple plane table survey.

3. Methods of representing surface features on maps.

4. Interpretation of large scale contour maps and the drawing of sections from them.

5. Simple exercises involving the use of the globe and the representation of large areas of the earth's surface.

6. Observations of atmospheric temperature and pressure, of wind and rainfall; interpretation and construction of weather charts.

7. The graphical representation of given statistics of population, production and geographical data.

---

A P P E N D I X 49THE MATRICULATION SYLLABUS IN GEOGRAPHY AND HISTORY WHICH  
CAME INTO EFFECT IN DECEMBER, 1920

(Taken from the Matriculation Examination Handbook for 1920, pp. 61-62.)

The history in outline of geographical discovery, trade routes, and European settlement, from Diaz to Tasman.

Introduction: Ancient and Mediaeval Trade Routes.

I. The Great Discoveries, their causes and results. The navigation of the period and factors by which it was influenced (e.g., the compass, prevailing winds and currents).

The history of trade and settlement in South Africa, Anglo-Saxon North America, and Australasia, from circa 1650 to 1900.

II. The Cape under the Dutch East India Company. Constitutional and economic aspects. Central and local government.

Expansion of the settlement and factors which influenced it.

Trade and farming. Climate, etc.

III. Growth of English Colonies in North America. Constitutional and Economic aspects. Rivalry between English and French in North America. Physical features in their relation to this struggle.

IV. American War of Independence. Constitution of the United States.

V. Colonization of the West by the U.S.A. Climate and physical features. The Ohio Ordinances. Discovery of gold in California. Immigration in the 19th century. Growth of industries and trade. Railways.

VI. Development of Canada. Physical features, etc. Racial question. Lord Durham's Report. Constitutional adjustment. Opening up the West. Immigration. Economic growth. Railways.

VII. Development of South Africa in the 19th century. Physical features, climate, etc. Immigration. Causes and results of the Great Trek. Constitutional growth (local and central government). Discovery of diamonds and gold.

Economic development. Railways. Opening up of the North.

VIII. Cook's voyages and founding of Australian Colonies and New Zealand. Geographical features. Constitutional and economic growth. Discovery of gold. Railways. Immigration.

---

A P P E N D I X 50THE MATRICULATION SYLLABUS IN GEOGRAPHY WHICH CAME INTO FORCE AT THE EXAMINATION OF DECEMBER, 1928

(Taken from the Matriculation Examination Handbook of 1927, p. 58.)

(Note. - The syllabus is divided into two sections, (A) Physical, and (B) Descriptive and Economic Geography. The idea underlying it is that the content of Section (A) shall form a general introduction to that of Section (B), and that, throughout, Geography should be linked up with everyday life. Practical work is provided as a series of simple tests in both sections of the syllabus. Special attention is drawn to the fact that under Section (B) candidates will be expected to show a knowledge of the economic conditions of their respective districts acquired by personal observation.)

A. The earth as a part of the solar system; the form and size of the earth; day and night; the seasons; latitude and longitude; distribution of land and water; relief of land areas; ocean currents and tides; distribution of sunshine, temperature, winds, rainfall.

Practical applications: Finding the meridian and local midday by a shadow method; reading large-scale relief maps and drawing sections therefrom; observations of atmospheric temperature and pressure, of wind and rainfall; reading and construction of temperature, pressure and rain charts; practical study of the physical conditions of the candidate's own district.

B. A general knowledge of the various continents, without much detail, will be required on the following lines: natural regions; vegetation and animal life; the races of mankind and their characteristics; distribution of population; human activities and their relation to geographical environment; commercial products and the conditions affecting their production and distribution. Similar knowledge, but in much greater detail, will be required of Africa south of the Zambesi.

Practical applications: Conclusions on the influence of relief upon density of population, occupations and means of communication; graphical representation of population and production on maps; practical study of the economic conditions of the candidate's own district.

---

THE MATRICULATION SYLLABUS IN GEOGRAPHY WHICH CAME INTO FORCE AT THE EXAMINATION OF NOVEMBER, 1947

(Taken from the Matriculation Examination Handbook of 1945, pp. 120-126.)

(N.B. - It is desirable that pupils should have access to recent issues of a number of standard reference books, such as the Statesmen's Year Book, the Statistical Year Book of the League of Nations, and the Official Year Books of the Union of South Africa and of Southern Rhodesia, and that they should be taught to use them freely to verify and to bring up to date statements in their textbooks, and also as sources of further information on topics and countries included in the syllabus. They should also be trained in the habit of making the fullest use of a good school atlas. They should be accustomed to comparing maps intelligently to deduce for themselves general relationships, such as that between the distribution of precipitation and of natural vegetation in Southern Africa.)

The syllabus is divided into two sections: (A) General Geography, (B) Regional Geography. The idea underlying it is that the content of Section (A) shall form a general introduction to that of Section (B). Candidates should study by personal observation the economic and general geographical conditions of their respective districts.

Two questions will be required to be answered from Section (A) of the syllabus and four from Section (B).

A. General Geography

(1) The Earth as a Planet:

Form and movements of the earth; day and night; the seasons. Distribution of insolation. Latitude; longitude; time.

(2) Maps and Diagrams:

The general idea of map projection, without any mathematical treatment: its difficulties and limitations, illustrated by reference to some of the projections most commonly used in school atlases.

Different ways of expressing the scale of a map. Calculation of distance and area on maps of which the scale is given.

Representation of relief by means of contours and colour layers. Drawing of sections from contoured maps and calculation of their vertical exaggeration.

Interpretation of isotherms, isobars and isohyets.

Representation of statistical data (a) in simple graphs; (b) on maps by means of dots or shading, e.g., population

and production maps.

(Note: Pupils should be able to illustrate topics from all parts of the syllabus with neat and clear freehand sketch maps and diagrams.)

(3) The Earth's Crust:

The three major rock types (igneous, sedimentary, metamorphic). Folds, faults, earthquakes, volcanoes. A general survey of the relief of the continents; the distribution of young folded mountains, older fold systems and ancient shields.

Weathering, transportation and deposition, and the resultant landforms.

The regional distribution of coal and petroleum.

(4) Climate:

Temperature and its seasonal variations as influenced by insolation and the distribution of land and water. Influence of temperature on atmospheric pressure. Relation of winds to pressure and the earth's rotation. Differences between the atmospheric circulation of tropical and temperate latitudes. Seasonal changes in the distribution of pressure and wind systems.

Cyclonic, convectional and relief rainfall; their regional and seasonal distribution.

The use of the principal meteorological instruments; records of temperature, wind and rainfall for a suitable period, and the representation of the data in graphical form.

(5) The Oceans:

Ocean currents as influenced by prevailing winds and coastal configuration; their relative temperatures and their climatic significance. Prevailing winds and currents of the Atlantic and Indian Oceans; their influence upon early voyages of discovery and on sailing ship routes.

Elementary facts about tides, without discussion of the theories of their origin.

(6) Trade and Trade Routes:

Climatic requirements of the following commodities, and the chief producing, exporting and importing countries: wheat, rice, maize, sugar cane, sugar beet, cacao, coffee, tea, cotton, rubber, timber, cattle and sheep and their products. The main trade routes of the world, by land, sea and air, and the geographical conditions determining them.

B. Regional Geography

(Note: (i) A broad survey of the natural and political divisions of each continent. This should include the main facts of relief, climatic and vegetation regions and the nature and distribution of population. This part of the syllabus will be tested by questions of a general nature only.

(ii) Certain countries or regions in each continent as listed in (1) to (6) below are selected for special treatment and more specialised questions may be expected on them.)

(1) Africa:

(a) Southern Africa (south of the Kunene and Zambesi). Relief; distribution of important mineral resources; climate; vegetation and its modification by man; distribution of population (European and non-European); influence of natural conditions on the course of European settlement, the railway system and the development of the chief ports and towns; air routes.

Types of farming; forestry; fishing; mining; manufacturing as influenced by raw material supply, labour, transport and markets.

(b) Less detailed treatment of the East African Highlands and their coastal regions, the Nile Valley, including Egypt and the Suez Canal, the Congo Basin.

(c) Only a general knowledge of the rest of Africa will be expected.

(2) Europe:

(a) The British Isles, France, Belgium, Holland, Germany, Italy and the European part of the U.S.S.R. in some detail, in terms of position, relief, climate, vegetation, population, products, trade, transport and principal towns. Special attention should be given to those regions in each country that are economically the most important, e.g. the Lowlands of Scotland, Southern Lancashire, the London region, the Ruhr basin, Northern Italy, North-Eastern France.

(b) Only a general knowledge of the rest of Europe will be expected.

(3) Asia:

(a) India, China, Japan, the East Indies, Malaya and Ceylon in some detail, following the scheme as outlined under 2(a), with special attention to the economically most important regions, e.g. Central Japan, the North China Plain and the Yangtse basin, the Ganges Plain.

(b) Only a general knowledge of the rest of Asia will be expected.

(4) Australasia:

Eastern Australia, South-Western Australia and New Zealand in some detail, following the scheme outlined under 2(a).

(5) North America:

(a) The United States and Canada in some detail, following the scheme outlined under 2(a), with special reference to the prairies, the north-eastern manufacturing region, and the Cotton Belt. Forest exploitation in Eastern Canada, the

North-Western U.S.A. and British Columbia; the fisheries of Newfoundland, British Columbia and Alaska; the iron and steel industries of Pennsylvania and the Great Lakes region; the food-packing and agricultural machine manufacturing of Chicago, and the textile industries of New England should receive attention.

(b) Only a general knowledge of Mexico, Central America and the West Indies will be expected, but the Panama Canal should be treated in some detail.

(6) South America:

(a) Brazil, Argentina and Chile in some detail, following the scheme outlined in 2(a), with special reference to the Pampas and the Brazilian coffee region.

(b) Only a general knowledge of the rest of South America will be expected.

---

FIVE EXAMINATION PAPERS IN MATRICULATION GEOGRAPHY SET ON THE SYLLABUS WHICH CAME INTO FORCE IN 1920.Matriculation Geography Paper set in December, 1923

Time 3 hours.

Answer seven questions, at least two from Section A and at least three from Section B; the questions selected must include Question 4 and Question 12.

Section A

1. Describe the phenomenon of the tides as it occurs round the shores of South Africa. Explain the causes as fully as you can.
2. Show the effect of the inclination of the Earth's axis to the plane of its orbit. Illustrate your answer by means of diagrams.
3. Contrast the climatic conditions of the Polar Regions with those of the Equatorial Regions. Base your answer on sunshine, temperature, wind, and rainfall. Show the effects of these conditions on vegetable, animal, and human life.
4. From the study of your own district, indicate the chief factors modifying the Earth's surface. Draw two or three diagrams of land formations in your district, and state how you think they have been formed.
5. What native tribes belong to the Bantu group? Draw a rough sketch-map of South Africa south of the Zambesi. Insert the names of the chief native races, indicating the districts they occupy.
6. Show clearly how you would find direction north and south by a shadow method. Explain how you would use the magnetic needle to find true north.

Section B

7. Describe carefully the rainfall of South Africa. Draw a sketch-map to indicate the variation in the amount of rainfall. State the regions which get (a) rainfall at all seasons, (b) summer rainfall, (c) winter rainfall, (d) little or no rainfall.
8. Write a full account of the build, climatic conditions, and products of India.
9. What are the chief vegetation zones of Europe? Name two typical products from each region, and indicate at least one port of outlet in each zone.
10. On the map of the world provided indicate -  
(a) the chief districts where jute, tobacco, the vine, cacao are grown;

- (b) the chief districts where silver, coal, lead, copper are found;
- (c) the chief trade routes of the world (show only most important ports of call);
- (d) the following towns: Moscow, Windhoek, Lausanne, Canberra, Monte Video, Montreal;
- (e) the following features: Lake Ontario, Kiel Canal, Rivers Tigris and Euphrates; indicate the position of Jugo-Slavakia and Lithuania.

11. Write a full account of the climatic conditions, products, and industries of either (a) the Congo Basin or (b) the Rhine Valley. Estimate the economic importance of the region you choose.

12. The above map is a contoured map of Korea. Describe the relief of the peninsula. Draw a section from A to B. What is the approximate distance by rail from Fusan to Wensan? (Taken from Examination Papers of the Joint Matriculation Board for December, 1923, pp. 90-92.)

Matriculation Geography Paper set in December, 1924

Time 3 hours.

Answer six questions, to be chosen as follows:- From Section A answer Question 7 and two others; from Section B answer Question 12 and one other question. The sixth question may be taken either from Section A or Section B.

Section A

1. Illustrate from Africa the way in which European countries depend on tropical and sub-tropical colonies as markets for home manufactures and as sources of supply for the raw materials of manufacturing industries.
2. State briefly the main reasons for the density of population in any four of the following areas:- The Clyde Basin; the Nile delta; Belgium; Pennsylvania; South Lancashire; the Ganges Basin; the Plain of Lombardy.
3. South Africa and Australia, although roughly of the same latitude and somewhat similar in climatic conditions, differ, in some respects, in economic development. State, and if possible account for, any differences you notice between Australia and the Union of South Africa in respect of mining, agriculture, manufacturing, and foreign trade.
4. What geographical conditions have led to the growth and importance of any six of the following towns:- Singapore, Montreal, Constantinople, Delhi, Genoa, Hamburg, Chicago, Ballarat, Canton, Marseilles.

5. Write a short essay on one of the following subjects:-

- (a) The future of manufacturing industries in South Africa;  
 (b) Afforestation; (c) Transport problems in South Africa.

6. What kinds of farming are typical of different regions of South Africa? Give a more detailed account of farming conditions in one of these regions, and mention the difficulties with which the farmer has to contend. Name the chief farm products exported from South Africa.

7. On the map of the world provided insert:-

- (a) The steamship route from North-Western Europe to Shanghai.  
 (b) The chief seaports on this route.  
 (c) The steamship route from New York to Vancouver, via the Panama Canal.  
 (d) The following towns:- Stockholm, Karachi, Beira, Manaus, Lisbon, Kashgar, Algiers, Rangoon, Winnipeg, Adelaide, Quebec, San Francisco.  
 (e) The following ocean currents:- The Labrador Current, the "Kuro-Shiwo," the Mozambique (Agulhas) Current, the Gulf Stream.  
 (f) The following features:- The Andes, the Danube, Lake Baikal, Vesuvius, the Great Barrier Reef.

#### Section B

8. How are trade winds caused? What factors determine their direction? Describe the influence of winds upon the climate of South Africa.

9. Give a short account of (a) Tundras, (b) Savannahs, (c) Tropical Forests. What climatic conditions give rise to each of these? Mention two regions where each type occurs, and enumerate the chief economic vegetable products of the regions selected.

10. (a) What observations of the sun would you make in order to determine true noon?

(b) Why is there a difference in most places between sun-time and clock-time?

(c) Describe the usual method by which a ship's officer calculates longitude.

11. The following statistics show the monthly rainfall, in inches, for two well-known towns, A and B, in South America.

(a) To what towns do you suppose the statistics might refer?

(b) Write a note on the distribution of rainfall throughout the year at each place.

(c) On the squared paper provided draw rainfall diagrams to illustrate the statistics.

Rainfall at A

	J	F	M	A	M	J	J	A	S	O	N	D
R.(Ins)	0.0	0.0	0.3	0.8	3.5	4.8	5.4	4.5	3.4	0.9	0.2	0.0

Rainfall at B

R.(Ins)	4.8	4.4	5.1	4.6	3.7	1.9	1.7	1.9	2.3	3.1	4.3	5.6
---------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

12. (a) What region is represented in the accompanying map? Give the names of any lakes, rivers, or other physical features recognized.

(b) Describe the relief of the area, particularly from the point of view of communications. At the mouth of the more westerly of the two rivers flowing south (though not marked on the map) is a large and busy port. What is this port, and what natural advantages does the port enjoy?

(c) Draw a section along the line AB.

(Taken from Examination Papers of the Joint Matriculation Board for 1924, pp. 89-92.)

Matriculation Geography Paper set in June, 1925

Time 3 hours.

Answer Question 1 and five others, but not more than three from either of the sections A or B.

1. On a certain day you are asked to observe and record the weather conditions of the locality in which your school is situated. Describe how you would read the various instruments, noting matters which require special care, and show, by means of a table and imaginary readings, the method by which you would make your record.

A.

2. Explain as fully as you can, with diagrams, why it is that at Capetown there is a difference of about four and a half hours between the length of day on 21st December and on 21st June.

3. What is the difference in structure and appearance between a "folded mountain range" and a "block mountain"? Give some examples of these two kinds of mountains in various parts of the world.

4. Show the general connection between the distribution of temperature and the distribution of rainfall over the earth's surface.

5. Describe the relation between the human activities and the geographical environment of one of the following:-

(a) The Bushmen. (b) The Esquimaux. (c) The Mongols.

6. Write a short account of the control exercised by climate and physical features upon the economic production of any

country in the northern hemisphere.

## B.

7. Compare the difficulties resulting from geographical conditions experienced by settlers in South Africa with those of settlers in Australia.
8. To what extent, in your opinion, have the climate and physical features of Africa and North America been responsible for the difference in the rate of development of the two continents?
9. It has been said that drought is the greatest handicap to the farmer in South Africa. (a) What regions are most affected? (b) To what causes do you attribute our drought problem? (c) Suggest how these conditions might be improved.
10. Compare the advantages of South Africa with those of the Argentine for stock-farming.
11. Write brief notes on the position and importance of six of the following:- (a) San Francisco, (b) Newcastle (Australia) (c) Madras, (d) Shanghai, (e) The St. Lawrence River, (f) Hull, (g) Heligoland, (h) The Strait of Magellan.

(Taken from the Examination Papers of the Joint Matriculation Board for 1925, pp. 103-104.)

Matriculation Geography Paper set in December, 1926

Time 3 hours.

Answer question 1 and five others. Not more than three questions may be selected from either Section A or Section B.

Seventy-five marks are assigned to Question 1 and forty-five marks to each of the remaining questions.

1. Describe concisely any methods with which you are acquainted for carrying out the following practical exercises:-
  - (a) Finding true south and local noon.
  - (b) The construction of a wind rose for a month from a table showing the wind direction for each day of the month.
  - (c) Explain why it is impossible to represent the continent of Africa on a plane surface exactly as it appears on a globe.

Section A

2. With the aid of diagrams explain the following terms: (a) Tropic of Capricorn, (b) Plane of the Ecliptic, (c) Perihelion, (d) Equinox, (e) Polar Circle.
3. How may ocean currents be caused by other means than by tidal action?
4. Account for the fact that over most of the interior of

the Union of South Africa the periods of sunshine are much longer and more continuous in the winter than in the summer.

5. Give some account of the area of distribution of one of the following racial groups and suggest some influences of geographical environment upon the characteristics and activities of the group:- (a) The Bantu. (b) The Mongols. (c) The Tuareg.

#### Section B

6. (a) On the accompanying map of Europe mark the positions of the more important wheat producing regions.

(b) State briefly in each case the geographical conditions which have contributed to the agricultural development of these regions.

7. To what extent have the physical features and the climate of North America determined the positions of the chief regions of dense population?

8. Compare the main features in the physical and economic geography of Eastern Australia with those of Eastern Africa south of Tanganyika.

9. From the economic point of view the Union of South Africa may be regarded as a country in which there are three types of regions, viz. -

- (a) regions of little economic importance;
- (b) regions capable of moderate economic development;
- (c) regions of great potential value.

Draw a sketch map of the Union and outline the areas of these three types and state your reasons for the grouping which you adopt.

10. Write notes on five of the following: (a) the Atlantic Rise, (b) the Trade Winds, (c) the Kuro Siwo, (d) the Chobe Swamp, (e) Catingas, (f) the Riff, (g) the Sennar Dam.

(Taken from Matriculation Geography Papers of the Joint Matriculation Board for 1926.)

#### Matriculation Geography Paper set in December, 1927

Time 3 hours.

Answer Question 1 and five others. Not more than three questions may be selected from either Section A or Section B. Seventy-five marks are assigned to Question 1 and forty-five marks to each of the remaining questions.

1. On the accompanying map are shown a number of barometer readings, reduced to sea level, for various stations in the Union and adjoining areas. From these and other readings the isobars of 30.20 inches have been drawn.

- (a) Draw isobars for 30.10, 30.15, 30.25 and 30.30 inches.
- (b) By means of arrows indicate approximate wind directions.
- (c) Where would rainfall be likely to occur?
- (d) During what month is such a distribution of pressure likely to occur, and for what reasons?

## A.

- 2. (a) Give some account of the main influences of the sun and the moon upon the formation of tides in the open ocean.
- (b) Why do successive high tides at any place normally occur at intervals of rather more than twelve hours?
- 3. Draw an imaginary land mass stretching from 60 degs N. to 60 degs S., the western and eastern coasts being represented by parallel straight lines. Draw the parallels of latitude across the land mass and indicate where you would expect rainfall to occur in the month of January. Give your reasons.
- 4. Give some account of the relationship between the climate, vegetation and fauna of the region in which your school or your home is situated. The locality must be mentioned.
- 5. Describe the special influences of the environment of a mountain region upon the character and activities of the people inhabiting it. Contrast these influences with those of a plain.

## B.

- 6. Write a brief description of the relief, climate and economic possibilities of either the plateau region of East Africa or the mandated territory of South West Africa. Draw a sketch map to illustrate your description.
- 7. Compare the geographical conditions which have determined the chief wheat growing regions of North America and South America. Sketch-maps showing the positions of the regions must be given.
- 8. Europe North of the Mediterranean is sometimes regarded as being divisible into three main geographic regions: the Maritime Region, the Continental Region and the Transition Zone. What are the distinguishing characteristics of these regions and where would you place their boundaries?
- 9. You are about to make a journey by train or by motor car from the Victoria Falls to Port Elizabeth. (a) Indicate the route you will take. (b) Describe briefly the main characteristics of the major geographical regions through which you will pass.
- 10. From the point of view of the influences of position, relief, climate and natural resources upon economic development compare either Natal with New South Wales or the south western parts of the Cape Province with those of

Western Australia.

(Taken from the Examination Papers of the Joint Matriculation Board for 1927, pp. 102-103.)

---

A P P E N D I X 53

FIVE EXAMINATION PAPERS IN MATRICULATION GEOGRAPHY AND HISTORY  
SET ON THE SYLLABUS WHICH CAME INTO EFFECT AT THE EXAMINATION  
OF 1920

Matriculation History-and-Geography Paper set in December, 1923

N.B. Answer six questions only. Fifty marks are assigned to each question.

Time 3 hours.

1. (a) On the map provided trace in the Atlantic and Indian Oceans - (i) the chief ocean currents in July; (ii) the prevailing winds in July.

(b) In what respects did these winds and currents influence the routes to the East followed by the Portuguese and the Dutch in the 17th century?

(c) Indicate these routes on the map provided.

2. State briefly what you consider to have been the most important results of the great geographical discoveries of the 15th and 16th centuries.

3. (a) Describe briefly the circumnavigation of the globe by Magellan and Cook.

(b) What was the object of these voyages and what were the chief results?

4. To what extent did geographical conditions - relief, climate, rainfall, etc. - affect the expansion of the settlement at the Cape during the 18th century?

5. (a) Describe briefly the chief climatic regions of North America.

(b) To what extent can geographical conditions be said to have influenced the success of the English in their struggle against the French in the 17th century?

6. Give a brief account of the mining industries of South Africa. Give some idea of their relative importance and the effect they have had on the development of the country.

7. (a) Describe the form of government chosen by either the United States of America or Australia.

(b) To what extent would you ascribe this form of government to geographical conditions prevailing in the country?

8. (a) Divide South Africa into climatic regions, giving your reasons for each division.

(b) Describe the typical products of each region. Illustrate by means of a sketch-map.

9. Of what economic and political importance is the Panama Canal to the United States of America?

10. "Eastern Canada developed much earlier than Western Canada." Explain this statement and give reasons.

11. Describe the situation of the following cities, and show how it has influenced their development:- New York, Winnipeg, Montreal.

12. Write notes on any three of the following:- Cartier, Pizarro, Trigardt, Livingstone.

(Taken from the Examination Papers of the Joint Matriculation Board for 1923, pp. 86-87.)

Matriculation History-and-Geography Paper set in June, 1924

Time 3 hours.

Answer six questions.

1. Explain carefully what you consider to have been the chief difficulties encountered by the Portuguese and Dutch navigators on their way to the East. How did they seek to overcome these difficulties?

2. What are the chief geographical factors that influence the trade of a city? Illustrate your answer by reference to Venice in the Middle Ages and Winnipeg to-day.

3. Describe the part played by Prince Henry the Navigator in the history of discovery during the 15th century.

4. (a) Describe briefly the geographical conditions which prevail (i) on the East Coast of North America, and (ii) in Canada.

(b) How did these conditions affect the economic development of the English and French colonists in the 17th century?

5. Describe carefully the commercial policy of the Dutch East India Company. In what respects did this policy affect the colonists at the Cape in the 18th century?

6. (a) Describe carefully the relief of the continent of

Africa.

(b) What effect did the relief of the country have upon (i) discoveries and (ii) colonization by European nations?

7. (i) Draw a sketch-map of the Union of South Africa and on it indicate clearly (a) the chief mining areas, and (b) the chief agricultural areas.

(ii) Show with what ports each is connected, and compare the relative advantages of the various ports with respect to foreign trade.

8. Write notes on any three of the following:- Da Gama, Champlain, Tasman, Stanley.

9. (a) Divide Australia into climatic regions, giving reasons for each division. Illustrate by means of a sketch-map.

(b) In what respects have climatic conditions affected colonization in Australia?

10. (a) Describe carefully the rainfall of South Africa.

(b) Why does the rainfall decrease from East to West and how does the decreasing rainfall affect natural vegetation?

11. Explain carefully the causes which led to the development of California.

12. New York is often called "the gateway to the American Continent." Explain this statement and compare New York with Boston and Montreal with respect to geographical advantages.

(Taken from the Examination Papers of the Joint Matriculation Board for 1924, pp. 85-86.)

Matriculation History-and-Geography Paper set in December, 1927

Time 3 hours.

Answer six questions only.

1. (a) What were the chief difficulties encountered by the Portuguese and the Dutch navigators on their way to the East?

(b) How did they seek to overcome these difficulties.

Illustrate your answer by means of a sketch-map.

2. "Two of the most important factors which govern the trade of a city are its position and its climate." Discuss this statement, and illustrate your answer by reference to any two well-known commercial cities in mediaeval or modern times.

3. What do you know of the achievements of any three of the following:- La Salle, Magellan, Pizarro, Linschoten, Stanley?

4. (a) Describe briefly the chief pursuits of the colonists at the Cape during the 17th and 18th centuries.

(b) How were these occupations influenced by geographical

conditions?

(c) With what difficulties, other than geographical, had the farmers to contend under the rule of the Dutch East India Company?

5. Describe the part played by the St. Lawrence and Congo rivers in the opening up of North America and Africa respectively.

6. (a) Describe the chief climatic regions of Australia, illustrating your answer by means of a sketch-map.

(b) How have colonisation and labour in Australia been affected by climatic conditions?

7. (a) Which are the chief wool-exporting areas of the world?

(b) Compare the climates and vegetation of these areas, and explain their influence upon the production of wool.

8. Explain carefully the influence of the discovery of gold and diamonds on the development of South Africa.

9. (a) Distinguish between a "Federation" and a "Union."

(b) Explain why the United States of America chose a Federation, and South Africa a Union as its form of government.

10. Describe carefully the sugar industry of Natal, and discuss any problems which have arisen in connection with it in recent years.

11. Of what economic and political importance is the Panama Canal to the United States of America?

(Taken from the Geography-and-History Examination Papers of the Joint Matriculation Board for 1927, pp. 98-99.)

Matriculation History-and-Geography Paper set in December, 1930

Time 3 hours. Answer six questions only.

1. Describe briefly what you consider to have been the chief results of the great geographical discoveries at the end of the 15th and the beginning of the 16th centuries, with particular reference to trade.

2. In what respects did geographical conditions affect the mode of life and the trade of the early French and English colonists in North America?

3. Describe carefully the form of government, central and local, introduced at the Cape during the rule of the Dutch East India Company.

4. Describe briefly the geographical discoveries made by any three(3) of the following:- Cortes, Tasman, La Salle,

Hudson.

5. Why are Winnipeg, New York and Sydney important trade-centres or ports of call to-day?
6. Describe the chief climatic regions on the West Coast of North America and name -
  - (a) the chief factors which help to make these climatic regions (e.g. rainfall, winds, etc.);
  - (b) the chief exports of, and one important city in, each region.
7. (i) Describe carefully what is meant by (a) a steppe region, (b) a region with a Mediterranean type of climate, (c) a coniferous forest region.
  - (ii) Give two examples of each region and tell what would probably be the chief pursuits in each.
8. Compare the situation to-day in South Africa and Australia with regard to native labour.
9. What is meant by a "federal system of government"? Name any two countries where this form of government has been chosen, and explain the reasons which led to its adoption.
10. What are the chief seaports of the Union of South Africa? How would you rank them in order of importance and why? Show by means of a sketch-map how each is connected with the chief industrial or agricultural centres of the country. (Taken from the Examination Papers of the Joint Matriculation Board for 1930)

Matriculation History-and-Geography Paper set in December, 1935

Time 3 hours. Answer any six questions.

1. (a) Give a brief description of the principal inter-continental trade routes of the 14th and 15th centuries.
  - (b) Give a short description of the natural conditions of areas through which these routes went.
  - (c) What technical developments and geographical knowledge made it possible at the time for the European nations to give more attention to ocean routes.
2. (a) Outline the expansion of South Africa and its colonization by Europeans from about 1700 to 1820. Which towns were founded in the occupied area, and when?
  - (b) Describe the relief, climate and natural vegetation of the areas concerned.
3. (a) Describe the economic conditions at the Cape during the time of the Van der Stels.
  - (b) What were the economic developments which caused the

difficulties with Willem Adriaan van der Stel?

4. (a) Compare the colonization of the New England Colonies with that of the Southern Colonies, e.g. Virginia, in the 17th century.

(b) To what extent was the colonization influenced by the geographical conditions?

5. (a) In the 19th century there was emigration on a very large scale from Europe to the United States of America. Of what class and nationality were these people? How can it be explained that America was capable of absorbing these immigrants?

(b) Compare the climate of the land they came from with that of the land of their adoption.

6. Describe the cause of the racial and language question in Canada. What are the present political and economic conditions of the two provinces concerned?

7. (a) Outline the development of railways in South Africa during the last half of the 19th century. What are the reasons for the expansion?

(b) What part did the relief play in the constructing of these railway lines?

8. Explain the constitution of the Commonwealth of Australia with special reference to central and state powers. To what extent do we find influence of geographical factors in the constitution?

9. (a) Give the causes for the construction of trans-continental railways in Canada and in Australia.

(b) Compare the natural geographical conditions of the areas through which the railway lines run.

10. Give a brief description of the course of the American War of Independence, with special reference to the events and natural conditions which brought about a change in the trend of affairs. (No description of battles is expected.)  
(Taken from the Examination Papers of the Joint Matriculation Board for 1935.)

---

A P P E N D I X 54FIVE EXAMINATION PAPERS SET ON THE MATRICULATION SYLLABUS  
IN GEOGRAPHY WHICH CAME INTO FORCE AT THE EXAMINATION IN  
DECEMBER, 1928Matriculation Geography Paper set in December, 1930

Time 3 hours.

Answer two questions from Section A and four from Section B.

Section A

1. Explain with the help of diagrams the causes of the seasons and their distinguishing characteristics.
2. What do you understand by planetary winds? How do they affect the climate of the Union of South Africa and with what economic results?
3. Explain how mountains are formed.
4. On the accompanying map of the Atlantic Ocean the salinity of the water is given in thousandths (weight per thousand weight units of water). Draw lines of equal salinity (isohalines) for every .5 per thousand. Explain the trend of the isohalines.

Section B

5. Examine the influence of the orography and the climate on the drainage of the Union of South Africa and the consequent value of our rivers to man.
6. Give an account of the natural vegetation of the South-western Cape Province and of the Transvaal Bushveld and the resultant value of the two areas for the pastoral industries.
7. Compare and contrast the natural environment and resultant mode of life of the Arabs and the Eskimos.
8. With a view to establish a freight service between New York and Yokohama a shipping company is investigating the prospects on four different routes. Which four routes would in your opinion be considered? State with reasons which one you consider the best and most profitable.
9. Mention the chief areas and the general conditions of production of either coal or gold.  
Examine the conditions of production of any one country in more detail.
10. Give an account of (a) the climate, (b) natural vegetation, (c) chief products of one of the following:- Brazil, China, Italy.

Matriculation Geography Paper set in December, 1933

Time 3 hours.

Answer six questions - two from Section A and four from Section B.

Section A

1. Explain with the help of diagrams the origin of - (a) the seasons; (b) the tides.
2. Write an essay on the causes, distribution and relief-forming influences of volcanism.
3. On the accompanying tables the temperatures (degs F.) and rainfall (inches) are given for three meteorological stations A, B, C. Draw diagrams on squared paper to represent the given data. Of what types of climate is each of the three typical? Discuss their characteristics as can be derived from the diagrams.
4. Discuss with examples the physical-geographical conditions which exercise influence on - (a) steam navigation on the ocean; (b) the development of water-power in a country.

Section B

5. Discuss - (a) the physical-geographical features of the Witwatersrand areas in Transvaal; (b) the economic development of the area.
6. Make a study of the distribution and economic exploitation of the equatorial forests and the great coniferous forests of the world.
7. Discuss Southern Rhodesia or Portuguese East Africa under the following headings - (a) location; (b) climate; (c) economic development.
8. Write an essay on Central Asia under the following headings: (a) climate; (b) natural vegetation; (c) human races and their mode of living.
9. Divide either Australia or the United States of North America into natural geographical regions and briefly discuss the geographical characteristics of each region.
10. Give a survey of communications in either South America or in Canada.

Matriculation Geography Paper set in December, 1935

Time 3 hours. Answer six questions - two from Section A and four from Section B.

Section A

1. Explain what causes day and night and the seasons. Why are the days in summer longer than in winter? Are the differ-

ences the same everywhere?

2. (a) Discuss the influence of ocean currents on the climate of an area near which they flow.

(b) Describe the influence and name the currents which flow past the following places:- Atacama desert, New Foundland, New Zealand, Norway, Formosa Island, Ceylon, Madagascar and British Columbia.

3. Write notes on five of the following:- artesian wells, folded mountains, forming of deltas, measuring the circumference of the Earth, fiords, inversion of temperature, convectional rains.

4. Between what latitudes do the Trade Winds mainly occur? Why in those areas? Do these winds blow in those latitudes only? What reasons are there for a change of area? Name four instances only of actual change of wind direction in those areas.

#### Section B

5. Insert on a sketch map the chief natural vegetation areas of South Africa (the Union and Southern Rhodesia). Discuss the activities of the people in the Eastern Grasslands or Savanna of the eastern Cape Province, Natal and northern Transvaal and in the Park Steppe or Highveld of Rhodesia.

6. Discuss the importance to communication of the Panama and the Suez Canals. (Note the shortening of the sea routes between areas concerned, and the nations deriving economic and military advantage.) What difference is there between the two Canals?

7. Which human races are found in Africa and what are the chief characteristics of each? Are there any signs of mixed breeding?

8. Discuss and compare the economic-geographical conditions of the Temperate Grasslands of North America, Europe and Asia, or of South America, South Africa and Australia.

9. Discuss the climate, relief, natural vegetation and population of your own district. Show how the third was influenced by the first two.

10. Describe and explain the climate, population and economic-geographical conditions of the East Indian Islands with special reference to Java.

#### Matriculation Geography Paper set in December, 1937

Time 3 hours. In Section A answer Question 1 and one other question; in Section B answer Question 4 and three other questions: six questions in all.

Section A

1. The map of the Lake Victoria region provided shows meridians 30 degs E. and 36 degs E., together with the Equator.

(a) Find the approximate scale of the map in miles to the inch.

(b) Draw a section along the Equator from west to east, stating the vertical scale used. (Lake Victoria is 3,726 feet above sea-level.)

(c) Write a note on the lakes of this region.

(d) Many streams flow into Lake Victoria. From your knowledge of contours, indicate on the map where such streams might be found.

2. Describe briefly and give reasons for the climatic conditions prevailing throughout the year in three of the following places:- Athens; Winnipeg; Rangoon; Hobart; Khartoum.

3. Write short notes on five of the following:- Tidal bores; river-capture; twilight; the Beaufort Scale; total eclipse of the sun; relative humidity; synclinal mountains; artesian basins.

Section B

4. On the map of the World provided indicate:-

(a) Regions of Equatorial Forest.

(b) Regions having a "Mediterranean" type of climate.

(c) Angola, Java, Libya, Colombia, South Australia, Cuba, Uruguay, Iran, Manchuria, The Philippines.

(d) The rivers Danube, Nile, Hwang-ho, Mackenzie and Rio Grande (N. America).

(e) The shortest sea-routes from Valparaiso to New York and from London to Wellington (New Zealand), and the summer route from Liverpool to Quebec.

5. Enumerate the principal cereals, and name the most important regions where each is produced. Select two of the cereals named, and explain how their production is influenced by geographical factors.

6. What do you understand by the term Natural Regions? Draw a sketch-map of either Africa or Australia, divide the continent into Major Natural Regions, and give reasons for your division.

7. Examine the geographical factors that have contributed to the origin and development of towns in the Union of South Africa.

8. (a) Give some account of shipping on the St. Lawrence and the Great Lakes of North America. To what extent have obstacles to navigation on these waterways been overcome?

(b) By what routes does the surplus wheat of North America reach the coast?

9. Describe any three of the following regions, pointing out the relationship between natural conditions and human occupations:- The Coastal Plain of Natal; Java; the Great Valley of California; the Punjab; the Ruhr district.

10. Write an essay on one of the following subjects:-

(a) The progress and distribution of manufacturing in South Africa.

(b) The native peoples of Africa.

(c) The scope and subject-matter of geography.

Matriculation Geography Paper set in November-December, 1939

Time 3 hours.

In Section A answer Question 1 and one other question; in Section B answer Question 5 and three other questions: six questions in all.

Section A

1. Study and return the sketch-map provided. (a) What region does it represent? (2) (b) Draw a section from A to B, equal in length to the line AB. (25) (c) Insert the names of one of the lakes, two of the rivers or tributaries, and five of the towns represented. (8) (d) Estimate approximately the area of the principal river-basin, or give a brief description of the region. (15)

2. Temperature and rainfall statistics for two South African towns are given below. (Refer to them in your answer as Place A and Place B.) Place A is 181 feet and Place B 5,925 feet above sea-level.

(a) On the squared paper provided construct a temperature chart and a rainfall chart for either of the two places.

(b) Write a note on the climatic conditions of each place. In what part of the country, approximately, might each place be situated?

<u>Place A</u>	J	F	M	A	M	J	J	A	S	O	N	D
T.(F.)	69	70	68	64	61	59	57	58	59	61	64	67
R.(")	1.1	0.7	1.4	2.5	2.3	1.0	2.3	2.6	2.2	1.4	1.9	1.6

Place B

T.(F.)	66	65	63	59	55	50	51	54	59	62	64	65
R.(")	5.9	4.6	3.7	1.3	0.7	0.0	0.1	0.3	0.8	2.6	4.0	4.2

(50)

3. Why does the apparent path of the sun in the sky vary (a) from day to day to an observer in the same place; (b) on the same day to observers in different latitudes? Illustrate your answer by means of diagrams. (50)

4. Write notes on four of the following:- The form and size

of the earth; how longitude is found; earthquakes; convectional rainfall; the currents of the Pacific Ocean; twilight; solstices and equinoxes; the International Date Line. (50)

Section B

5. On the map of the world provided indicate the following:-

- (a) The 32 deg. F. winter isotherm in the Northern Hemisphere. (5)
- (b) The direction of the winds prevailing in and around Africa in December. (8)
- (c) Parts of India receiving rainfall in December. (3)
- (d) Three areas south of the Equator and outside the Tropics, one in each of the Southern Continents, which have somewhat similar climatic characteristics. (6)
- (e) The cotton-belt of the United States, the coniferous-forest belt of Europe and Asia, and the most important area for wheat production in India. (6)
- (f) Three important inter-continental air-routes, together with towns along each. (9)
- (g) Florida, the Strait of Malacca, Cape Horn, Korea, Lake Baikal, Tokyo, The Hwang-ho, the Frisian Islands, Canton, Istanbul, the Volga, the Greater Antilles, Bass Strait. (13)

6. "The main features of the relief of Africa present a sharp contrast to those of South America." Examine this statement as fully as possible. (50)

7. Divide North America into Major Natural Regions, illustrating your answer by means of a sketch-map. Give reasons for the particular divisions you adopt. (50)

8. Show how three of the following towns owe much of their importance to their position with regard to the control of important routes:- Montreal; Singapore; Winnipeg; Hamburg; Vienna; Istanbul. Illustrate your answer by means of sketch-maps. (50)

9. Give a geographical description of the Netherlands East Indies, illustrating your account by means of a sketch-map. (50)

10. What are the chief commodities exported from the tropical regions to the temperate regions? Select three commodities from different parts of the Tropics, and describe where and how they are produced. (50)

11. Write a geographical account of two of the following territories:- Basutoland; Swaziland; the Bechuanaland Protectorate. (50)

A P P E N D I X 55FIVE EXAMINATION PAPERS SET ON THE MATRICULATION SYLLABUS  
IN GEOGRAPHY WHICH CAME INTO FORCE AT THE EXAMINATION IN  
NOVEMBER, 1947Matriculation Geography Paper set in March, 1948

Time 3 hours.

Answer two questions from Section A; question 5 and three other questions from Section B. Six questions in all.

Section A

1. Write notes (15 to 20 lines) on three of the following, illustrating your answer wherever possible, by sketches or diagrams:-

(a) The variation in the length of day and night in different parts of the globe.

(b) The variation in temperature between the two main seasons of the year.

(c) The Mercator Map Projection - its advantages and disadvantages.

(d) Spring Tides and Neap Tides.

(e) The Standard Time Zones of North America. (50)

2. (a) What do you understand by the term "isotherm"? (5)

(b) From the following figures, what facts do you deduce about the temperature and rainfall of the place?

Temp. degs F.	J	F	M	A	M	J
Average Maximum	93	90	85	79	71	67
Average Minimum	63	63	59	51	43	38
Average rainfall in inches	2.3	2.4	3.1	1.4	0.7	0.2

  

Temp. degs F.	J	A	S	O	N	D
Average Maximum	67	71	79	85	88	92
Average Minimum	37	41	47	53	57	62
Average rainfall in inches	0.2	0.3	0.6	1.0	1.6	1.9

(c) If this place were 3,900 feet above sea level, on what isotherm would it be in (i) January, and (ii) July? (8)

(d) What is the main type of rainfall that is likely to occur? How is this rainfall brought about? (10)

(c) Using the graph paper provided, draw temperature and rainfall graphs of the figures given in (b) (12)

3. (a) Explain how the rock surfaces are affected by the weather in:- (i) high mountain regions, such as the Alps; (ii) limestone regions, such as the northern part of South West Africa; (iii) desert regions, such as Arabia. (30)

(b) Explain how a river affects the surface of the earth over which it flows. Give examples and diagrams in illustration. (20)

4. (a) Explain how the Monsoon Wind system of Asia is

brought about. (30)

(b) Draw sketch maps in illustration of your answer. (20)

Section B

5. On the map of the world provided indicate clearly and neatly the following:-

(a) Those regions that experience a cool temperate maritime (West European) type of climate, and those regions which experience a Mediterranean type of climate. (10)

(b) Three important producing areas of each of these:- coffee, sugar-cane, rubber, wool, hardwood timber. (15)

(c) The air route between Europe and South Africa, with important intermediate stopping places. (5)

(d) Five important canals with their names. (5)

(e) Belgian Congo, Brazil, Germany, China, and the United States of America, with their approximate boundaries. (10)

(f) Algiers, Auckland, Delhi, Glasgow, St. Louis. (5)

6. What effect have the discovery and development of mineral fields had upon the development of the railway system of Africa south of the Zambesi. Illustrate your answer by a sketch map. (50)

7. Describe rice, tea, and silk in Monsoon Asia, dealing with

(a) regions of large scale production; (10)

(b) the conditions under which each crop is produced; (25)

(c) the export of rice and tea to other lands; (10)

(d) the manufacture of silk in Asia. (5)

8. (a) Explain how the planetary wind system has been largely responsible for the division of Chile into three natural regions. (10)

(b) What difference in relief and climate are to be seen in these three regions? (15)

(c) Describe the economic development of these three regions. (25)

9. (a) Where are the main manufacturing regions of the British Isles situated? (5)

(b) Why did this country become the "workshop of the world" during the 19th Century? (15)

(c) Choose one of the main manufacturing regions and describe its activities as fully as you can. (30)

10. Write an account of sheep farming in the Southern Hemisphere, dealing with:- (a) the chief sheep farming areas; (b) important differences in natural conditions in each area; (c) methods of sheep farming; (d) the products of sheep farming and their destination. (50)

11. Choose either the Cotton Belt or the Maize Belt of the United States of America, and describe:- (a) the situation

of the belt; (b) climatic conditions; (c) methods of production of the main crop and of other crops cultivated in the same area; (d) the destination of the products of the region; (e) the chief towns and communications. (50)

12. (a) What are the requirements of a large port?

(b) Choose three large ports in different parts of the world and for each:- (i) show its position either by an annotated sketch map or a description; (ii) describe the trade, both import and export, that it carries on. (50)

Matriculation Geography Paper set in November-December, 1948

Time 3 hours.

Answer two questions from Section A; Question 5 and three other questions from Section B.

Section A

1. Write 15 to 20 lines on three of the following, and illustrate your answer, where possible, by sketches or diagrams:-

(a) The reason why the temperature of the air at high altitudes is lower than it is at sea-level in the same latitude

(b) The distinction between Sun Time and Standard Time. Why do some countries have Time Zones?

(c) The relative merits of the Mollweide and the Mercator projection. Which would you choose for a world map to show Ocean Currents and why?

(d) What is meant by the statement that a place has a mean January temperature of 72 degrees F.? How has this figure been obtained?

(e) Why is High Tide later each day than it was the day before? (50)

2. (a) Give an account of the Tropical Monsoon climate and illustrate your answer with sketch maps of India showing pressure-belts, winds and rainfall. (40)

(b) On the squared paper supplied make general temperature and rainfall graphs to illustrate the climate conditions of Bombay or Calcutta. Only approximately correct data are expected. (10)

3. Where will a river in its course to the sea (a) wear away the surface of the land; (b) raise the level of the land by depositing material? Explain these processes. (40)

Illustrate these processes of erosion and deposition giving examples from rivers in different parts of the world. (10)

4. On the contoured map provided -

(a) draw the main river and three tributaries; (6)

- (b) mark two peaks, a spur, a gentle slope, a pass, and draw the lake into which the main river drains; (8)
- (c) draw a road to pass through the main valley and calculate its length; (6)
- (d) give a general description of the region and describe the view looking up the main valley from X; (20)
- (e) draw a section from A to B using the squared paper provided. (10)

### Section B

5. In the map of the world supplied fill in -

- (a) the tropical forest regions; (3)
- (b) the following ocean currents, showing their direction and stating whether they are warm or cold: the Peru Current, the North Atlantic Drift, the Mozambique Current, and the West Wind Drift; (8)
- (c) three important oilfields, each in a different continent, with their names; (6)
- (d) the cotton-belt of the U.S.A. with three cotton-exporting ports; (4)
- (e) regions where the following are produced on a large scale - Tea(2 regions.)Tobacco(2 regions). Rice(3 regions). Cane Sugar(3 regions). (10)
- (f) three important canals for inland traffic. (3)
- (g) three regions each of which produces a large quantity of one of the following for export: mutton, beef, fruit; and the port from which each is exported. (6)
- (h) South West Africa, Bolivia, Labrador, Norway, Pakistan, with their respective boundaries. (10)

6. (a) Name the chief coalfields in the Union of South Africa. (5)

(b) Show their location and the chief towns and rail communications on a sketch map. (15)

(c) Discuss the factors that have contributed to their development. (10)

(d) What is their importance to South Africa? (20)

7. In what parts of South America are deserts or semi-deserts found? Explain the reasons for their arid condition, and give an account of their utilisation by man. (50)

8. Choose two of the following commodities: Wood-pulp in Canada; raw silk in China; butter and cheese in New Zealand; coffee in Brazil. State -

(a) The main producing areas with their important towns.

(b) The geographical conditions which have led to production on a large scale.

(c) The destination of the product when exported. (50)

9. (a) On a sketch map of Australia mark the main Natural

## Regions (10)

(b) Choose two different regions, one in the east and one in the west, and give an account of the climate, the natural vegetation and the economic development of the areas. (40)

10. Choose any two of the following regions, and, in each case show how geographical conditions have affected the lives and the occupations of the people: Belgium; Southern Rhodesia; the Lancashire Coalfield; the Indus Basin; North Italy. (50)

11. What geographical factors favour the location of manufacturing industries? (20)

Illustrate your answer by reference to manufacturing in either North-East United States or Central Japan. (30)

12. Discuss three of the following statements (about 15 to 20 lines).

(a) The River Rhine is an important commercial highway.

(b) The Canadian Shield is rich in minerals.

(c) Soil erosion is one of the greatest problems in South Africa.

(d) California grows one-third of the fruit and one-quarter of the vegetables of the whole United States.

(e) Java is one of the most densely populated agricultural regions of the world. (50)

Matriculation Geography Paper set in November-December, 1949

Time 3 hours.

Answer two questions from Section A, Question 5 and three other questions from Section B.

Section A

1. Write 10 or 15 lines on three of the following, illustrating your answer, where possible, by sketches or diagrams:-

(a) The rainfall of your home or school district and how it is measured and recorded.

(b) The meaning of the terms Equinox and Solstice.

(c) The influence of Ocean Currents on the climate of South Africa.

(d) Spring Tides and Neap Tides.

(e) The choice of a map projection for a map of the Transvaal, and for a sea chart, and the reasons for your choice. (50)

2. (a) Draw a circle to represent the world and in it mark the pressure belts and the prevailing winds, as they would appear if the surface of the earth showed no differences between land and sea. (10)

(b) State and account for the chief points of difference between the nature of the Trade Winds and that of the prevailing Westerlies, illustrating your answer by reference

to the areas in the Southern Hemisphere over which they are the regular winds. (40)

3. (a) Name five different types of lakes and explain how they have been formed, giving examples of each type from different parts of the world. (30)

(b) Choose two lakes formed in different ways and in each case draw a map to show the position of the lake. Indicate the surrounding relief by roughly approximate contours. (20)

4. The following statistics refer to a particular town:-

	J	F	M	A	M	J
T.(F.)	49.3	52.0	54.1	56.5	60.8	66.4
R.(")	3.7	3.3	3.8	2.8	2.1	0.5

	J	A	S	O	N	D
T.(F.)	70.2	70.2	68.0	61.5	56.1	50.7
R.(")	0.2	0.3	1.3	3.0	3.7	4.0

(a) Examine the figures and state the important facts derived from them. (10)

(b) Give a full account of the type of climate the place experiences. (20)

(c) What type of natural vegetation would you expect to find in such a place and what crops are likely to be grown. (10)

(d) On the squared paper provided draw a temperature graph and a rainfall graph for the place. (10)

#### Section B

5. On the map of the world supplied indicate clearly -

(a) the extent of the Coniferous Forests of the Northern Hemisphere and the Deserts of the Southern Hemisphere; (8)

(b) five ports from which the following are exported: tea, rice, coffee, coal, wine (one port for each product). Name the ports; (5)

(c) two important oilfields in Asia (name them); (2)

(d) the International Date Line; (2)

(e) the winds that influence the climate of India in July; (3)

(f) the ocean currents of the Atlantic; (10)

(g) regions where the following are mined: copper, tin, chromium ore, manganese, diamonds, iron. Mark two places for each mineral and name the places or regions; (12)

(h) the following countries with their boundaries: the Belgian Congo, Iran, Sweden, Brazil. (8)

6. (a) What factors have contributed to the recent development of manufacturing in the Union of South Africa? (20)

(b) Discuss the manufactures connected with the following raw materials in South Africa: iron, wool, fruit. Give the centres where the goods are manufactured and the conditions under which this is done. (30)

7. Compare the farming activities of the Argentine Pampas with those of the Prairie Provinces of Canada showing how

climatic and other factors have influenced the development of the regions. (50)

8. (a) What is meant by the "Cotton Belt" of the U.S.A.? State the chief cotton-growing areas and give an account of the conditions under which the crop is produced. (30)

(b) Where in the United States is cotton manufactured? Give an account of the industry and name the chief towns engaged in cotton manufacture. (20)

9. (a) What are the characteristics of a good port? (Choose examples from European ports). (10)

(b) Select four important ports in Europe (not more than one from the British Isles), and, with the help of sketch maps describe their position and give reasons for their importance. (40)

10. (a) Discuss the conditions that have influenced the development of the mutton and dairy industries in New Zealand. (30)

(b) With the help of a sketch map state the chief sheep and cattle areas of the country and the ports from which the products are exported. (20)

11. Choose two of the following subjects and write about 25 lines on each:-

- (a) The fisheries of Newfoundland and of British Columbia.
- (b) The cultivation of rubber in the East Indies, including the Malay Peninsula.
- (c) Irrigation in the Nile Valley.
- (d) The Panama Canal. (50)

12. (a) Describe the course of the Yangtze River from its source to the sea and give some account of the country passed through discussing the climate and the occupations of the inhabitants. (20)

(b) Draw a sketch map in illustration, marking two tributaries and five important towns. (15)

(c) Write short notes on any three of these towns. (15)

Matriculation Geography Paper set in November-December, 1950

Time 3 hours.

Answer two questions from Section A; Question 5 and three other questions from Section B.

Section A

1. Write 10-15 lines on three of the following (30-45 lines in all), illustrating your answer, where possible, by sketches and diagrams:-

(i) Why equatorial regions are always warm and polar regions always cold.

(ii) Why the windward side of a mountain barrier is wetter than the leeward side.

(iii) Why a Mollweide projection is often chosen for a map to show natural vegetation regions.

(iv) Why the length of day and night varies during the year in the place where your home or school is situated.

(v) Why deserts are found on the West coasts of continents between 20 degs and 30 degs S. latitudes. (60)

2. Explain, giving examples from different parts of the world, three ways in which mountains have been formed. Illustrate your answer with sketches and diagrams. (60)

3. The following temperature and rainfall figures refer to two towns A and B. Both are on the equator, but the altitude of one is 33 feet and that of the other 9,350 feet above sea level:-

(a) Study the figures and state the important facts they reveal. (10)

(b) Discuss the climate of each place and account for the characteristics of each climatic type and the differences between them as shown by these figures. (26)

(c) Describe briefly the Natural Vegetation likely to be found at each place. (12)

(d) Choose either A or B and on the graph paper provided represent the temperature and rainfall. (Do not use more than half the graph paper for this.) (12)

	<u>Place A</u>											
	J	F	M	A	M	J	J	A	S	O	N	D
T.(F.)	78.0	79.0	80.0	80.8	81.5	81.0	81.0	80.6	80.4	80.1	79.3	78.6
R.(")	8.5	6.1	6.5	6.9	7.2	6.7	6.8	8.5	7.1	8.2	10.0	10.4
	<u>Place B</u>											
	J	F	M	A	M	J	J	A	S	O	N	D
T.(F.)	54.0	55.0	54.5	54.5	54.7	55.0	54.9	54.9	55.0	54.7	54.3	54.7
R.(")	3.9	3.9	4.8	7.0	4.6	1.5	1.1	2.2	2.6	3.9	4.0	3.6

4. Study the contour map and mark:- (a) The main river and three tributaries. (8) (b) The site of a town (T) where ship-building is carried on. (2) (c) The railway from this town passing through the gap in the West. Estimate the length of this railway. (9) (d) Draw a section from X to Y on the graph paper provided. (15) (e) Describe carefully the country mapped. (26)

#### Section B

5. On the map of the World provided mark carefully and neatly:-

(a) The Ocean Currents of the Atlantic Ocean indicating their directions and whether they are cold or warm. (10)

(b) The parts of the world that experience a Mediterranean type of climate. (6)

(c) A port which exports raw cotton, a port which exports tinned salmon, a port which exports mutton. Name the

- three ports. (3)
- (d) The Equatorial Forest Lands. (5)
- (e) Regions where tin, copper, iron are mined. (3 places for each; name the places.) (9)
- (f) The prevailing winds that blow on the West coast of N. America in July. (3)
- (g) The following rivers: Nile, Congo, Volga each with a tributary. (6)
- (h) Alaska, Queensland, Nigeria, Argentina with boundaries. (8)
6. (a) What are the climatic factors that limit the growth of wheat? (12)
- (b) Explain what is meant by "Winter wheat" and "Spring wheat" referring to the areas in North America where each type is grown and to the climatic conditions prevailing in these areas. (24)
- (c) Discuss the export routes of the wheat from the Canadian Prairies and make a sketch map to show these routes. / (24)
7. (a) Which regions in South Africa, in South America, and in Australia are specially suitable for the rearing of sheep? (12)
- (b) Choose either Australia or South America. Discuss sheep farming in the country you have chosen and account for its development. (23)
- (c) In what ways are conditions in the sheep-raising areas of South Africa similar to or different from those in the country you have chosen? (20)
8. (a) Divide China into climatic regions and describe and account for the characteristics of each climatic type. (30)
- (b) Name two important products from each region. (6)
- (c) India and China are both called "Monsoon Lands". In what ways and for what reasons does the climate of India differ from that of China? (24)
9. (a) To what extent have geographical conditions made communications easy in Europe? (24)
- (b) In the case of three of the following towns - Rotterdam, Paris, Marseilles, Milan - draw a sketch-map showing the position of the town and discuss its importance paying special attention to the routes that converge on it. (36)
10. Tea, rice, cotton are three products of India. For each of these crops describe carefully the locations in which it is grown, the geographical conditions which are best suited to it and the uses to which it is put. (60)
11. Choose any two of the following areas:-  
The S.E. region of Brazil. Central Chile. The S. Wales Coalfield. The Natal Coastlands. The Scottish Lowlands.

Discuss the activities of the people in each of the regions you have chosen and show how these are affected by geographical conditions. (60)

12. (a) Name ten of the chief oil producing regions of the world. (10)

(b) With the help of a diagram describe the structure of an oil-field and explain how the oil is obtained and transported. (25)

(c) What advantages are there in mining a liquid like oil over mining a solid like coal? (15)

(d) Why are the centres for the refining of petroleum often found far from the oil wells? (10)

Matriculation Geography Paper set in November-December, 1951

Time 3 hours.

Answer two questions from Section A and four questions from Section B.

Section A

1. Write 10 to 15 lines on three of the following (30 to 45 lines in all) illustrating your answer, where possible, by sketches and diagrams:-

(a) How data for making a Mean Annual Rainfall map are obtained. (b) How the atmosphere is heated. (c) How you would find the Latitude of the place where your home or school is situated. (d) Spring Tides and Neap Tides. (e) Bonne's Projection and its uses. (55)

2. The following statistics refer to four towns. Each is typical of a definite climatic region.

	Mean Jan. Temp.F.	Mean July Temp.F.	Mean Annual Rainfall ins.	When Rain occurs.
A	53	75	35	28.7 in. from November to April.
B.	76	84	72	71 in. from May to October.
C.	45	59	56	All seasons with a Winter maximum.
D	-4	66	20	14 in. from April to September.

(a) Decide what type of climate each represents and give reasons for your answer. (39)

(b) State the type of Natural Vegetation you would expect to find in each region and mention three crops likely to be grown in each. (16)

3. (a) How does the sea act as an agent of erosion? (9)

(b) Account for the formation of (i) a fiord and (ii) a delta. Draw diagrams and give examples. (46)

Discuss the influence each landform has on human settlement.

4. Study the contour map provided.

- (a) Draw in the courses of the rivers. (8) (b) Draw a section from X to Y (vertical scale 1 inch = 500 ft.) (9) (c) Calculate the vertical exaggeration of your section. (4) (d) Describe the country mapped. (22) (e) Draw an East to West railway line through T and estimate its length. (4) (f) Describe the view from T looking North and South. (8)

Section B

5. On the map of the World provided mark clearly and neatly:

- (a) Two regions of Temperate Grassland; two regions of Tropical Forest; two Tropical Deserts. (12)  
 (b) The Ocean Currents of the Indian Ocean in July. (Give names, indicate direction and whether warm or cold.) (10)  
 (c) Two possible sea-routes from Auckland to London with two intermediate ports for each route. (8)  
 (d) The principal port for each of the following: Brazil, Italy, Chile, New South Wales. (4)  
 (e) Mark important areas for the following crops. (Two areas for each crop). Wheat, coffee, cotton, oil-palm, citrus fruit. (10)  
 (f) The natural vegetation regions of Australia. (10)  
 (g) Manchuria, Egypt, Mexico with their boundaries. (6)

6. (a) Give a brief account of the mineral resources of the Transvaal. (15)

(b) Make a sketch-map of the Transvaal and mark the places where minerals are found and the railway lines linking these areas. (25)

(c) Discuss the importance of these minerals to the development of industries in South Africa. (20)

7. (a) Draw a sketch-map of the Mississippi Basin marking three important tributaries and four towns. (12)

(b) Show the position of the chief crop-belts and state the reasons for the distribution of these crops. (41)

(c) Account for the importance of either New Orleans or Galveston. (7)

8. In the Tropics plantation crops are grown to supply the industrial world with many commercial products.

(a) Name eight of these products. (8) (b) Choose any three plantation crops and for each state an important area where it is grown and the conditions of soil, climate, labour supply and transport on which its successful production depends. (40)

(c) In what way are the tropical lands, in their turn, dependent on the great industrial centres of the Temperate Zone? (12)

9. With the help of sketch-maps describe the position and

discuss the importance of three of the following ports:  
Hamburg, Antwerp, London, Glasgow. (60)

10. Choose any two of the following regions:- The Pampas of the Argentine. The North China Plain. South Island, New Zealand. Central Japan.

Give a geographical account of each of the regions chosen showing how natural conditions have influenced human occupations. (50)

11. (a) How do climate and relief affect the development of waterpower? Refer to countries where water-power is used. (22)

(b) Give some account of the industries dependent on hydro-electric power in Canada. (32)

(c) An expensive aluminium "plant" has been erected far up the Saguenay River in Eastern Canada, remote from supplies of the raw material. How do you account for this?(6)

12. Discuss two of the following statements:-

(a) Man's dependence upon metals has increased within the last century to an incredible degree.

(b) The British Isles leads the world in ship-building.

(c) There has been a great development of the Middle East oil production in the last ten years.

(d) The United States is the world's largest producer of sulphur.

(e) Soil erosion is one of the greatest problems in South Africa. (60)

---

A P P E N D I X 56SUBJECTS FOR THE DEPARTMENTAL JUNIOR CERTIFICATE EXAMINATION AS GIVEN IN "SECONDARY SCHOOL COURSES. JUNIOR AND SENIOR CERTIFICATE HANDBOOK" FOR THE YEARS 1925, 1932 and 1946As given in "Secondary School Courses. Junior and Senior Certificate Handbook" for 1925

The syllabus provides for a two-year course of study after Standard VI, the examination being taken at the Standard VIII stage.

Subjects. -

- (1) First Language.
- (2) Second Language.
- (3) Either (a) any two of the following:-  
Biology. Hygiene and Physiology. Physics and Chemistry.  
or (b) any one of the following University Junior Certificate Syllabuses:-  
Botany. Chemistry. Physical Science. Physics.
- (4) (a) Arithmetic, or Housecraft Arithmetic, or Commercial Arithmetic, or Mathematics; and  
(b) History or Geography.
- (5) The equivalent of one major and one minor subject, chosen from the following lists, it being understood that two minor subjects are equivalent to one major subject.

Major Subjects.

Agriculture(after 1925). Music(instrumental). One of the languages specified below:-

French. German. Hebrew. Latin. Sechuana. Sesuto. Xosa(Kafir). Zulu.

Minor Subjects.

✕Arithmetic, or Commercial Arithmetic, or Housecraft Arithmetic. ✕Biology. Bookkeeping. Business Methods. Cookery and Housewifery, or Cookery and Laundrywork. Drawing. ✕Geography. ✕History. ✕Hygiene and Physiology. Manual Training. ✕Mathematics. Needlework. ✕Physics and Chemistry. Shorthand. Typewriting. Aural Training and Theory of Music(after 1925). Gardening and Elementary Agriculture(in 1925 examination only).

✕If not taken under (3) or (4).

(Op. Cit., pp.2-4)

The wide range of possible options enables schools to select special courses of study suited to their individual requirements. The possible number of these distinctive courses is large. A few typical groupings are here set out: A General Course might consist of two languages, science, arithmetic, history or geography, woodwork or needlework, and a third language.

A Girls' Course might consist of two languages, science (biology and hygiene and physiology), housecraft arithmetic, history or geography, needlework and instrumental music.

A Rural Course might consist in 1926 of two languages, science, arithmetic or housecraft Arithmetic, geography or history, woodwork or needlework, and agriculture....

A Commercial Course might consist in 1925 of two languages, science, commercial arithmetic, history or geography, shorthand, bookkeeping, business methods.

An Academic Course might consist of two languages, science, arithmetic, history or geography, mathematics, and Latin or other third language. (Op. Cit., pp. 4-5.)

Two minor subjects are regarded as equivalent to one major subject.

The subjects to be selected in accordance with the requirements indicated above amount to the equivalent of five major subjects and one minor subject. To gain a full certificate, candidates will be required to pass in the aggregate, in one of the official languages taken on the higher grade, and in a total equivalent to four major subjects and one minor subject. Subjects carrying 200 marks or less are reckoned as minor subjects. (Op. Cit., p. 7.)

Aggregate pass: 40%; First Class 60%; Subject pass 30%. (Op. Cit., p. 8.)

As given in "Secondary School Courses. Junior and Senior Certificate Handbook" for 1932

Candidates must take the following subjects:-

- (1) First language.
- (2) Second language.
- (3) Any two of the following:-

Biology, Hygiene and Physiology, Physics and Chemistry, and in addition, the equivalent of three major subjects from the following list, two minor subjects being equivalent to one major subject:-

Major Subjects

French. German. Hebrew. Latin. Chwana. Suto. Xosa. Zulu. Bookkeeping and Commercial Arithmetic. Cookery, Laundrywork and Housewifery. Geography. Greek. History. Instrumental Music. Mathematics. Shorthand Theory and Typewriting. Arithmetic(as major subject). Agriculture(as major subject). Woodwork(as major subject).

Minor Subjects

Arithmetic(as minor subject). Aural Training and Theory of Music. \*Biology. Cookery and Housewifery or Cookery and Laundrywork. Drawing. \*Hygiene and Physiology. Metalwork. Needlework. \*Physics and Chemistry. Agriculture(as minor

subject). Woodwork(as minor subject).

‡If not taken under (3). (Op. Cit., pp.2-3.)

N.B. The requirements for a pass, as stated here, are the same as given in the 1925 Handbook, except that in 1932 a candidate had to pass in a total equivalent of five major subjects.

As given in "Secondary School Courses. Junior and Senior Certificate Handbook" for 1946

Candidates must take the following subjects:-

- (1) An official language, taken on the higher grade.
- (2) A second modern language.
- (3) Any two of the following:

Biology, Hygiene and Physiology, Physics and Chemistry, and, in addition, the equivalent of three major subjects from the following list, two minor subjects being equivalent to one major subject:-

Major Subjects

French. German. Hebrew. Latin. Southern Sotho. Tswana. Xhosa. Zulu. Bookkeeping and Commercial Arithmetic. Cookery, Housewifery and Laundrywork. Geography(Major). Greek. History(Major). Mathematics. Music. Needlework(major). Shorthand Theory(English or Afrikaans) and Typewriting. Shorthand Theory(English and Afrikaans). Arithmetic(major). Agriculture(major). Art(major). Woodwork(major).

Minor Subjects

Arithmetic or Commercial Arithmetic(minor). ‡Biology. Cookery and Housewifery or Cookery and Laundrywork. Art (minor). Geography(minor). ‡Hygiene and Physiology. Metalwork. Needlework(minor). ‡Physics and Chemistry. Agriculture(minor). Woodwork(minor).

‡If not taken under (3).

N.B. Geography could not be taken both as a minor and as a major subject. Explanation: the minor syllabus was but a shortened version of the major one. The requirements for a pass remain the same as those given in the 1932 Handbook.

---

A P P E N D I X 57SUBJECTS FOR THE UNIVERSITY JUNIOR CERTIFICATE EXAMINATION  
AS GIVEN IN THE RELEVANT HANDBOOKS FOR 1918, 1937 and 1949As given in "Junior Certificate Examination. Regulations  
and Syllabuses and Special Subjects for 1918 and 1919

1. The subjects of examination are as follows:-

Group 1.

English A (No candidate taking this subject may take English B as well) (Two papers) or Dutch A (No candidate taking this subject may take Dutch B as well.) (Two papers). Arithmetic.

Group 11.

English B. Dutch B. Latin. Greek. History. French. German. Hebrew. Xosa or Zulu. Sesuto.

Group 111.

Mathematics. Physics. Chemistry. Physical Science (Physics and Chemistry). (No candidate taking this subject may take either Physics or Chemistry as well.) Botany. Geography.

2. (a) Every candidate will be required to take the two subjects in Group 1, and not less than three or more than four of the subjects in Groups 11 and 111.

When three subjects are taken from Groups 11 and 111, two must be selected from one Group and one from the other Group. When four subjects are taken from Groups 11 and 111, two may be selected from each Group, or one may be selected from Group 111 and three from Group 11, provided that one of the three subjects taken in Group 11 is either (i) Latin, (ii) Greek, or (iii) History. No candidate may take more than two subjects from Group 111. (Op. Cit., p. 4.)

No candidate will be approved by the examiners unless he passes in both subjects in Group 1., and in at least three other subjects (not all of which may be in the same Group), and obtains the required minimum aggregate of marks.

(Op. Cit., p. 4.)

Marks

Highest aggregate obtainable in the examination.....	1900
Minimum aggregate for a place in Class 1.....	1140
" " " " " " 11.....	950
" " " " " " 111.....	760
Subject pass mark.....	30%

(Op. Cit., p. 5.)

As given in the "Junior Certificate Examination Handbook, 1937"

The subjects of examination are as follows:-

Group 1.

English A (two papers), or Afrikaans A (two papers);  
Arithmetic or Commercial Arithmetic.



not already taken. A subject from IV, not already taken.  
 Mathematics. History. Geography. Bookkeeping and Commerce.  
 Shorthand and Typewriting. Geometrical Drawing. Art.  
 Music. Physiology and Hygiene.

Further Regulations

- (a) No candidate taking a subject on the A grade may take the same subject on the B grade.
- (b) No candidate may take both Xhosa and Zulu, on either grade.
- (c) No candidate may take more than one of the three subjects Tswana, Southern Sotho and Northern Sotho, on either grade.
- (d) A candidate taking a Bantu Language on the A grade under I must also take English (A or B) and/or Afrikaans(A or B).
- (e) No candidate taking Botany may take Biology.
- (f) No candidate taking Physical Science may take either Physics or Chemistry.
- (g) No candidate may take more than four languages (including not more than two Bantu languages), and no candidate may take more than two of the Science subjects mentioned under IV.  
 (Op. Cit., pp. 2 & 3.)

In order to pass in the examination as a whole a candidate must:-

- (a) obtain the prescribed minimum aggregate; and
- (b) pass in the subject from I and not fewer than four other subjects.  
 (Op. Cit., p. 4.)

Marks

Percentage in each subject.....	33 $\frac{1}{3}$ %
Minimum aggregate for a pass (Class III).....	880
Minimum aggregate for a place in Class II.....	1,100
Minimum aggregate for a place in Class I.....	1,320
Highest aggregate obtainable in the examination.....	2,200
Highest aggregate obtainable if 3 languages are taken on the A Grade.....	2,400

(Op. Cit., p. 5.)

---

A P P E N D I X 58SUBJECTS FOR THE DEPARTMENTAL SENIOR CERTIFICATE EXAMINATION  
AS GIVEN IN "SECONDARY SCHOOL COURSES. JUNIOR AND SENIOR  
CERTIFICATE HANDBOOKS" FOR 1925, 1936 AND 1946As given in "Secondary School Courses. Junior and Senior  
Certificate Handbook" for 1925

The syllabus provides for a two-year course of study after Standard VIII, the examination being taken at the Standard X stage.

Subjects. - Candidates must take the following subjects:-

1. First Language.
2. Second Language.
3. Science: Agricultural Science, or Biology, or Botany, or Chemistry, or Housecraft Science, or Physiology and Hygiene, or Mechanics, or Physical Science (Physics and Chemistry), or Physics, or Zoology.
4. History, or Geography, or Historical Geography, or Commercial Geography and History, or Greek (as fourth language).
5. The equivalent of two major subjects from the following lists, it being understood that two minor subjects are equivalent to one major subject.

Major Subjects

Another Language. Another Science. Cookery and Housewifery and Laundrywork. Drawing. Geography or Commercial Geography & History. History or Historical Geography. Manual Training. Mathematics. Music. Needlework.

Minor Subjects

Bookkeeping. Business Methods. Commercial Arithmetic. Shorthand. Typewriting. (Op. Cit., p. 53.)

The wide range of possible options enables schools to select special courses of study suited to their individual requirements. The possible number of these distinctive courses is large. A few typical groupings are here set out:

A General Course might consist of two Languages, Science, History, Geography, and Manual Training or Needlework.

A Girls' Course might consist of two Languages, Housecraft Science, History, Needlework, and Music.

A Rural Course might consist of two Languages, Agricultural Science, Geography or History, Biology, and Manual Training.

A Commercial Course might consist of two Languages, Science, Commercial Geography and History, Commercial Arithmetic, Bookkeeping, Business Methods, and Typewriting.

An Academic Course might consist of two Languages, Science, Geography or History, Mathematics, and a Third Language.

(Op. Cit., p. 54.)

Two minor subjects are regarded as equivalent to one major subject. The subjects to be taken, selected in accordance with the requirements indicated above, amount to the equivalent of six major subjects. (Op. Cit., p. 56.)  
N.B. In order to pass a candidate must obtain an aggregate of 40%, and a pass in one of the official languages taken on the higher grade and in a total equivalent to five major subjects. Subject pass: 30%. (Adapted from p. 56, Op. Cit.)

As given in "Secondary School Courses. Junior and Senior Certificate Handbook" for 1936

Candidates must take the following subjects:-

- (i) An official language, taken on the higher grade.
- (ii) A second modern language.
- (iii) Science: Agricultural Science, or Biology, or Botany, or Chemistry, or Geology, or Mechanics, or Physical Science (Physics and Chemistry), or Physiology and Hygiene, or Physics, or Zoology, and in addition three subjects from the following:-

Another Language. Another Language. Another Science. Another Science. Bookkeeping and Commercial Arithmetic. Commercial Geography and History. Cookery, Housewifery and Laundrywork. Art. Geography. History. Literature (English or Afrikaans and Nederlands). Manual Training. Mathematics. Music. Needlework. Shorthand(English or Afrikaans) and Typewriting. Shorthand (English and Afrikaans).

Candidates taking either Geography or History are not allowed to take Commercial Geography and History.

(Op. Cit., pp. 53-54.)

To obtain a pass

40% in the aggregate. Pass in each of five subjects, including one of the official languages taken on the higher grade. Subject pass: 33½%. (Op. Cit., p. 55.)

As given in "Secondary School Courses. Junior and Senior Certificate Handbook" for 1946

Candidates must take the following subjects:-

- (i) An official language, taken on the higher grade.
- (ii) A second modern language.
- (iii) Science: Agricultural Science, or Biology, or Botany, or Chemistry, or Geology, or Physical Science (Physics and Chemistry), or Physiology and Hygiene, or Physics, or Zoology, and in addition three subjects from the following:-

Another Language. Another Language. Another Science.

Another Science. Bookkeeping and Commercial Arithmetic. Cookery, Housewifery and Laundrywork. Art. Geography. History. Literature (English, or Afrikaans and Nederlands). Manual Training. Mathematics. Music. Needlework. Shorthand (English or Afrikaans) and Typewriting. Shorthand (English and Afrikaans).

Geology will cease to be a subject of the examination after 1946. (Op. Cit., p. 37.)

N.B. The requirements for a pass are the same as those given in the Handbook for 1936.

Addendum In all three sets of regulations, the total aggregate obtainable was 1,900 and the minimum aggregate for a pass 760, or 40% of the total. However, by taking two official languages on the higher grade instead of one, candidates could obtain a boosted total of 2,000, while the minimum aggregate for a pass remained 760. Thus, such candidates were virtually able to pass on a minimum aggregate equivalent to 38% of the total.

#### A P P E N D I X 59

#### SUBJECTS FOR THE MATRICULATION EXAMINATION AS GIVEN IN THE RELEVANT HANDBOOKS FOR 1920, 1928 AND 1948

#### The "New Regulations" for the Matriculation and the School-Leaving Certificates as given in the "Matriculation Examination Handbook" for 1920

#### Matriculation Certificates

The subjects of the examination are as follows:-

1. English. 2. Dutch. 3. Afrikaans. 4. Latin. 5. Greek.
6. French. 7. German. 8. Hebrew. 9. Mathematics (not to be taken with subject 21). 10. Physics and Chemistry (not to be taken with subjects 11 or 12). 11. Physics. 12. Chemistry.
13. Botany and Zoology (not to be taken with subjects 14 or 15). 14. Botany. 15. Zoology. 16. Geology.
17. History and geography (not to be taken with subjects 18 or 19). 18. History. 19. Geography. 20. Agricultural Science. 21. Practical mathematics. 22. Mechanics. 23. Bookkeeping and Commercial Arithmetic. 24. Shorthand and Typewriting. 25. Drawing (not to be taken with subject 26).

26. Geometrical Drawing. 27. Domestic Science. 28. Music.  
29. Any other modern language taught at any European University may be taken, subject to the approval of the Board. ) (Other languages may also be taken subject to the approval of the Board.) (Op. Cit., pp. 20-21.)

The subjects of the examination are grouped as follows:-

1. (a) English, (b) Dutch.
2. Mathematics.
3. (a) Latin, (b) Greek, (c) French, (d) German.
4. (a) Physics and Chemistry, (b) Botany and Zoology, (c) Physics, (d) Chemistry, (e) Botany, (f) Zoology, (g) Geology.
5. (a) History and Geography, (b) History, (c) Geography, (d) English, (e) Dutch, (f) Afrikaans, (g) Hebrew, (h) any modern language which may be taken under 5(a), subject 29, (i) an additional subject from 3 or 4.
6. Agricultural Science, (b) Practical Mathematics, (c) Mechanics, (d) Bookkeeping and Commercial Arithmetic, (e) Shorthand and Typewriting, (f) Drawing, (g) Geometrical Drawing, (h) Domestic Science, (i) Music, (j) any additional language specially approved by the Board, (k) an additional subject from 5. (Op. Cit., p. 21.)

N.B. Subjects printed in italics (here underlined) may be taken either on the higher or the ordinary grade, at the option of the candidate, save that the subject selected under group 1 must be taken on the higher grade. Other subjects can be taken only on the ordinary grade. (Op. Cit., pp. 21-22.)

Footnote: The papers of a higher grade will be set on the same syllabus as those of the ordinary grade in the subject, except in the case of English and Dutch, where separate syllabuses are provided, namely, English and Dutch A and B respectively. (Op. Cit., p. 21.)

The standard for a pass in each subject is approximately 40 per cent. of the maximum marks, and any candidate obtaining approximately 75 per cent. of the maximum marks in any subject is entitled to pass with distinction in that subject. (Op. Cit., p. 22.)

The matriculation certificate may be obtained by passing in either five or six subjects, under the following conditions:-

(i) Five subjects. A candidate taking five subjects may not, in his selection of subjects, include group 6 or omit more than one of the five remaining groups. He may not take fewer than three higher grade subjects, and such subjects must be selected from different groups, one of which must

be group 1 and one either group 2 or group 3.

(ii) Six subjects. A candidate taking six subjects must select one subject from each of the six groups.

The candidate must pass in all the requisite subjects at not more than two separate examinations for the matriculation certificate (or the school-leaving certificate.. ..), and at the first of such examinations he must pass in not fewer than three subjects.

The certificate may also be issued by the Board, under such conditions as it may determine in each case, to any candidate who has, prior to the 2nd April, 1918, obtained the senior certificate of the University of the Cape of Good Hope or prior to the 1st day of August, 1920, the school-leaving certificate of the Board, including one subject from each of five different groups. (Op. Cit., pp. 22.23.)

A candidate who has obtained the matriculation certificate may enter again for the examination in any subject not already taken by him, and, if successful, the fact will be recorded on his original certificate. A special entry form must be filled in by every such candidate. (Op. Cit., p. 23.)

#### School-Leaving Certificates

Certificates, called school-leaving certificates, are issued by the Board to candidates who pass in the following subjects, either at one and the same examination, or at two examinations, at the first of which a pass must be obtained in not fewer than three subjects, viz.:-

(1) Higher grade English or higher grade Dutch, (2) History and Geography, (3) either English, Dutch, Afrikaans, French, German, Hebrew or another language specially approved by the Board, (4) either a subject from group 4 of the matriculation certificate subjects or Agricultural Science, (5) and (6) any other two matriculation subjects.

(N.B. No subject can be taken under more than one group.)

(Op. Cit., p. 24.)

N.B. Under the New Regulations no aggregate for all the subjects is required, and successful candidates are not divided into classes. (My own addendum.)

Interim and New Regulations for the Matriculation and the School-Leaving Certificates as given in the "Matriculation Examination Handbook" for 1928

General note on the two alternative sets of regulations

The Matriculation and School-Leaving Examinations are at present conducted under two alternative sets of Regulations which are known respectively as the Interim Regulations and the New Regulations.

The most important differences between these alternative schemes are indicated in the following summary:-

1. MATRICULATION CERTIFICATE.

Interim Regulations

1. Each candidate must offer six subjects chosen as shown on pages 4-5, and must take the six subjects at one and the same examination.
2. In order to secure a Pass, a candidate must obtain approximately 30 per cent. of the marks in each subject and approximately 40 per cent. in the aggregate of the subjects: provided (i) that if a candidate has obtained 30 per cent. in 5 subjects and not less than the minimum aggregate required for a Second Class Certificate, he may be granted a Third Class Certificate if he has gained not less than 20 per cent. of the marks in his sixth subject; (ii) that a candidate who has obtained the minimum aggregate required for a Pass, and who has failed in one subject only, may be granted a Third Class Certificate if he obtains one third of the marks in that subject, or in any other subject which complies with the regulations, at any subsequent examination.

New Regulations

1. Either six or five subjects may be offered.

(a) Six Subjects:

The six subjects must be chosen as shown in paragraph 6 (page 27), one subject to be selected from each of the six groups, and the subject selected from Group I. to be on the Higher Grade.

(b) Five Subjects:

In his selection of subjects a candidate may not take any subject from Group VI., nor may he omit more than one of the remaining five groups.

At least three of the five subjects must be taken on the Higher Grade, and these subjects must be selected from different groups, one of which must be Group I. and another either Group II or Group III.

2. All the subjects (6 or 5, as the case may be) may be taken at one time, or the examination may be taken in parts,

provided that a candidate must pass in at least three subjects at his first examination and in the remaining subjects at one subsequent examination, i.e., he may attempt the examination any number of times, but he may not be credited with passes at more than two examinations.

3. In order to secure a pass, a candidate must obtain approximately 40 per cent. of the marks in each subject. (No aggregate for all the subjects is required under the New Regulations, nor are successful candidates divided into classes, the list of names being published in alphabetical order, with the candidates' examination numbers, but no school or centre.)

4. The Higher Grade papers are distinct from the Ordinary Grade papers, and demand a more intimate and precise knowledge of the subject.

The syllabuses for the Higher Grade papers are the same as for Ordinary Grade papers, except in the case of the official languages, where separate syllabuses are provided, that is to say, the syllabuses for English, Nederlands and Afrikaans Higher Grade, are the same as for English A, Nederlands A and Afrikaans A respectively under the Interim Regulations.

Similarly, the syllabuses for English, Nederlands and Afrikaans, Ordinary Grade, are the same as those for English B, Nederlands B, and Afrikaans B respectively under the Interim Regulations.

#### 11. SCHOOL-LEAVING CERTIFICATE.

##### Interim Regulations.

The conditions under which the School-leaving Certificate may be obtained under the Interim Regulations are set forth on pages 16-18, and appear to require no special comment.

##### New Regulations.

The subjects are as given in paragraph 12 (page 29).

It is to be noted

(i) that the six subjects may be taken at one and the same examination or at two separate examinations, as in the case of the Matriculation Certificate;

(ii) that no two subjects contained in paragraph 5 (a) (pages 24-25) may be taken together for the School-leaving Certificate which are not permitted to be so taken for the Matriculation Certificate (e.g., no candidate may take History or Geography, in view of the fact that History and Geography (one subject) has to be taken).

Under both the Interim and New Regulations the examination papers are the same for the School-leaving Certificate as for the Matriculation Certificate in

corresponding subjects and grades.

Matriculation requirements under the Interim Regulations

The subjects of examination are as follows:-

Group I.

English A (Two papers); or Nederlands A (Two papers); or Afrikaans A (Two papers).

Latin, or Greek, or French, or German.

Mathematics (Two papers).

Greek (if not already taken), or History, or Geography.

Group II.

Physics. Chemistry. Physical Science (Physics and Chemistry). Botany. Zoology. Geology. Botany and Zoology (Biology). Agricultural Science A (Two papers). Hygiene (Two papers).

Group III.

English B (not to be taken with English A).

Nederlands B (not to be taken with Nederlands A or Afrikaans A).

French. (if not taken under Group I)

German. " " " " "

Latin. " " " " "

Greek. " " " " "

History. " " " " "

Geography. " " " " "

Portuguese. Hebrew. Xosa. Zulu. Sesuto. Secwana.

(Op. Cit., pp. 4-5.)

Every candidate for the matriculation certificate is required to take six subjects, viz., four subjects in Group I, one subject in Group II, and one subject in Group III; provided that a candidate who does not take Latin may not take Hebrew. (Op. Cit., p. 6.)

Maximum marks assigned to each subject

Group I.

Mathematics.....500

English A; Nederlands A; Afrikaans A each.....400

Latin; Greek; History each.....350

French; German; Geography each.....300

Group II.

Each subject.....300

Group III.

Latin; Greek; History; English B, Afrikaans B and Nederlands B each.....350

All other subjects each.....300

Approximate standards for pass certificates

Aggregate marks.

In each subject.

Class I.....1320 30 per cent.

Class II.....1100 30 per cent.

Aggregate marks.	In each subject.
Class 111 either (i).....880	30 per cent.
or (ii).....1100	30 per cent. in any 5 subjects,& 20% in the remaining subjectt

(Op. Cit., p. 15.)

Requirements for School-Leaving Certificate under Interim Regulations

The subjects of examination are as follows:-

Group 1.

English A (Two papers), or Nederlands A (Two papers), or Afrikaans A (Two papers); History or Geography.

Group 11.

English B. Nederlands B. Afrikaans B. French. German. Portuguese. Xosa or Zulu. Sesuto. Secwana.

(Note: No candidate taking English B may take English A; no candidate taking Nederlands B may take Nederlands A or Afrikaans A or B; no candidate taking Afrikaans B may take Afrikaans A, or Nederlands A or B.)

Group 111.

Physics. Chemistry. Botany. Zoology. Physical Science (Physics and Chemistry). (No candidate taking this subject may take Physics, or Chemistry, or Mechanics.) Geology. Botany and Zoology (Biology). Hygiene. (Two papers.) (No candidate taking this subject may take Domestic Science.) Agricultural Science A (Two papers.) (No candidate taking this subject may take Agricultural Science B.

Group 1V.

- (i) Either Mathematics or Practical Mathematics. (Two papers.)
- (ii) Latin.
- (iii) English Literature; or Nederlands Literature; or Afrikaans Literature.
- (iv) Either Agricultural Science B or a second subject from Group 111.
- (v) Bookkeeping and Commercial Arithmetic.
- (vi) Domestic Science (not to be taken with Hygiene.)
- (vii) Music.
- (viii) Either Drawing or Geometrical Drawing. (Two papers.)
- (ix) Shorthand and Typewriting.
- (x) A second subject from Group 11.
- (xi) Geography (if not taken under Group 1.)

Every candidate will be required to take six subjects, viz., two subjects in Group 1, one subject in each of Groups 11 and 111, and two subjects in Group 1V. (Op. Cit., pp. 16-17.)

Marks assigned to each subject

319.

Group 1.

English A or Nederlands A or Afrikaans A.....	400
History.....	350
Geography.....	300

Group 11.

English B, Afrikaans B, Nederlands B each.....	350
All other subjects each.....	300

Group 111.

Each subject.....	300
-------------------	-----

Group 1V.

Latin.....	350
Mathematics or Practical Mathematics each.....	500
All other subjects each.....	300

Approximate standards for pass certificate

Highest aggregate obtainable in examinations.....	2200
Minimum aggregate for a place (a) in Class 1.....	1230
Minimum aggregate for a place (b) in Class 11.....	1025
Minimum aggregate for a place (c) in Class 111.....	820

Candidates must obtain 30% in each of the six subjects offered, or 30% in each of five subjects, and 20% in the remaining subject, in the case of candidates obtaining 1. or 11. Class aggregate. (Such candidates will be placed in the 111 Class.) (Op. Cit., p. 18.)

Matriculation requirements under the New Regulations

The subjects of the examination are as follows:-

1. English.
  2. Nederlands.
  3. Afrikaans (not to be taken with Subject 2).
  4. Latin.
  5. Greek.
  6. French.
  7. German.
  8. Hebrew.
  9. Mathematics. (not to be taken with subject 23.)
  10. Physics and Chemistry (not to be taken with subject 11 or 12.)
  11. Physics.
  12. Chemistry.
  13. Biology (Botany and Zoology) (Not to be taken with subject 14 or 15.)
  14. Botany.
  15. Zoology.
  16. Geology.
  17. Hygiene (not to be taken with subject 29).
  18. Agricultural Science A (not to be taken with subject 22).
  19. History and Geography (not to be taken with subject 20 or 21).
  20. History.
  21. Geography.
  22. Agricultural Science B.
  23. Practical Mathematics.
  24. Mechanics.
  25. Bookkeeping and Commercial Arithmetic.
  26. Shorthand and Typewriting.
  27. Drawing (not to be taken with subject 28).
  28. Geometrical Drawing.
  29. Domestic Science.
  30. Music.
  31. Portuguese.
  32. Xosa.
  33. Zulu.
  34. Sesuto.
  35. Secwana.
- (Op. Cit., pp. 24-25.)

In the case of all subjects which are printed in italics, (here underlined) papers of a higher grade are set. Footnote: The papers of a higher grade will be set on the same syllabus as those of the ordinary grade in the subject,

except in the case of English, Nederlands, and Afrikaans, where separate syllabuses are provided, namely, English, Nederlands, and Afrikaans A and B respectively. (A and B of Interim Regulations denote higher grade and ordinary grade respectively of New Regulations.) (Op. Cit., p. 25.)

The subjects of the examination are grouped as follows:-

- I. (a) English, (b) Nederlands, (c) Afrikaans.
- II. Mathematics.
- III. (a) Latin, (b) Greek, (c) French, (d) German.
- IV. (a) Physics and Chemistry, (b) Biology (Botany and Zoology), (c) Physics, (d) Chemistry, (e) Botany, (f) Zoology, (g) Geology, (h) Hygiene, (i) Agricultural Science A.
- V. (a) History and Geography, (b) History, (c) Geography, (d) English, (e) Nederlands, (f) Afrikaans, (g) Hebrew, (h) any of the languages included under Nos 31-35 inclusive, (i) an additional subject from III or IV.
- VI. (a) Agricultural Science B, (b) Practical Mathematics, (c) Bookkeeping and Commercial Arithmetic, (d) Shorthand and Typewriting, (e) Drawing, (f) Geometrical Drawing, (g) Domestic Science, (h) Music, (i) Mechanics, (j) any of the languages included under Nos. 31-35 inclusive, (k) an additional subject from V.

Subjects printed in italics (here underlined) may be taken either on the higher or the ordinary grade, at the option of the candidate, save that the subject selected under group I must be taken on the higher grade. Subjects printed otherwise may be taken only on the ordinary grade. (Op. Cit., p. 26.)

The standard for a pass in each subject is approximately 40% of the maximum marks, and any candidate obtaining approximately 75% of the maximum marks in any subject is entitled to pass with distinction.

The matriculation certificate may be obtained by passing in either five or six subjects, under the following conditions:-

(i) Five subjects. A candidate taking five subjects may not, in his selection of subjects, include group VI or omit more than one of the five remaining groups. He may not take fewer than three higher grade subjects, and such subjects must be selected from different groups, one of which must be group I and one either group II or group III.

(ii) Six subjects. A candidate taking six subjects must select one subject from each of the six groups, the subject from group I being on the higher grade.

The candidate must pass in all the requisite subjects

at not more than two separate examinations for the matriculation certificate (or the school-leaving certificate), and at the first of such examinations he must pass in not fewer than three subjects. (Op. Cit., p. 27.)  
School-Leaving Certificate requirements under New Regulations

N.B. - No candidate will be permitted to enter for the School-leaving Certificate and the Matriculation Certificate at one and the same examination. (Same stipulation made for School-leaving Certificate under interim regulations.)

Certificates, called school-leaving certificates, are issued by the Board to candidates who pass in the following subjects, either at one and the same examination, or at two examinations, at the first of which a pass must be obtained in not fewer than three subjects, viz.:-

(1) Higher grade English or higher grade Nederlands or Higher Grade Afrikaans, (2) History and Geography, (3) either English, Nederlands, Afrikaans, French, German, Hebrew, or another language specially approved by the Board, (4) either a subject from group IV of the matriculation certificate subjects or Agricultural Science B, (5) and (6) any other two matriculation subjects.

(N.B. - No subject may be taken under more than one group, and the further restrictions as to the selection of subjects, specified under paragraph 5(a) are also to be observed.) (Op. Cit., 29.)

Regulations for the Matriculation and the School-Leaving Certificates as given in the "Matriculation Examination Handbook" for 1948

Regulations for the Matriculation

The list of approved subjects is as follows:-

Section A.

1. English (Higher Grade) (not to be taken with subject No. 2).
2. English (Ordinary Grade).
3. Afrikaans (Higher Grade) (not to be taken with subject No. 4, 5 or 6).
4. Afrikaans (Ordinary Grade). (not to be taken with subject No. 3, 5 or 6).
5. Nederlands (Higher Grade) (not to be taken with subject No. 35 or 6).
6. Nederlands (Ordinary Grade) (not to be taken with subject No. 35 or 5).
7. Latin. 8. Greek. 9. French. 10. German. 11. (Rescinded). 12. Hebrew. 13. Xhosa A or Xhosa B or Zulu A

or Zulu B. 14. Tswana or Southern Sotho A or Southern Sotho B or Northern Sotho A or Northern Sotho B. 14A. Venda. 14B. Tsonga. 15. Mathematics. 16. Physical Science (not to be taken with subject no. 17 or 18). 17. Physics. 18. Chemistry. 19. Biology (not to be taken with subject No. 20 or 21). 20. Botany. 21. Zoology. 22. Geology. 23. Agricultural Science. 24. Domestic Science and Hygiene. 25. History. 26. Geography. 27. Mechanics. 28. Bookkeeping and Commercial Arithmetic. 29. Art. 30. Music. 31. Geometrical Drawing.

#### Section B.

(May only be taken as 6th or 7th subjects in the examination.)  
32. Commerce. 33. Shorthand and Typewriting. 34. Additional Mathematics (may not be taken without Mathematics). 35. Nederlands (may only be taken by candidates also offering Afrikaans; Higher Grade). (Op. Cit., pp. 14-16.)

A successful candidate at the Matriculation Examination will be awarded either a School-leaving Certificate or a Matriculation Certificate.

#### Requirements for the School-leaving Certificate

Candidates for the School-Leaving Certificate are required to take at the Matriculation Examination not fewer than six and not more than seven subjects at one and the same examination.

Candidates are required to pass in at least five subjects, selected as follows:-

- (i) One of the official languages (Higher Grade).
- (ii) The second official language (Higher or Ordinary Grade), or Latin, or Greek, or French, or German; or Mathematics (if not taken under (iii)), or History or Geography, or Hebrew, or Xhosa A or Xhosa B, or Zulu A or Zulu B, or Tswana, or Southern Sotho A or Southern Sotho B, or Northern Sotho A or Northern Sotho B, or Venda, or Tsonga, or other language in which the Board decides to conduct an examination.
- (iii) A Science subject or Mathematics.
- (iv) and (v) Any two subjects (not already taken) selected from section A of the prescribed list of approved subjects.

A candidate who enters for six or seven subjects and passes in five, obtaining the minimum aggregate, but fails in one compulsory subject from Group I or Group II or Group III, may obtain the School-Leaving Certificate by gaining, at any subsequent examination, not less than one-third of the maximum marks in the subject in which he failed, or in any other subject from the same group. The class of certificate will be determined by the original aggregate. A candidate entering for re-examination in this failing com-

pulsory subject may also, at the same subsequent examination, take any subject in which he has passed without obtaining the matriculation standard of 40%, specified in (ii) above, with a view to obtaining this standard; but in the event of failure in the compulsory subject, he shall forfeit any credit for any passes on the matriculation standard he may secure in other subjects.

Candidates may also offer either one or two further subjects from the prescribed list, not already taken.

N.B. - No candidate may take more than four languages, and no subject may be taken on the Higher Grade, except the official languages.

The approximate standards for a pass and for classification shall be:-

(A) In individual subjects: a minimum of 33 $\frac{1}{3}$ %.

(B) In the examination as a whole: passes in each of five subjects, and a minimum aggregate of not less than 780 for a pass in Class III; 1,000 for a pass in Class II; 1,300 for a pass in Class I.

(No mark under 25% in any individual subject will be included in the candidate's aggregate. (Op. Cit., pp. 18-19.)

Maximum marks assigned to each subject:-

Mathematics, the Official Languages (Higher Grade),	
Bantu Languages (A Grade) each.....	400
The Official Languages (Ordinary Grade) and Latin.....	
each.....	350
All other subjects.....	each 300

Matriculation and School-Leaving Certificates

Matriculation Certificates will be awarded to candidates who have satisfied the conditions for a School-Leaving Certificate, and who in addition:

(A) have obtained not less than 40% of the total marks in each of four subjects, one from each of the following groups:-

- (i) One of the official languages (Higher Grade).
- (ii) The second official language (Higher or Ordinary Grade), or Latin, or Greek, or German, or French, or Xhosa A or Xhosa B, or Zulu A or Zulu B, or Tswana, or Southern Sotho A or Southern Sotho B, or Northern Sotho A or Northern Sotho B, or Venda, or Tsonga.
- (iii) A Science subject or Mathematics.
- (iv) A subject chosen from (ii) (not already taken), or Mathematics (if not taken under (iii)), or Hebrew, or other language in which the Board decides to conduct an examination, or History, or Geography. (Op. Cit., p.20.)

(B) have either (i) included among these four subjects Mathematics or an approved language, other than English or Nederlands or Afrikaans; or (ii) taken Mathematics or an approved language, other than English or Nederlands or Afrikaans, as a fifth subject, and obtained not less than 33 $\frac{1}{3}$ % of the total marks.

(Note 1: An approved language, other than English, Afrikaans or Nederlands, will hereafter be called "A Third Language".

Note 2: A sixth School-Leaving Certificate subject must have been taken.

Note 3: No candidate may take more than four languages, and no subject may be taken on the Higher Grade except the official languages.)

A candidate who obtains a School-Leaving Certificate, but fails to obtain 40% in one or more of the four subjects specified above, may complete the requirements for the Matriculation Certificate by obtaining the required percentages in such subject or subjects or in another subject or subjects of the required group or groups at a subsequent examination or examinations, and if successful shall be awarded a Matriculation Certificate of the same class as his original School-Leaving Certificate.

When a Matriculation candidate takes both official languages on the Higher Grade and attains to Matriculation standard in one of them, he will be considered to have passed in the ordinary grade in the other if his mark falls between 30 and 40%.

When a Matriculation candidate takes an official language on the Higher Grade and a Bantu language on the A grade, and obtains the Matriculation standard in the official language, he will be considered to have passed in the B grade of the Bantu language if his mark falls between 30 and 40%. (Op. Cit., pp. 21 and 22.)

---

EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS ON  
THE J.C. GEOGRAPHY PAPERS, AND REFERRING SPECIFICALLY TO  
THE NATURE OF THE CANDIDATES' ANSWERS TO MATHEMATICAL-  
GEOGRAPHY QUESTIONS

Excerpt from the 1936 report

In regard to the question of finding the true North and South, it was clear that at certain centres none of the candidates understood the methods they attempted to use.

Comparatively few candidates were able to give a clear account of the meaning of latitude and longitude. (The Education Gazette, Vol. XXVI, 17th March, 1927, No. 6, p. 226.)

Excerpt from the 1927 report

The question on the relation between Longitude and Time was on the whole well done but the use of the adjectives "early" and "late" caused great confusion. "Ahead" and "behind" should be substituted.

In answering the question dealing with the length of day in the arctic circle the majority of candidates confused the arctic circle with the North Pole. (The Education Gazette, Vol. XXVII, 23rd February, 1928, No. 4, p. 235.)

Excerpt from the 1928 report

Greater use should be made of actual occurrences of phenomena during the year, especially if the study of them comes within the scope of the syllabus, e.g. the eclipse of the sun in 1928. (The Education Gazette, Vol. XXVIII, 6th June, 1929, No. 10, p. 465.)

Excerpt from the 1929 report

A great number of the candidates seem to have studied only one section of the syllabus, with the result that they could not do the questions on mathematical and physical geography; while others again could not do those on regional geography. (The Education Gazette, Vol. XXIX, 13th March, 1930, No. 5, p. 197.)

Excerpt from the 1932 report

The most striking feature of all the scripts was the small use made of explanatory diagrams. Many papers contained no diagrams whatsoever.

A series of well annotated diagrams would have been a sufficient answer to the question dealing with the length of day and night at the Poles and at the Equator. There was much confusion in answering this question. The Northern Hemisphere, the Arctic Circle and the North Pole were

treated as synonymous terms.

Excerpt from the 1936 report

The specific questions on physical geography were very badly done. Section B and C of the syllabus seem to cause special difficulty. More practical work should be done as a basis for the study of causes of the seasons. (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 388.)

Excerpts from the 1944 reports

Geography major

Teachers must give more attention to physical and practical geography. (The Education Gazette, <sup>15th Feb. 1945</sup> Vol. XLIV, No. 5, February, 1945, p. 281.)

Geography minor

Physical and practical geography do not receive sufficient attention. Observations of the sun as a basis for the study of the seasons is clearly prescribed by the syllabus. However, a considerable number of candidates in answering this question wasted time by drawing diagrams showing the relative position of sun and earth on the four principal dates. A lengthy discussion of the causes determining the succession of the seasons usually followed. (Ibid.)

Excerpt from the 1945 report

Geography major

More attention must be given to practical observations.. The majority of candidates had a poor knowledge of longitude and latitude and could not calculate time. (The Education Gazette, Vol. XLV, No. 5, 7th February, 1946, p. 307.)

Excerpt from the 1946 report

Geography minor

Practical geography is still weak. Very few candidates could give the approximate length of a degree of longitude at the Equator. Answers varied between 10 and 8,000 miles. Many were uncertain about such terms as solstices and equinoxes, and evidently did not see any connection between altitude of the sun at true noon and the seasons. (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, pp. 378-379.)

Excerpts from the 1948 reports

Geography major

In general Section A on the physical and practical geography was very poorly done. It was quite clear that in many centres this section of the work did not come

to its rights. The result was that many a good candidate missed a possible "A" through sheer lack of knowledge in this branch of the work.

.....  
 In many centres the candidates made use of the incorrect argument that the direct rays of the sun are warmer than the oblique rays on account of the fact that the equator is nearer to the sun than the poles. The calculations in connection with sun time and standard time proved that very few candidates knew that although Kimberley is situated on 25 degs E. Longitude, South Africa takes its time from 30 degs East Longitude. (The Education Gazette, Vol. XLVIII, No. 18, 28th July, 1949, p. 1260.)

Geography minor

On the whole the questions in Section A and Section B, Part I, were well answered, but Section B, Parts II and III, covering the practical and mathematical side, showed that in many centres this side of the subject did not receive due attention. (Ibid., p. 1261.)

Excerpts from the 1950 reports

Geography major

Many candidates were under the impression that the sun is a small dot in comparison with the earth. This resulted in the erroneous idea that the distance from the sun to the poles is longer than the distance from the sun to the equator. (The Education Gazette, Vol. L, No. 17, 26th July, 1951, pp. 1422-1423.)

Geography minor

Answers to questions on practical geography indicated clearly that this portion of the syllabus had received little or no attention in some schools. (Ibid., 1423.)

Excerpt from the 1951 report

Geography major

Some candidates did not know the difference between equinoxes and solstices... Answers to questions on practical geography indicated clearly that this portion of the syllabus had received little attention in some schools. (The Education Gazette, Vol. LI, No. 13, 22nd May, 1952, p. 885.)

---

A P P E N D I X 61EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS ON THE S.C. GEOGRAPHY PAPERS, AND REFERRING TO THE NATURE OF THE CANDIDATES' ANSWERS TO GEOMORPHOLOGICAL QUESTIONS AND TO QUESTIONS ON PHYSICAL GEOGRAPHY IN GENERALExcerpt from the 1932 report

The best answers were those dealing with earth movements and land-forms (Section A). (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, p. 323.)

Excerpt from the 1936 report

Among faults of common occurrence are listed: "ignorance of the real nature of alluvial plains and ice-sheets", and "the belief that...fiords are due to wave action, that the Rockies run along the coast of North America". (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 365.)

Excerpt from the 1938 report

Lowlands were nearly always confused with flat lands. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 787.)

Excerpt from the 1939 report

The questions in Section B - Regional Geography - were well done by most candidates, but it would appear that sufficient attention has not been given to the parts of the syllabus dealing with Physical and Practical Geography.

.....

The question on land forms was badly answered... (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p.983.)

Excerpt from the 1940 report

It seems that little attention has been paid to work on physical geography... (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 341.)

Excerpt from the 1945 report

It is quite evident that insufficient attention is being paid to Physical Geography. A number of good candidates failed to obtain high marks simply because they did badly in this particular question. An "old" river was frequently given as the place of origin of the ancient civilizations of Egypt or Mesopotamia... (The Education Gazette, Vol. XLV, No. 5, 7th February, 1946, p. 288.)

Excerpt from the 1951 report

Some centres still give no attention to practical and physical geography, with the result that candidates fail hopelessly on that section of the paper. (The Education Gazette, Vol. LI, 8th May, 1952, No. 12, p. 795.)

EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS, AND  
REFERRING TO THE NATURE OF THE CANDIDATES' ANSWERS TO CLIMATIC  
QUESTIONS SET IN THE GEOGRAPHY EXAMINATIONS FOR J.C.

Excerpt from the 1927 report

Once again the examiner must urge the use of practical methods, such as the construction and reading of simple charts and maps in the study of climate. In no other way can the subject be taught adequately. For example the contrast in the climates of the East and West of South Africa can be best understood by a graphical representation of the climatic data. This type of teaching tends to produce a more precise and accurate knowledge and to prevent such vague and valueless statements as "Cape Town, Durban and New Antwerp all have a good rainfall".

A large percentage of candidates did not understand the meaning of "range of temperature." (The Education Gazette, Vol. XXVII, 23rd February, 1928, No. 4, p. 235.)

Excerpt from the 1929 report

Among a number of answers which are quoted to show that geography was not being studied intelligently in quite a number of schools are the following ones of a climatic nature:- Russia and Belgium have a Mediterranean climate;... Holland and Belgium have a continental climate because they experience the influence of the sea; the climate of the Rhine Valley is insular or extreme;... (The Education Gazette, Vol. XXIX, 13th March, 1930, No. 5, p. 197.)

Excerpt from the 1930 report

From many of the answers it is evident that geography is not yet studied intelligently enough. A large number of candidates, for instance, had no conception of the causal connection between the situation of a country and its climate, or between its climate and its products. A good many candidates were quite convinced that England and Holland had a very warm climate owing to the influence of the Gulf Stream;... (The Education Gazette, Vol. XXX, 2nd April, 1931, No. 6, p. 253.)

Excerpt from the 1932 report

In this report the following passage of relevance occurs at the end of a criticism concerning the small use made of illustrative diagrams:- Diagrams, too, would have greatly helped in answering the question on the Trade Winds. Few candidates gave actual latitudes, fewer still mentioned pressure areas and "Westerlies" were confused with "Trade" winds. (The Education Gazette, Vol. XXXII, 13th April, 1933, No.7, p.343.)

Excerpt from the 1933 report

A common error was the description of the Lombardy Plain as a region experiencing the "Mediterranean" type of climate. (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p. 352.)

Excerpt from the 1934 report

Many candidates confused types of vegetation with types of climate and Antitrade winds with Trade Winds. Teachers should encourage the use of the terms North Westerlies and South Westerlies in place of Antitrades.

Candidates must realise that when describing the climate experienced in a certain region, it is not enough to state merely the fact that the place has a "Mediterranean" or a "Monsoon" type. An account of the characteristics of the type should follow. (The Education Gazette, Vol. XXXIV, 18th April, 1935, No. 8, p. 417.)

Excerpt from the 1936 report

Geographical terms such as "hot," "wet", "tropical," "equatorial", "temperate," "extreme," as applied to climate, are much too vaguely used. (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 388.)

Excerpt from the 1937 report

...geographical terms concerning climate and vegetation were often wrongly interpreted and the difference between "equatorial" and "tropical", or the meaning of "monsoon", "trade", "continental", was not always understood.

Candidates sometimes described relatively, e.g., "the climate of Belgium is like that of England";... (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p.235.)

Excerpt from the 1938 report

Exactness is missing in many answers, and such statements as: "The Cape Province has a Mediterranean Climate, " ...and "China has a Monsoon Climate" appeared frequently. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 806.)

Excerpt from the 1940 report

It was clear from their descriptions that candidates did not understand the meanings of words such as....temperature or Continental climate... The direction (in pressure and wind diagram) of the wind was usually correct, but frequently the name was wrong. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 695.)

Excerpt from the 1941 report

A large number of candidates took the Cool Temperate Oceanic region to be the Mediterranean type. (The Education Gazette, Vol. XL1, 19th February, 1942, No. 5, p. 341.)

Excerpt from the 1942 report

Many candidates, who attempted the question on the climatic influence on natural vegetation in the Equatorial forest and Coniferous forest regions, failed to see the connection between climate and vegetation. (The Education Gazette, Vol. XL11, 18th February, 1943, No. 6, p. 377.)

Excerpt from the 1943 report

It is clear from the answers of many candidates that teachers do not treat the climatic regions of the world in sufficient detail. (The Education Gazette, Vol. XL111, 17th February, 1944, No. 5, p. 280.)

Excerpts from the 1945 report

Geography major

The candidates' ideas of climate are very vague. They speak about "a hot summer, or a cold winter or a nice climate". They can easily be taught that the average winter temperature is 48 degs F. and the rainfall plus or minus 25 ins. (The Education Gazette, Vol. XLV, No. 5, 7th February, 1946, p.307.)

Geography minor

Many candidates gave a lengthy description of climatic conditions in Mediterranean regions but failed to find an explanation for the wet winters and dry summers of these areas. (Ibid., p. 308.)

Excerpt from the 1947 report

With reference to the description of climatic conditions it has to be reported that candidates do not take the trouble to distinguish between tropical and equatorial climates, between the winter and the summer conditions of a certain region or between two different climatic types that may occur in the same country. The result is that one often comes across statements of the following kind that are only partially true: "the deserts are hot regions", or "Nigeria has an equatorial climate".

For a country like South Africa where droughts are such an actual matter, it was an eye-opener to see how very few candidates had a clear conception of what is meant by "an inch of rain". (The Education Gazette, Vol. XLV11, No. 6, 19th February, 1948, pp. 364-365.)

Excerpt from the 1948 report

A large number of candidates interpreted the "cool temperate oceanic type of climate" with the words "western

margin type" added in brackets as being the Mediterranean type; in this way at least 40 per cent. of the candidates lost twenty-five marks outright. And in naming six countries having this type of climate one certainly does not expect a candidate to limit himself to six countries in western Europe. (The Education Gazette, Vol. XLVIII, No. 18, 28th July, 1949, p. 1260.)

Excerpt from the 1950 report

The question on the natural regions, i.e. where the climate responsible for certain types of vegetation, had to be described, was poorly done. Candidates did not know the difference between evergreen shrubs and evergreen forests, or between deciduous forests and coniferous forests. (The Education Gazette, Vol. L, No. 18, 9th August, 1951, pp. 1422-1423.)

---

A P P E N D I X 63EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS ,  
AND REFERRING TO THE NATURE OF THE CANDIDATES' ANSWERS TO  
CLIMATIC QUESTIONS IN THE GEOGRAPHY EXAMINATIONS FOR S.C.Excerpt from the 1925 report

The following is one of three incorrect answers given as instances of the candidates' dependence on imperfectly remembered notes:- ...the Mediterranean climate was said to be the result of "distance from the sea, temperature, and ocean currents..." (The Education Gazette, Vol., XXV, 6th May, 1926, No. 9, p. 295.)

Excerpt from the 1933 report

There is much evidence that the pupil might well devote himself to more practical work and less note-taking. A large number of candidates who attempted the question on the climate of South Africa supposed the lines drawn on the map, marked 29.8, 29.85, etc., to be not isobars but isotherms; and this was no mere verbal confusion, for such candidates proceeded to discuss temperature conditions. (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p. 332.)

Excerpt from the 1935 report

The questions dealing with climatic data and with the distribution of population in South Africa were badly done on the whole. Candidates showed a marked inability to understand statistical data.

.....

Few candidates were able to give a rainfall or temperature figure when discussing climate... (The Education Gazette, Vol. XXXV, 16th April, 1936, No. 8, p. 422.)

Excerpt from the 1936 report

Among eleven common faults are listed the following of a climatic nature: the belief that temperature is determined largely by ocean currents...that Lombardy has a Mediterranean climate, and that rain consists of condensed air... (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p.366.)

Excerpt from the 1937 report

Practical geography appears to be neglected, especially in some centres. Candidates do not seem to understand the meteorological instruments referred to. One wonders whether they have ever seen them. The rainfall chart especially was very badly done. Yet such charts should be kept in every school even in the primary department. If candidates had been accustomed to working with such

instruments as thermometers and rain gauges, if they had determined the average temperature of their area for a month or a year and noted the actual rainfall, then they might reasonably be expected to deduce a type of climate and suggest a locality when rainfall and temperature data were put before them. There is something seriously wrong with our practical geography when a large percentage of the candidates suggest a Mediterranean climate for a place which has its highest average temperature (85 degrees) in the month of May and an annual rainfall of 74 inches with a fall of 24 inches in the month of July alone. Geography must be comparative - otherwise it is not alive. (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p. 302.)

Excerpt from the 1938 report

The factors underlying climate are still hardly comprehended by candidates; thermometers and rain-gauges do not seem to be used with any understanding. If this were so then the fixing of a locality for which certain temperature and rainfall conditions are given should not present so much difficulty. (The Education Gazette, Vol. XXXVII, 27th July, 1939, No. 14, p. 787.)

Excerpt from the 1939 report

It would appear...that very little work has been done in connection with climatic statistics. Candidates seemed to have had very little experience of dealing with maps interpreting climate, and had no knowledge of how the mean monthly or mean annual figures are obtained. Although the actual figures were given for the rainfall of Bombay, very few candidates gave the correct mean annual rainfall figure and a large number wrote all they knew about "Monsoons" without any reference to the data. (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p. 983.)

Excerpt from the 1940 report

It seems that...little map work has been done in connection with climate. If pupils were taught to interpret climatic maps they would be able to get a clearer conception of what climate means. As it is they give vague and indefinite statements such as "not too hot" and "rather wet", and have little conception of the influence that altitude, winds and ocean currents have on the temperature and rainfall of a region. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 670.)

Excerpt from the 1941 report

There seems to be a tendency to confuse climatic regions with natural vegetation regions and the terminology relevant

to these is used indiscriminately. (The Education Gazette, Vol. XLl, 19th February, 1942, No. 5, p. 321.)

Excerpt from the 1942 report

Few candidates really understood average temperature and average rainfall. Since so much use is made of climatic data it would perhaps be as well if more attention were given to practical work in connection with local temperature and rainfall and to the working out of local averages. (The Education Gazette, Vol. XLll, 18th February, 1943, No. 6, p. 357.)

Excerpt from the 1945 report

The following, among others, are given as instances of answers which are either off the question or too vague: A detailed account of Bombay's climate does not state what can be deduced from the figures given of Bombay... Vague expressions, such as "suitable climate" or "good rainfall", are devoid of significance. (The Education Gazette, Vol. XLV, 7th February, 1946, No. 5, p. 288.)

Excerpt from the 1946 report

The following is a climatic instance given to exemplify the tendency of candidates to write off the question: A description of the Mediterranean climate does not say what causes this particular climate. (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, p. 358.)

Excerpt from the 1948 report

In the question on climatic data, wasteful descriptions were given on the inland position of the place and the effects of altitude, despite the fact that the question stated that the place was near sea-level.

.....

The question on the climate of Tokio was very poorly done. (The Education Gazette, Vol. XLVlll, 14th July, 1949, No. 17, p. 1162-1163.)

Excerpt from the 1951 report

In all probability weather records have not been kept, because candidates do not know these instruments.

Candidates show a lack of specific scientific geographical knowledge, especially of such terms as "precipitation", "relative humidity"... (The Education Gazette, Vol. Ll, 8th May, 1952, No. 12, p. 794-795.)

A P P E N D I X 64EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS, AND REFERRING TO THE NATURE OF THE CANDIDATES' ANSWERS TO CARTOGRAPHICAL QUESTIONS IN THE GEOGRAPHY EXAMINATIONS FOR J.C.Excerpt from the 1928 report

Greater attention should be paid to map reading and map construction. Much depends on the pupils' ability to interpret a map intelligently. (The Education Gazette, Vol. XXVIII, 6th June, 1929, No. 10, p. 465.)

Excerpt from the 1935 report

...it is apparent that there is need for more practice in...map reading. (The Education Gazette, Vol. XXXV, 16th April, 1936, No. 8, p. 445.)

Excerpt from the 1936 report

Teachers are again urged to drill their pupils in... the interpretation of maps. (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 388.)

Excerpt from the 1944 reportGeography minor

Many candidates could not interpret the scale of a map correctly. Consequently they could not calculate the actual distances and areas as represented on the map. (The Education Gazette, Vol. XLIV, No. 5, <sup>15th</sup>February, 1945, p. 281.)

Excerpt from the 1947 reportGeography minor

The average mark obtained for...the measurement of the distance between two places marked on a map, was disappointing. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, p. 365.)

---

A P P E N D I X 65EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS, AND REFERRING TO THE NATURE OF THE CANDIDATES' ANSWERS TO CARTOGRAPHICAL QUESTIONS IN THE GEOGRAPHY EXAMINATIONS FOR S.C.Excerpt from the 1929 report

It would appear that more practice is needed in map-reading. When students reach the senior certificate stage, they should, be able to visualise quickly and correctly the relief of an area on a contour map; and in the drawing of typical sections the vertical scale should not be so far exaggerated as to give (as was frequently done) a false impression of the general character of the country." (The Education Gazette, Vol. XXIX, 13th March, 1930, No. 5, p.181.)

Excerpt from the 1932 report

In the question on Triangulation, most candidates supposed that having measured angles with a theodolite one draws a diagram to scale. That would be impossible, except at the cost of accuracy; the "look and draw" method belongs to the plane-table. (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, p. 323.)

Excerpt from the 1933 report

In the question on contours...whenever a river was indicated a number of V's were frequently drawn athwart the stream, but since the V's had no relation to the contours they were clear evidence that the pupil had memorized verbally without a practical acquaintance with the principle. (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p.332.)

Excerpt from the 1936 report

One of eleven common faults which are listed: excessive exaggeration of vertical heights in drawing the section. (The Education Gazette, Vol. XXXVI, 1st April, 1937, No.7,p.365.)

Excerpt from the 1938 report

Very few candidates were able to make a satisfactory section of the contour map provided. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 787.)

Excerpt from the 1939 report

The work on the contour map was badly done by the majority of candidates. A very small number recognised it as that of a plateau and escarpment, and a still smaller percentage knew how to find the scale used. (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p. 983.)

Excerpt from the 1942 report

Contour maps are evidently neglected in some centres; this is a pity since the ability to read a relief map correctly is so important in modern geography. (The Education Gazette, Vol. XL11, 18th February, 1943, No. 6, p. 357.)

---

EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS  
CONCERNING THE NATURE OF THE CANDIDATES' ANSWERS TO  
QUESTIONS ON NATURAL VEGETATION IN THE GEOGRAPHY EXAMINATIONS  
FOR THE JUNIOR AND SENIOR CERTIFICATES

Junior Certificate

Excerpt from the 1934 report

Many candidates confused types of vegetation with types of climate... (The Education Gazette, Vol. XXXIV, No. 8, 18th April, 1935, p. 417.)

Excerpt from the 1937 report

...geographical terms concerning climate and vegetation were often wrongly interpreted... (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p. 235.)

Excerpt from the 1942 report

Many candidates, who attempted the question on the climatic influence on natural vegetation in the Equatorial forests and Coniferous forests regions, failed to see the connection between climate and vegetation. (The Education Gazette, Vol. XLII, 18th February, 1943.)

Excerpt from the 1950 report

Candidates did not know the difference between evergreen shrubs and evergreen forests, or between deciduous forests and coniferous forests. (The Education Gazette, Vol. L, No. 17, 26th July, 1951, pp. 1422-1423.)

Senior Certificate

Excerpt from the 1924 report

...coniferous forests were ascribed to the equatorial regions... (The Education Gazette, Vol. XXV, 6th May, 1926, No. 9, p. 295.)

Excerpt from the 1941 report

There seems to be a tendency to confuse climatic regions with natural vegetation regions and the terminology relevant to these is used indiscriminately. (The Education Gazette, Vol. XLI, 19th February, 1942, No. 5, p. 321.)

Excerpt from the 1947 report

Evergreen forests and evergreen shrubs are not similar types of vegetation. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, pp. 344-345.)

---

A P P E N D I X 67EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS ABOUT THE NATURE OF CANDIDATES' ANSWERS TO QUESTIONS ON REGIONAL AND ECONOMIC GEOGRAPHY IN THE JUNIOR AND SENIOR CERTIFICATEJunior Certificate1926 report

At a large number of centres far too little attention had been paid to the geography of the world outside South Africa. For example, in answering the question on the Mediterranean climate, a large number of candidates showed little knowledge of countries bordering the Mediterranean itself. In answer to the question relating to the coalfields of Europe, the information given was vague and confused. Although candidates are not expected to know the geography of Europe in detail, they are expected to have a clear and accurate knowledge of the outstanding geographical features of the Continent. (The Education Gazette, Vol. XXVI, 17th March, 1927, No. 6, pp. 225-226.)

1927 report

Greater accuracy appears to be necessary in teaching the distribution of products. It is not sufficient to state that "sugar grows in Natal." Here again sketch maps showing the distribution of products should be used and should be studied in close relation to the climatic maps. (The Education Gazette, Vol. XXVII, 23rd February, 1928, No. 4, p. 235.)

1928 report

In some cases it (i.e. economic geography) is receiving the necessary attention, but in others it is almost entirely neglected. More attention should be paid to the industrial districts of Europe. (The Education Gazette, Vol. XXVIII, 6th June, 1929, No. 10, p. 465.)

1929 report

It is rather disappointing...to find that after 10 years of school life there are still many pupils who have such a poor knowledge of their own country that they place New York in Natal, make the Orange River flow from West to East into the Indian Ocean, believe that Pretoria lies South of Johannesburg, and tell us that Kimberley is a town in South-West Africa noted for its gold mines! A great number of the candidates seem to have studied only one section of the syllabus, with the result that they could not do the questions on mathematical and physical geography; while others again could not do those on regional geography. In quite a number of schools it would appear that geography is not studied intelligently, as witness the following answers: Russia and Belgium have a

Mediterranean climate; Lancashire is famous for its great cotton crops, Holland for its rice and tobacco; the Western Province produces sugar and rice; Holland and Belgium have a continental climate because they experience the influence of the sea; the climate of the Rhine Valley is insular or extreme; the agricultural development of South Africa has not been great, because most of the people are engaged in farming. (The Education Gazette, Vol. XXIX, 13th March, 1930, No. 5, p. 197.)

1930 report

It seems as if all sections of the syllabus are not treated with equal thoroughness by some teachers, the knowledge of most of the candidates with regard to countries being generally considerably weaker this year than their knowledge of general practical geography.....From many of the answers it is evident that geography is not yet studied intelligently enough. A large number of candidates, for instance, had no conception of the causal connection between the situation of a country and its climate, or between its climate and its products. A good many candidates were quite convinced that England and Holland had a very warm climate owing to the influence of the Gulf Stream; others again that cotton and rice were the chief products of the central countries in England, and tobacco and mealies of Holland. (The Education Gazette, Vol. XXX, 2nd April, 1931, No. 6, pp. 252-253.)

1931 report

From a great percentage of the answers it has become once more abundantly clear that geography is still studied, and apparently taught, in a very unintelligent way in most of our schools. Most of the candidates possess a knowledge of the facts, but have not the faintest notion of the significance or the inter-relation of these facts. (The Education Gazette, Vol. XXXI, 10th March, 1932, p. 247.)

1932 report

Very few candidates attempted the question dealing with the Natural Regions of South Africa and Australia and in most cases the knowledge shown was of a very superficial nature. The question demanded good map work and use should have been made of 'colour' shading to differentiate the different regions. ... The most popular questions producing the most satisfactory answers were those dealing with world commodities and the description of a particular region under five given headings. (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, p. 343.)

1935 report

One question on South African geography was compulsory, a second was optional. On the whole these questions were poorly done. For this examination, a text-book on South Africa suitable for the Primary School is not adequate; teachers are urged to give more attention to the geography of the home land. ... The better candidates showed a good, up-to-date knowledge of world geography; but there were too many scripts with vague and inexact answers. (The Education Gazette, Vol. XXV, 16th April, 1936, No. 8, p. 445.)

#### 1936 report

The questions on South Africa were not well done. The knowledge of South African geography shown by many candidates was certainly not beyond what might fairly be required of pupils at the primary school stage. ... In their zeal for the modern regional treatment of geography, teachers should not overlook the vital importance of the political unit. In this year's paper one optional question was on South-West Africa; many of the candidates who attempted this question wrote answers on the western province of the Cape. (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 388.)

#### 1937 report

The questions dealing with South Africa were not as well done as those dealing with other countries. ... Candidates should read the questions more carefully. Africa and South Africa, South Africa and Cape Province, temperate grassland and tropical grassland were often confused. (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p. 234.)

#### 1938 report

The South African map question was very badly done. The average mark obtained for inserting ten geographically important towns are less than four. ... Exactness is missing in many answers, and such statements as: "The Cape Province has a Mediterranean Climate", "France grows citrus fruit" and "China has a Monsoon climate" appeared frequently. ... The descriptions of the Nile and of Holland were very weak. The existence of great irrigation schemes in the former, or of anything more important than neat dairymaids or blue trousered Hollanders tending tulips in the latter, is clearly not credited in some centres. A clearer appreciation of the relative importance of the inhabitants' occupations is desirable. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, pp. 805-806.)

#### 1939 report

The questions and the map work on Europe were not as well done as a rule as those on Africa, and the fact that in several centres all candidates omitted to do any questions on

Europe, or scored low marks in comparison with their other work, suggests that this section of the syllabus is being neglected by some teachers.

A better knowledge of irrigation might have been expected in a country as dry as South Africa. The existence of modern irrigation schemes on the Nile is not widely known among J.C. candidates.

Many candidates did not know the meaning of the words "citrus fruit", "irrigation" and "waterway". A recent report warned teachers against using words the meaning of which might not be quite clear to their pupils. (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p. 1047.)

#### 1940 report

It was distressing to note that hundreds of candidates wrote that cotton "is grown in the moist, damp climate of Lancashire". Quite a common mistake was that pupils described the world production of maize, instead of the production in South Africa.

It was clear from their descriptions that candidates did not understand the meanings of words such as manganese, flax, relief, temperature or continental climate, eastwards and westwards, etc. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 695.)

#### 1941 report

It seems extraordinary that candidates have to lose marks because they do not know the meaning of words such as "irrigation," (especially in the English-speaking centres) "citrus fruit," "cape", etc.

It was astonishing to note that hundreds of candidates wrote that Holland with its "many canals and windmills" is one of the world's chief irrigating countries. Another common error was that endless descriptions were given on "perennial and basin irrigation in Egypt," when the question referred to irrigation methods in South Africa.

A large number of candidates took the Cool Temperate Oceanic region to be the Mediterranean type. (The Education Gazette, Vol. XLI, 19th February, 1942, No. 5, p. 341.)

#### 1942 report

"...it is still evident that many teachers treat South African geography very superficially. ... Many candidates, who attempted the question on the climatic influence on natural vegetation in the Equatorial Forest and Coniferous Forest regions, failed to see the connection between climate and vegetation. (The Education Gazette, Vol. XLII, 18th February, 1943, No. 6, p. 377.)

1944 reportGeography major

Teachers must stress more the connection between the human occupations and the natural phenomena on the earth's crust. (The Education Gazette, Vol. XLIV, No. 5, February, 1945, p. 281.)

Geography Minor

The questions on economic and regional geography were, on the whole, satisfactorily answered. The main transport routes of the world need more attention. Candidates confuse the Panama and Suez routes. The majority of candidates did not attempt the question on the Suez canals. (The Education Gazette, Vol. XLIV, No. 5, <sup>15th</sup> February, 1945, p. 281.)

1946 report

Vagueness tends to remain a very common fault, e.g. America is used for the U.S.A., South America for the Argentine, while wheat is cultivated in Winnipeg and maize in Buenos Aires.

The question on ports was very poorly done on the whole. The sketch-maps indicating their positions were poor and non-sensical reasons were advanced for their importance. (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, p. 378.)

1947 report

In connection with the natural regions the idea of geographical control should be stressed much more strongly. In some centres all the candidates give a description of the natural vegetation first and then they return to climatic conditions. This disturbs the logical order of things, while in the paper, too, it was asked the other way about. Again, the determination of products and human activities by natural geographical conditions was done very poorly. Candidates simply give a description of the primary and secondary industries in all the different countries where a certain natural type occurs without in the least attempting to show the relationship to natural conditions. ...

For a country like South Africa where droughts are such an actual matter, it was an eye-opener to see how very few candidates had a clear conception of what is meant by "an inch of rain". The term "fruit" was used much too loosely; it would be just as correct to say that a farmer farms with "animals" as that he produces "fruit". The use of the term "veld" for the temperate grasslands in South Africa is certainly not to be recommended, while the most general misconception certainly was the assertion that the residue that is left

over after the juice has been pressed out of the sugar canes is used as a cattle feed. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, pp. 364-365.)

1948 report

In Section B on general and regional geography the candidates did much better. (I.e. than on the section on mathematical, physical and practical.) Many of them, however, do not appear to be aware of the fact that the products a tramp steamer will take in at different ports are the products for export and not merely any product a country produces.

In the question on the maize industry in South Africa, too many candidates named possible instead of actual uses, while in the case of one large centre all the candidates used the word silos instead of elevators. (The Education Gazette, Vol. XLVIII, No. 18, 28th July, 1949, p. 1260.)

Senior Certificate

1926 report

In two centres the questions on Physical Geography were well answered, but it was evident that regional and economic geography - more important divisions of the subject - had been neglected. (The Education Gazette, Vol. XXVI, 3rd March, 1927, No. 5, p. 185.)

1928 report

The commonest fault was a marked tendency to talk round the subject and leave the essential points unexplained; candidates talk much too airily about geographical principles without showing any aptitude to illustrate these principles with concrete and definite facts. Indeed it is obvious that most of the students have not a sufficiently firm groundwork of geographical knowledge and it would appear also that in many cases the teachers themselves are not well equipped for teaching the economic geography of the world.

It cannot be urged too strongly that the prime need is to give students a clear and true picture of the different natural regions and the chief countries of the world; the enunciation of principles should grow out of the study of facts. When candidates talk of Lancashire as a cotton growing area, or of the volume of the Argentine trade as comparable to that of South Africa, there is surely something ineffective about the teaching. (The Education Gazette, Vol. XXVIII, 25th April, 1929, No. 7, p. 336.)

1929 report

In the teaching of modern geography, it is necessary to keep careful guard on the tendency of over-simplification.

Students should realise, for example, that human activities in particular areas are not necessarily decided by climate only. Thus, the northern limits of wheat production in Canada are determined by economic rather than by climatic factors. The present localisation of the cotton and woollen industries in Lancashire and Yorkshire can be only partially explained by reference to purely geographical causes...

(The Education Gazette, Vol. XXIX, 13th March, 1930, No. 5, p. 181.)

#### 1930 report

It might be well to indicate the main lines on which improvement has been made during the last three years.

(a) The Major Natural Regions of the World are more clearly visualised, and it is apparent that constant use is made of the atlas...

(b) Answers on particular areas show a more accurate knowledge of basic facts and details, without which there can be no solid geographical superstructure.

(c) Terms such as "geographical control", "influence of environment", etc., are less glibly used. Indeed, the most satisfactory feature of this year's scripts was the absence of these vague generalisations. (The Education Gazette, Vol. XXX, 12th March, 1931, No. 5, p. 202.)

#### 1931 report

One of two criticisms which are offered: There was a frequent tendency to write answers in note form, sometimes to the extent of reproducing note-book material that was not relevant to the answer. Thus many candidates illustrated their account of the manufacturing industries of South Africa by means of a sketch-map of natural regions. The note-book habit showed itself also in the too-general use of abbreviations; (e.g., "the curr.t caused by the S.E.F.W."; "versk. in temp."; "N.S.W. equals temp. grasslands"; "the industry is quite imp."). (The Education Gazette, Vol. XXXI, 10th March, 1932, p. 227.)

#### 1932 report

A number of candidates, happily not so numerous a band as in the past, continue to reproduce irrelevant material memorised from notebooks. The worst instance was that of a candidate who took the opportunity afforded by the question on the Mississippi to summarize the entire geography of the United States (5 pages); most of the candidates who attempted this question exhibited this fault to a greater or less degree. Similarly, the importance of mining in South Africa may be discussed without introducing a detailed review of

the distribution of minerals. The relation between natural conditions and human occupations in certain regions was also the excuse, in some papers, for the quotation of much unwanted tabloid geography - build, climate, natural vegetation, towns, communications, trade, etc. ...

The questions answered least satisfactorily were the map question and that dealing with Southern Africa. (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, pp. 322-323.)

1933 report

The tendency to introduce irrelevant material was illustrated in the question on the St. Lawrence Basin, which afforded an opportunity for the survey of North America in general... (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p. 332.)

1934 report

The previous tendency to reproduce memorised note-book material, an educationally futile practice, has largely disappeared. ...

The questions answered least satisfactorily were those relating to Southern Africa. It is amazing that in these progressive days school-leaving pupils should be so ignorant of the arresting geographical problems of their own country. Very few candidates gave satisfactory accounts of such matters as soil-erosion in South Africa, our native peoples, or the distribution of rainfall and population, nor was the preponderance of the native population sufficiently recognized. (The Education Gazette, Vol. XXXIV, 18th April, 1935, No. 8, pp. 393-394.)

1935 report

The questions dealing with climatic data and with the distribution of population in South Africa were badly done on the whole. ...

There was a general vagueness of statement and much irrelevancy throughout the papers. ...

Few candidates...made any distinction between the different regions of temperate grassland; and very few could discuss adequately the conditions affecting the cultivation of cotton in a chosen area. (The Education Gazette, Vol. XXXV, 16th April, 1936, No. 8, p. 422.)

1936 report

Among common faults are listed: Indefiniteness (e.g. giving a description of the Punjab that might apply equally to any part of India...misunderstanding of the unfortunate expression "Balance of Trade"...confusion of cause and effect (e.g. "Port Elizabeth imports motor car parts because she has

factories for assembling cars"...padding" (e.g. "wheat, from which bread is made"... (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 366.)

#### 1937 report

...on the whole there is an extraordinary lack of background and information is limited apparently to that provided in the textbooks. Consequently many candidates are capable of going into details about deltas and estuaries but very few appear to know that here in South Africa we provide enough wheat and sugar for our own use and that practically all our tea and coffee has to be imported.

The weakest answers were those written on the South African questions. It would seem that far greater use might be made of the Year Book and also of a good atlas. Most of the sketch maps drawn in order to illustrate the mineral production of the Transvaal would have been a disgrace to a Standard VI pupil.

On the whole answers are too vague; there are too many pointless generalisations, e.g., "cheap and plentiful labour is an important factor. Many of the industries of Natal are possible because of the plentiful labour supply". But the candidate gives no facts about that plentiful labour before attempting to answer them. (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p. 301.)

#### 1938 report

There is often a...vagueness in the answers to the questions, e.g. all industrial areas appear to have "plentiful supplies of fuel, textiles, and iron and steel goods are manufactured."

Candidates from many centres have a most detailed knowledge of e.g. the formation of a glacier but frequently they know next to nothing of the communications of their own land nor can they contrast her imports and exports with that of another country. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 787.)

#### 1939 report

The questions in Section B - Regional Geography - were well done by most candidates... (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p. 983.)

#### 1940 report

One or two questions were well done - for example those on the petroleum supply of the world, and Germany's coalfields - and the answers showed some systematic work, but, as a general rule, vagueness and irrelevancy are characteristic of most of the answers, especially of those on South Africa,

and there is a lamentable absence of place names.

Although the question on the density and distribution of the population of South Africa was divided into two definite parts, in many cases the answers were confused. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p.670.)

1942 report

...the answers showed that not only had the syllabus been carefully covered but the candidates had done a certain amount of reading apart from the information provided in the textbooks and in the form of notes. ...

Questions on South African geography were only fairly satisfactory. Candidates have a far more accurate knowledge of the Argentine than of the Highveld of the Transvaal, and of an estuary than a koppie. (The Education Gazette, Vol. XLII, 18th February, 1943, No. 6, p. 357.)

1944 report

The candidates frequently lose marks not so much from a lack of knowledge but because they are not able to use their knowledge to answer the question asked. Candidates can for example give a geographical description but very few of them have any understanding of the connection between the geographical conditions of the region and the people of that region. Consequently they do not answer that part of the question in which they are asked for reasons for density of population or for the influence of natural conditions upon the activities of the people. (The Education Gazette, Vol. XLIV, No. 5, February, 1945, p. 263.)

1945 report

It is surprising to note the perfunctory attention paid by candidates to South Africa itself. The question on South Africa received by far the weakest answers. Candidates apparently find it easier to travel across Canada, from the west to the east coast, than across South Africa.

(N.B. A reference of a general nature is also made to the prevailing vagueness of the answers.) (The Education Gazette, Vol. XLV, No. 5, 7th February, 1946, p. 288.)

1946 report

This year again, just as last year, the fact must be emphasised that candidates do not use their knowledge of geography correctly. They generalise too much; give long descriptions which cannot be accepted as answers to the questions. If a candidate gives the natural conditions suitable for coffee production, that is not the answer to the question as to what the favourable geographic factors are for coffee production in Brazil... (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, p. 358.)

1947 report

The question on the minerals of the Transvaal was really poorly answered. Candidates have but an elementary knowledge of the mineral wealth of South Africa. The African rivers and their tributaries are apparently lesser known than the Yangtse with its tributaries and lakes. Often even the Limpopo was marked as a tributary of the Zambesi. ... Many candidates do not know the difference between iron and steel. Often candidates wrote about the steel mines of Iscor near Pretoria or the steel that is mined at Thabasimbi. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, pp. 344-345.)

1948 report

The question on cotton was...poorly answered. Hundreds of candidates do not know the difference between cotton, i.e. raw cotton, and manufactured cotton or cotton goods. As a result of this, candidates wrote pages on the cotton manufacturing industries of Lancashire, France and Belgium. This was a very serious mistake. It was also not enough to mention only three countries for the production of cotton. Many candidates (in Std. X) think that cotton is actually grown in England! In connection with the trade it is generally stated that England and France export cotton. (The Education Gazette, Vol. XLVIII, No. 17, 14th July, 1949, pp. 1162-1163.)

1950 report

Most answers on the distribution of population in Australia were long-drawn-out geographical descriptions of Australia, while the answers on dairy produce in New Zealand, rubber in Malaya, etc., were very disappointing. Some candidates paid no attention to "local geographical factors", while others who did not know of dairy farming, included mutton, wool and skins. Vague and indefinite statements like, "the climate is good or favourable for cotton growing on the Deccan", and "the soil is fertile for coffee planting on the Sao Paulo plateau" are worthless. (The Education Gazette, Vol. L, No. 17, 26th July, 1951, p. 1344.)

1951 report

Questions were answered vaguely, e.g. mention was made of industries or raw materials without specifically stating what articles are manufactured or what the raw materials are or from which region of the country they are derived... (Candidates) do not know the difference between phosphates or nitrates or where petroleum is found. (The Education Gazette, Vol. LI, 8th May, 1952, No. 12, pp. 794-795.)

A P P E N D I X 68EXCERPTS TAKEN FROM THE DEPARTMENTAL EXAMINERS' REPORTS  
CONCERNING THE NATURE OF CANDIDATES' ANSWERS TO QUESTIONS  
WHICH DEMAND SKETCH MAPS OR THE INSERTION OF GEOGRAPHIC  
DISTRIBUTIONS ON OUTLINE MAPSJunior Certificate1928 report

The importance of the filling in of outline maps must again be emphasised. Though there are indications that this is being attended to in most centres, some of the attempts to fill in an outline map of South Africa so as to show the distribution of certain products were deplorable. (The Education Gazette, Vol. XXVIII, 6th June, 1929, No. 10, p.465.)

1930 report

Topography was generally weak, e.g., the situation of Hamburg presented a difficulty to most of the candidates. Some thought that it was the principal seaport of France, others again of England. Some candidates think that Pretoria is situated near the North Pole, while others frequently confused Belgium with Denmark, or Belgium with Bohemia. A little more time and intelligent study devoted to the map would not be out of place here. (The Education Gazette, Vol. XXX, 2nd April, 1931, No. 6, pp. 252-253.)

1932 report

Very few candidates attempted the question dealing with the Natural Regions of South Africa and Australia and in most cases the knowledge shown was of a very superficial nature. The question demanded good map work and use should have been made of "colour" shading to differentiate the different regions.

"Colour" shading too should have been used to indicate the areas where different crops are grown in South Africa. Most candidates either gave five "spots" to represent the five products asked for, or completely covered the map with letters. (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, p. 343.)

1933 report

One must again urge the use of sketch-maps. It was surprising to see how few candidates could produce a good outline map of South Africa. Very few filled in the areas of production by means of coloured pencils as they were urged to do in last year's report. (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p. 351.)

1934 report

More use was made of sketch-maps and these were, on the whole, better than usual. There were some excellent maps of South Africa. (The Education Gazette, Vol. XXXIV, 18th April, 1935, No. 8, p. 417.)

#### 1935 report

A few excellent diagrammatic sketch maps were produced, but it is apparent that there is need for more practice in both map drawing and map reading. While geography does not aim at teaching draughtmanship, candidates should be able to draw simple maps which represent the facts correctly and place the various features at the proper proportionate distances one from another; to place Johannesburg in the northern Transvaal, as many did, is worse than bad map drawing, it is ignorance of facts.

More time should be spent by the pupils in working out exercises with material obtained from the atlas, text books, and reference books. (The Education Gazette, Vol. XXXV, 16th April, 1936, No. 8, p. 444.)

#### 1936 report

Teachers are again urged to drill their pupils in the use of the atlas and in the interpretation of maps. Well annotated sketch maps of regions studied are of greater value than dictated notes. (The Education Gazette, N Vol. XXXVI, 1st April, 1937, No. 7, p. 388.)

#### 1937 report

Far too little use was made...of sketch maps in illustration...

Finally, one felt that not enough use had been made of the atlas in the work of the class. (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, pp. 234-235.)

#### 1938 report

In last year's report the examiners for the geography of both the Senior and Junior Certificate examination commented on the low standard of the maps handed in by the candidates, and of the obvious neglect of the atlas in class teaching. This year has shown no improvement in this respect, and as the Junior Certificate paper for 1938 demanded a map or sketch in illustration wherever that was possible, a lower average mark for the subject has been scored. Many candidates who obtained full marks for the descriptive parts of the questions that dealt with occupations and products of countries did not attempt to draw a map and, as a result, missed getting a better symbol.

The South African map question was very badly done. The

average mark obtained for inserting ten geographically important towns are less than four.

In map questions candidates should not use a light pencil, nor should they be encouraged to run riot with coloured crayons. While some schools neatly print names on maps, others scribble in longhand. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 805.)

#### 1939 report

The poor knowledge of maps was again the outstanding weakness revealed by the geography scripts. Many candidates, who gave otherwise excellent answers on Kenya or Angola, drew sketch maps of Tanganyika, Nigeria or South-West Africa to illustrate their answers. Others who knew all about the towns and industries of the coalfields of Lancashire, Yorkshire or Lanarkshire placed these fields quite incorrectly on their sketch maps - or omitted the maps entirely. Less than a quarter of the candidates who attempted the question inserted the name Tanganyika correctly on the map of Southern Africa provided, and less than one-tenth marked the position of Dar-es-Salaam correctly. There must be something wrong with the teaching of the subject when this state of affairs continues after three consecutive examiner's reports have stressed the need for the regular use of the atlas in geography teaching. (The Education Gazette, Vol. XXXIX, 11th July, 1940, No. 15, p. 1047.)

#### 1940 report

That map-work is still sorely neglected in many schools was brought out on the map question of South Africa, this question averaging the lowest marks of all the questions. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 694.)

#### 1942 report

The map question on South Africa again averaged the lowest marks of all the questions, and it is still evident that many teachers treat South African geography very superficially. ... Less than 10 per cent of the candidates marked Lake Arthur correctly, and a great majority had no notion of the boundaries of the Orange Free State. (The Education Gazette, Vol. XLII, 18th February, 1943, No. 6, p. 377.)

#### 1943 report

Although the map-work part of the paper from a very large number of candidates was a pleasure to mark, there are still some centres where this section of the work is neglected. It is only natural that candidates from such centres can never hope to receive high marks. (The Education Gazette, Vol.

XL111, 17th February, 1944, No. 5, p. 279.)

1944 report

Geography minor

The poor knowledge of maps must again be emphasised. (The Education Gazette, Vol. XLIV, No. 5, February, 1945, p. 281.)

1945 report

More attention must be given to...map work - especially sketch maps. ... Pupils must be taught how to indicate data on a map, without the use of a key. (The Education Gazette, Vol. XLV, No. 5, 7th February, 1946, p. 307.)

1946 report

The sketch-maps indicating their positions (i.e. ports) were poor. The sketch-maps on countries varied from real works of art requiring an undue amount of the candidate's time to mere lines indicating nothing. On a sketch-map should be indicated only what has been asked in the question.

In the map of South Africa, if towns were indicated by a definite point, a mountain range by a clear line, and a region within a dotted line, the confusion of complicated keys would be avoided. (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, p. 378.)

1947 report

Geography major

Except at a few centres map-work was done very poorly, especially where certain items had to be indicated on maps. ... On the map of Europe the coalfields were indicated very poorly. It often happened that places, e.g. intermediate ports of call on an ocean-route that had to be indicated on a map, were described in the text. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, p. 364.)

Geography minor

The average mark obtained for the questions which required that certain information should be inserted on a map of South Africa...was disappointing. (Ibid., p. 365.)

1948 report

Geography major

The answers on the compulsory map question, Section C, were quite satisfactory, with the possible exception of the indication of the China type of climate - this was either very poorly done, or omitted altogether. (The Education Gazette, Vol. XLVIII, No. 18, 28th July, 1949.)

Geography minor

Generally the map work was poor and untidy and the information required was often given in the answer-book when it should have been indicated on the map. It was astounding to see how many candidates could not fill in an area of the

Union which had a scattered population. Their knowledge of the railway route from Port Elizabeth to Durban was equally poor. (The Education Gazette, Vol. XLVIII, 28th July, 1949, p. 1261.)

#### 1950 report

It was a real pleasure...to look at the maps (of some candidates). ... Pupils should be shown that it is impossible to write on maps; printing must be used. A dot is necessary to indicate a city: Port Elizabeth written somewhere in the vicinity of Algoa Bay cannot be accepted as correct. ...

A key must be used when filling in the maps. There is enough space on the map for everything to be indicated on it neatly. ...

It was most surprising to see how many candidates showed the railways as passing right across the Drakensberg of Basutoland. (The Education Gazette, Vol. L, No. 18, 9th August, 1951, pp. 1422-1423.)

#### 1951 report      Geography major

At some centres the teaching of geography is undoubtedly of a high standard. Sketches were neatly done, maps were clearly and correctly marked... This can, however, not be said of all the centres. (The Education Gazette, Vol. LI, No 13, 22nd May, 1952,) p. 885.)

#### Geography minor

Sketch maps were of a very poor quality. Far too many candidates did not draw maps where these were asked for. (The Education Gazette, Ibid., p. 885.)

#### Senior Certificate

##### 1930 report

...it is apparent that constant use is made of the atlas; but teachers are advised to encourage students to illustrate their answers with sketch maps. (The Education Gazette, Vol. XXX, 12th March, 1931, No. 5, p. 202.)

##### 1932 report

The questions answered least satisfactorily were the map question and that dealing with Southern Africa. Candidates whose other answers were excellent were amazingly ignorant of the situation of important regions like Manchuria, the Argentine, Java, etc., and of the steam-ship routes to Australasia and the East. ... Not a single candidate was able to draw a map of Southern Africa to show the various states, rivers, centres of population, railways, etc. A few candidates made a poor attempt at a rainfall or vegetation

map, but it should be recognized that the term "map", without qualification, means one showing features like those enumerated above, and having (if possible) some simple representation relief. (The Education Gazette, Vol. XXXII, 13th April, 1933, No. 7, p. 323.)

1933 report

...well-known places such as Hamburg, Aden, Chicago, etc., were often allocated to such strange regions that the pupil responsible could seldom have examined a map of the world. The constant use of the Atlas and the insertion of topographical detail into outline maps is indispensable to the study of the subject. (The Education Gazette, Vol. XXXIII, 19th April, 1934, No. 7, p. 332.)

1934 report

It is...evident that pupils in certain centres should devote more of their time to the study of the Atlas and to map exercises. Most candidates were familiar with the map of the world, to the extent that various features could be inserted in the proper continents, but for the Senior Certificate a more accurate knowledge of town-sites, harbours, railways routes etc., is demanded. (The Education Gazette, Vol. XXXIV, 18th April, 1935, No. 8, p. 394.)

1935 report

It was disappointing to find the diagrams and sketch-maps so poor.

The map of the world was filled in, in most cases, without any key for reference though a few were very neatly done. It is interesting to note the ignorance of place names shown by many candidates, some of whom did quite good work otherwise. (The Education Gazette, Vol. XXXV, 16th April, 1936, No. 8, p. 421.)

1936 report

One of a number of common faults: Lack of familiarity with maps (e.g. marking sea-routes and ocean currents in the interior of continents, and equatorial forests in Siberia... (The Education Gazette, Vol. XXXVI, 1st April, 1937, No. 7, p. 365.)

1937 report

The weakest answers were those written on the South African questions. It would seem that far greater use might be made...of a good atlas. Most of the sketch maps drawn in order to illustrate the mineral production of the Transvaal would have been a disgrace to a Standard VI pupil. (The Education Gazette, Vol. XXXVII, 24th March, 1938, No. 6, p. 301.)

1938 report

Maps are often done in the most slovenly fashion; the name of a town is written in but no dot is put to show where the place really is situated. (The Education Gazette, Vol. XXXVIII, 27th July, 1939, No. 14, p. 787.)

1940 report.

The mapwork was surprisingly poor and in many cases the writing untidy and nearly illegible. (The Education Gazette, Vol. XL, 8th May, 1941, No. 11, p. 670.)

1941 report

The work was neat and well set out and the sketch-maps were in some cases very good. ...

It would appear...that more practice in maps showing world distribution is needed for the maps were on the whole badly done. (The Education Gazette, Vol. XLI, 19th February, 1942, No. 5, p. 321.)

1942 report

The examiner would like to suggest that more attention be given to sketch maps. Candidates must remember that where a sketch map is definitely asked for in the question marks are allocated accordingly. But the sketch map must be drawn to illustrate the particular point which is under discussion in the question; otherwise it has little value. (The Education Gazette, Vol. XLII, 18th February, 1943, No. 6, p. 357.)

1943 report

...candidates should pay more attention to map work. The filling in of the world map is a question where candidates ought to be able to score full marks, but the lack of accurate knowledge makes good marks the exception rather than the rule. More drill work in map study would seem to be necessary. Natural regions and areas producing certain crops should be given boundaries. The use of crayons for filling in these areas is advisable. In any case candidates might remember that maps that are filled in in pencil create a very bad impression. With regard to sketch maps candidates are again reminded that when a sketch map is asked for, then marks are allocated accordingly. Such sketch maps are often neglected or else inaccurately drawn. (The Education Gazette, Vol. XLIII, 17th Feb., 1944, No. 5, p. 279.)

1944 report

On the whole mapwork shows an improvement but it is a pity that the advice given last year by the examiner in connection with the clear outlining of regions, the use of coloured crayons and the general accuracy of the map was not followed by many of the centres. The primitive careless way

in which most sketch maps are made can be the result only of a lack of the correct use and knowledge of the atlas. (The Education Gazette, Vol. XLIV, No. 5, February, 1945, p. 263.)

#### 1946 report

Candidates did badly in the map question, mainly as a result of inaccuracy. A city cannot be indicated merely by writing its name somewhere in the vicinity; a dot in the correct position is necessary. Tobacco cannot be indicated in U.S.A. simply by writing the name somewhere over the interior of that country. Boundaries of vegetation regions must be given, and the name of the vegetation (not the climate) written alongside. A neat index, given in one corner of the map, is an absolute necessity. (The Education Gazette, Vol. XLVI, No. 6, 20th February, 1947, p. 358.)

#### 1947 report

It is a pleasure to report that some excellent work has been received from a larger number of centres this year. Particularly as regards the mapwork it is clear that special attention has been given to neatness and accuracy in many schools. A finely pointed nib and printing are essential requirements, not only for creating an impression of neatness, but also to do justice to that which has to be filled in on the map. This proved to be the case at many centres. In general high marks have been obtained for the maps. (The Education Gazette, Vol. XLVII, No. 6, 19th February, 1948, p. 344.)

#### 1948 report

The map of the world was in many cases filled in in a very slovenly and inaccurate way. The sea-routes crossed islands, then followed extraordinary routes just to find the two intermediate ports. Although some candidates filled their maps in properly, others wrote instead of printing and often in ordinary pencil. (The Education Gazette, Vol. XLVIII, No. 17, 14th July, 1949, pp. 1162-1163.)

#### 1950 report

Many centres evidently still neglect mapwork. Neatness in printing, accuracy, etc., were sadly lacking. (The Education Gazette, Vol. L, No. 17, 26th July, 1951, p.1344.)

#### 1951 report

Map-work especially was lacking in neatness. Data were inserted in pencil - ocean currents without indication of direction of flow; winds without the name of the place to which they were blowing; and rivers without their names. Data were written over other data with the result that

359.

nothing could be deciphered. Products were inserted without due indication of the region where they are found; numbers were often used on the map where no numbers had been given. (The Education Gazette, Vol. Ll, 8th May, 1952, No. 12, pp. 794-795.)

---

