

**UNIVERSITY OF SWAZILAND**

**FACULTY OF EDUCATION**

**DEPARTMENT OF CURRICULUM AND TEACHING**

**MAIN EXAMINATION PAPER. APRIL/MAY 2006**

**TITLE OF PAPER: CURRICULUM STUDIES IN GEOGRAPHY**

**COURSE CODE: EDC277 ,**

**DURATION: THREE (3) HOURS**

**STUDENTS: B.ED II AND PGCE**

- INSTRUCTIONS:**
- 1. THERE ARE A TOTAL OF SIX QUESTIONS**
  - 2. ANSWER ANY FOUR (4) QUESTIONS.**
  - 3. EACH QUESTION IS WORTH TWENTY FIVE (25) MARKS**
  - 4. YOU ARE ADVISED NOT TO SPEND MORE THAN FORTY FIVE (45) MINUTES ON ANY ONE QUESTION.**

**SPECIAL REQUIREMENT: IGCSE GEOGRAPHY SYLLABUS, 2007 AND ARTICLE FROM THE TIMES OF SWAZILAND.**

### QUESTION 1

Discuss how, as a teacher of geography, you can use the school's neighbourhood for the effective teaching and learning of geography in the lower secondary school. **[25 marks]**

### QUESTION 2

- a) Advance any five points to justify the use of teaching/learning aids in geography (10).
- b) The following are some of the teaching/learning aids used in the teaching and learning of geography: •

Overhead projector, slide projector, chalk board, charts, text book.

Choose any three of the teaching/learning aids listed above; and for each:

- (i) Discuss three advantages of using it; (3x3)
- (ii) Discuss two disadvantages of using it. (2x3) **[Total: 25 marks]**

### QUESTION 3

Projects are very important in the teaching and learning of geography. Discuss the value of project work in the teaching and learning of geography and point out some of the disadvantages of using project work. **[25 marks]**

### QUESTION 4

This question is based on the attached article copied from Times of Swaziland – Wednesday, November 30, 2005.

You are expected to formulate lesson notes for a lesson entitled “Livestock rearing in Swaziland”. The notes should include the following:

- a) Problems faced by livestock farmers in Swaziland;
- b) How the problems can be solved;
- c) Marketing of livestock products in Swaziland. **[25 marks]**

### QUESTION 5

- a) Discuss the importance of lesson planning in the teaching and learning of geography (13 marks).
- b) Using the IGCSE syllabus attached:
  - i. Formulate an overall aim for the topic 'Settlement' (2 marks)
  - ii. Derive six objectives for one of the four subtopics. The objectives should fill the following categories of domains of learning:
    - Knowledge (one objective). (2 marks)
    - Application (one objective). (2 marks)
    - Analysis (one objective). (2 marks)
    - Affective domain (one objective) (2 marks)
    - Psychomotor domain (one objective) (2 marks) **(Total 25 marks)**

### QUESTION 6

Discuss the importance of each of the following concepts on map work in the teaching and learning of geography.

- a) Scale (5)
- b) Bearings (5)
- c) Horizontal distance (5)
- d) Gradient (5)
- e) Cross section (5)

**[25 marks]**

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**END OF QUESTION PAPER**

# FOCUS ON FARMING

Your Weekly Update Every Wednesday

Contributions and comments to:  
Nombiso Hlatwayo  
PO Box 156  
Mbabane  
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e-mail: Phe26@yahoo.com

## EXPECT A CATTLE PRICE INCREASE

By Sipho Shongwe  
(Your friend in the Swaziland  
Livestock Industry)

Swaziland Livestock Technical Services would like to advise stakeholders that there is an unavoidable cattle price increase coming this December. It happens every year in December that cattle price increases by 5 to 15%. This festive season will be worse because of the late rains and high cattle mortality due to the drought.

There are many factors that are responsible for this price increase but the prominent factor is the festive season demand for beef, which increases every year. Secondly, the drought has devastated pastures resulting in high cattle mortality and many surviving cattle are too thin to be marketed, generating a short supply of cattle in markets that

just because there is a big demand for beef in the market. Farmers must make sure that their cattle are sold at the right price all the time. They should get worried when they see their regular customers walking away from deals because this is a sign that the butcher can no longer sell the meat and make a profit at the price the farmers are selling the cattle.



Cattle...this means farmers with fat cattle will do well this December if they market their cattle wisely.

have an increasing demand for beef. The short supply of cattle has increased competition for the few fat cattle available in feedlots and few selected farms.

### Market

This means farmers with fat cattle will do well this December if they

1. Advise government marketing section that they have cattle to sell. Farmers must tell the marketing officer the numbers of cattle available for sale and they must state whether they are for breeding or slaughter. The government agent will schedule an auction sale and invite cattle

### Farmers who have fat cattle are advised to: -

2.

buyers in Swaziland to attend the auction sale. Farmers who sell cattle in auction sales get good prices for the cattle.

Advise the cattle and invite cattle buyers to tender for the cattle. The farmer will decide on a date to open the tenders and the tenders must be opened preferably in the presence of all the people who have tendered for the cattle. It is important to tell the bidders the minimum price expected for the cattle since the farmers will not be forced to sell if the bids are too low. Before the tenders are opened, the farmer must also disclose payment terms if that was not included in the advert.

SWAZI MTN INCREASES ITS  
DREF PAID CATEGORY BY 14%

TTN I FT

International General Certificate  
of Secondary Education

**Syllabus**

**GEOGRAPHY**  
**0460**

For Examination in 2007



UNIVERSITY *of* CAMBRIDGE  
International Examinations

**GEOGRAPHY 0460  
IGCSE  
2007**

**IMPORTANT NOTICE**

**University of Cambridge International Examinations (CIE) in the UK and USA**

University of Cambridge International Examinations accepts entries in the UK and USA only from students registered on courses at CIE registered Centres.

UK and USA private candidates are not eligible to enter CIE examinations unless they are repatriating from outside the UK/USA and are part way through a course leading to a CIE examination. In that case a letter of support from the Principal of the school which they had attended is required. Other UK and USA private candidates should not embark on courses leading to a CIE examination.

This regulation applies only to entry by private candidates in the UK and USA. Entry by private candidates through Centres in other countries is not affected.

Further details are available from Customer Services at University of Cambridge International Examinations.

**Exclusions**

This syllabus must not be offered in the same session with any of the following syllabuses:

2217 Geography  
2223 Geography (Southern Africa)  
2230 Geography (Brunei)

You can find syllabuses and information about CIE teacher training events on the CIE Website ([www.cie.org.uk](http://www.cie.org.uk)).

# Geography

## Syllabus code: 0460

Available in the June and November examination sessions

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### NOTE

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This syllabus was revised for first examination in June 2006.

Please note that Papers 2 and 4 will now consist of combined question paper and answer booklets with candidates answering in the spaces provided. (Paper 1 will still require separate answer paper/answer booklet.)

# INTRODUCTION

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International General Certificate of Secondary Education (IGCSE) syllabuses are designed as two-year courses for examination at age 16-plus. This syllabus is available for examination in both the June and November sessions.

All IGCSE syllabuses follow a general pattern. The main sections are:

- Aims
- Assessment Objectives
- Assessment
- Curriculum Content.

The IGCSE subjects have been categorised into groups, subjects within each group having similar Aims and Assessment Objectives.

Geography falls into Group II, Humanities and Social Sciences, of the International Certificate of Education (ICE) subjects together with Development Studies, Economics, History, Latin, Literature, Natural Economy and Sociology.

The booklet *IGCSE: An Introduction* gives fuller details of ICE and the general pattern of the syllabuses.

## AIMS

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The aims of the syllabus are the same for all students. The aims are set out below and describe the educational purposes of a course in Geography for the IGCSE examination. They are not listed in order of priority.

The aims are to encourage students to develop:

1. a sense of place and an understanding of relative location on a local, regional and global scale;
2. an awareness of the characteristics and distribution of a selection of contrasting physical and human environments;
3. an understanding of some of the processes affecting the development of such environments;
4. an understanding of the spatial effects of the ways in which people interact with each other and with their environments;
5. an understanding of different communities and cultures throughout the world and an awareness of the contrasting opportunities and constraints presented by different environments.



# ASSESSMENT OBJECTIVES

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The four assessment objectives in Geography are:

- A Knowledge with understanding
- B Analysis
- C Judgement and decision making
- D Investigation (enquiry skills, practical skills and presentation skills).

A description of each assessment objective follows.

## A KNOWLEDGE WITH UNDERSTANDING

Students should be able to demonstrate knowledge and understanding of:

1. the wide range of processes, including human actions, contributing to the development of
  - (a) physical, economic, social, political and cultural environments and their associated effects on the landscapes;
  - (b) spatial patterns and interactions which are important within such environments;
2. the inter-relationships between people's activities and the total environment and an ability to seek explanations for them;
3. the importance of scale (whether local, regional or global) and the time at which spatial distributions and the working of systems are considered;
4. the changes which occur through time in places, landscapes and spatial distribution.

## B ANALYSIS

Students should be able to:

5. select, organise, present and interpret geographical data;
6. use and apply geographical knowledge and understanding in verbal, numerical, diagrammatic, pictorial and graphical form;
7. use geographical data to recognise patterns in such data and to deduce relationships.

## C JUDGEMENT AND DECISION MAKING

Through their geographical training students should be able to:

8. reason, make judgements (including evaluation and conclusions) which demonstrate, where appropriate
  - (a) a sensitivity to, and a concern for, landscape the environment and the need for sustainable development;
  - (b) an aesthetic appreciation of the earth including its people, places, landscapes, natural processes and phenomena;
  - (c) an appreciation of the attitudes, values and beliefs of others in cultural, economic, environmental, political and social issues which have a geographical dimension;
  - (d) an awareness of the contrasting opportunities and constraints of people living in different places and under different physical and human conditions;
  - (e) a willingness to review their own attitudes in the light of new knowledge and experiences;
9. recognise the role of decision making within a geographical context as affected by
  - (a) the physical and human contexts in which decisions are made;
  - (b) the values and perceptions of groups or individuals;
  - (c) the choices available to decision makers and the influences and constraints within which they operate;
  - (d) the increasing level of global interdependence.

**D INVESTIGATION (ENQUIRY, PRACTICAL AND PRESENTATION SKILLS)**

Students will be expected to demonstrate the ability to do the following:

10. select and use suitable basic techniques for observing, collecting, classifying, presenting, analysing and interpreting data;
11. use a variety of sources for obtaining information including
  - (a) maps and plans at a variety of scales;
  - (b) audiovisual materials such as pictures, photographs, film, television and radio;
  - (c) documentary materials such as books, newspapers and magazines;
  - (d) statistics;
12. depict information in simple map and diagrammatic form;
13. select, use and present geographical information in an appropriate form and an effective manner.

**SPECIFICATION GRID**

The relationship between the assessment objectives and components of the scheme of assessment.

Paper	Assessment Objective			
	A Knowledge with understanding	B Analysis	C Judgement and decision making	D Investigation
1	40%	30%	30%	-
2	10%	80%	10%	-
3 or 4	20%	20%	20%	40%

The assessment objectives are weighted to give an indication of their relative importance. They are not intended to provide a precise statement of the number of marks allocated to particular assessment objectives.

# ASSESSMENT

## ***Scheme of assessment***

All candidates will take Paper 1, Paper 2 and either Paper 3 or Paper 4.

Paper 1 will be answered on separate answer paper/answer booklet. Papers 2 and 4 will consist of combined question papers and answer booklets where candidates answer in the spaces provided.

**Paper 1** (1 hour 45 minutes) Candidates will be required to answer three questions (3 x 25 marks). Six questions will be set: two on each of the three themes. Questions will be structured with gradients of difficulty, will be resource-based and involve problem solving and free response writing. This paper will mainly be concerned with Assessment Objectives A, B, and C.

**Paper 2** (1 hour 30 minutes) (60 marks) This paper will be taken by all candidates. Candidates must answer all the questions. This paper will be mainly skills-based and will test a candidate's ability to handle various ways of depicting geographical information. The questions will be neutral in that they will not require specific information of place. Candidates will be able to demonstrate skills of analysis and interpretation and application of graphical and other techniques as appropriate.

One question will be specifically based on a large-scale (1 : 25 000 or 1 : 50 000) topographical map of a tropical area such as Zimbabwe, the Caribbean or Mauritius and will include a full key.

### Either

**Paper 3, Coursework (School-based assessment)\*.** Two school-based assignments will be set by teachers. Each assignment should consist of an average of 1200 to 1500 words. (60 marks)

\*Teachers may not undertake school-based assessment without the written approval of CIE. This will only be given to teachers who satisfy CIE requirements concerning moderation and they will have to undergo special training in assessment before entering candidates.

CIE offers schools in-service training in the form of courses held at intervals in Cambridge and elsewhere and also via Distance Training Packs.

### Or

**Paper 4, Alternative to Coursework** (1 hour 30 minutes) (60 marks)

As an alternative to Coursework, candidates will be set a series of tasks in a written examination on issues relating to one or more of the syllabus themes:

1. Population and Settlement
2. The Natural Environment
3. Economic Development and the Use of Resources.

Candidates must answer all questions. This paper will test all the assessment objectives with an emphasis on the investigative Assessment Objective D.

A primary feature of questions in this paper is that they will involve an appreciation from a theoretical standpoint of a range of techniques used in a variety of fieldwork studies. Questions will test the methodology of the following data collection enquiry skills.

- (a) questionnaires;
- (b) observation;
- (c) counts (such as pedestrian and traffic counts);
- (d) measurement techniques (appropriate to river, beach and weather studies)

Questions may involve the development of suitable hypotheses appropriate to specific topics linked to the relevant geographical knowledge and understanding. Methods used to process and to present data will also be tested using both cartographical and statistical techniques. An ability to analyse data collected and to formulate conclusions, as required by Assessment Objectives B and C, will also be examined in this paper.

*Centres should note:*

- (i) that candidates are **not** allowed to use atlases for the written papers;*
- (ii) all measurements on the written papers will be metric,*
- (iii) the twenty-four hour clock only will be quoted on the written papers.*

**Weighting of papers**

Paper	Weighting
1	45%
2	27.5%
3 or 4	27.5%

# CURRICULUM CONTENT

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## THEMES

The curriculum is divided into three themes which are collectively designed to develop an understanding of both the natural and the human environment:

- 1 Population and Settlement,
- 2 The Natural Environment,
- 3 Economic Development and the Use of Resources.

## RESOURCES

Questions in all written papers are resource based. The resources offered may be photographic, map extracts, drawings, diagrams, graphs, text extracts, statistics and tables of data.

Resource materials are selected from various world areas in order to match the aims of an international syllabus and examination. As a result candidates may be dealing with world areas with which they are not familiar. The resources used in questions **do not** require specific regional knowledge. They include sufficient information for questions to be answered without the necessity of specific regional knowledge. The resources used in the examination are for candidates to analyse and interpret.

The resource materials are designed to prompt candidates to relate general principles they have studied to the particular examples given.

## CASE STUDIES

The curriculum gives teachers the opportunity to select case studies to illustrate the themes. Specified illustrations of case studies have not been included in the syllabus. This is to provide teachers with complete freedom in selecting appropriate specific examples to illustrate the content of the three themes. Further information on case studies is included in the Notes for Guidance for Paper 1.

## THEME

### 1 Population and Settlement

- |     |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 | <b>Population dynamics</b> | <ul style="list-style-type: none"> <li>- Describe the growth of the world's population and associated problems and show an understanding of the causes and consequences of over-population and under-population.</li> <li>- Identify and suggest reasons for contrasting patterns of population growth (or decline) as influenced by migration, birth rate and death rate, especially the impact of HIV/AIDS.</li> <li>- Describe the consequences (benefits and problems) of different patterns of population growth.</li> <li>- Identify and suggest reasons for different types of population structure as shown by age/sex pyramids.</li> <li>- Describe the factors influencing the density and distribution of population and population migration.</li> </ul> |
| 1.2 | <b>Settlement</b>          | <ul style="list-style-type: none"> <li>- Describe and explain the factors influencing the size, development and function of urban and rural settlements and their spheres of influence.</li> <li>- Describe and give reasons for the characteristics of land use zones of urban areas in LEDCs and MEDCs.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

- Describe the problems of urban areas in MEDCs and LEDCs, their causes and possible solutions.
- Describe the impact on the environment resulting from urbanisation and possible solutions to reduce this impact.

## **2 The Natural Environment**

- |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2.1 Plate tectonics</b>                                                          | <ul style="list-style-type: none"> <li>- Describe the distribution of earthquakes, volcanoes and fold mountains in relation to plate margins.</li> <li>- Describe the causes and effects of earthquakes and volcanic eruptions.</li> </ul>                                                                                                                                                                 |
| <b>2.2 Landforms and landscape processes</b>                                        | <ul style="list-style-type: none"> <li>- Describe weathering, river and marine processes.</li> <li>- Describe and explain the landforms associated with these processes.</li> </ul>                                                                                                                                                                                                                        |
| <b>2.3 Weather, climate and natural vegetation</b>                                  | <ul style="list-style-type: none"> <li>- Describe the methods of collecting and measuring meteorological data.</li> <li>- Describe and explain the characteristics of the climate and natural vegetation of two ecosystems:<br/>tropical rain forest;<br/>tropical desert.</li> <li>- Describe and explain the relationship between the climate and natural vegetation in these two ecosystems.</li> </ul> |
| <b>2.4 Inter-relationships between the natural environment and human activities</b> | <ul style="list-style-type: none"> <li>- Demonstrate the interaction between the natural environment and human activities with reference to natural hazards, landscape processes, climate and the two named ecosystems.</li> </ul>                                                                                                                                                                         |

## **3 Economic Development and the Use of Resources**

- |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3.1 Agricultural systems</b> | <ul style="list-style-type: none"> <li>- Describe and identify the influence of inputs (natural and human) on the processes and outputs of each of the following agricultural systems:<br/>a large-scale system of commercial farming;<br/>small-scale subsistence farming.</li> <li>- Recognise the causes and effects of shortages of food and describe possible solutions to this problem.</li> </ul>                                |
| <b>3.2 Industrial systems</b>   | <ul style="list-style-type: none"> <li>- Classify industries into primary, secondary and tertiary.</li> <li>- Describe and explain how the proportions employed in primary, secondary and tertiary industries differ in LEDCs and MEDCs and may change with time and level of development.</li> <li>- Describe and identify the influence of inputs on the processes and outputs (products and waste) of industrial systems.</li> </ul> |

- Describe and explain the factors influencing the distribution and location of high technology industries *and one other manufacturing/processing industry*. Distribution should be studied on a global/national scale. Study should also be made of particular zones and/or industrial plants with respect to locational and siting factors.
- 3.3 Leisure activities and tourism**
- Describe and account for the growth of leisure facilities and tourism in relation to the main attractions of the physical and human landscape.
  - Assess the benefits and disadvantages of tourism to receiving areas.
- 3.4 Energy and water resources**
- Describe the significance of fuelwood, non-renewable fossil fuels (coal, oil and natural gas), renewable energy supplies (geothermal, wind, running water, solar and biogas).
  - Describe the factors influencing the development and siting of power stations (thermal, hydro-electric and nuclear).
  - Describe the uses, provision and competition for water resources and the impact of water shortages.
- 3.5 Environmental risks and benefits: resource conservation and management**
- Describe how human activities (agriculture, manufacturing industries, tourism and energy production) may improve the quality of life and/or pose threats to the environment:  
soil erosion;  
global warming;  
pollution (water, air, noise, visual).
  - Demonstrate the need for sustainable development, resource conservation and management in different environments.
  - Identify areas at risk and describe attempts to maintain, conserve or improve the quality of the environment.

# NOTES FOR GUIDANCE

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## THEME

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### 1. Population and Settlement

#### 1.1 Population dynamics

*Candidates should be able to*

- Describe and suggest reasons for the rapid increase in the world's population in recent times, 'the population explosion'.
- Define the main components influencing population growth - birth rate, death rate and migration.
- Describe the relationship between population growth and resources and explain why problems may result in some areas such as over-population and under-population.
- Identify and suggest reasons for contrasting patterns of population growth in different world areas as influenced by differences in birth rate, death rate and migration. Factors affecting these influences should be considered such as differences in social, economic and other factors, e.g. government policies and their impact upon birth rates, differences in health care, social and other factors influencing death rates, especially the impact of HIV/AIDS. These factors should be illustrated by reference to selected examples.
- Describe the consequences (benefits and problems) of different patterns of population growth. Consideration should be given to variations in the size and nature of dependent populations and standards of living.
- Identify and suggest reasons for different types of population structure as shown by age-sex pyramids. Candidates should be able to describe population pyramids and relate them to the different stages of the Demographic Transition Model.
- Identify the major influences on population density and population distribution. Reference should be made to physical, economic and human factors.
- Describe and suggest reasons for population migrations. Reference should be made to internal movements such as rural-urban migration as well as to international migrations both voluntary and involuntary.

Throughout population studies candidates should make use of statistics, graphs, diagrams and maps. Such exercises could bond the preparation of candidates for Paper 1 and the other components of the IGCSE Geography examination.

#### 1.2 Types of settlement

*Candidates should be able to*

- Describe the patterns of rural settlements - dispersed, linear, nucleated.
- Explain how physical factors (relief, soil, water supply) and other factors such as accessibility, agricultural land use, influence the sites and patterns of rural settlements.
- Describe and explain the factors which may influence the size, growth and functions of rural and urban settlements.
- Describe and suggest reasons for the hierarchy of settlements and services.
- Describe and explain the land use zones of towns and cities to include the Central Business District (CBD), residential areas, industrial areas, the provision of open spaces and transport routes. Differences in the patterns of urban structures in cities of LEDCs and MEDCs should be identified.
- Describe problems associated with the growth of urban areas such as congestion in the CBD, housing shortages, traffic congestion, squatter settlements. Suggested solutions to overcome these problems should be illustrated by reference to selected examples.
- Describe the effects of urbanisation on the environment - pollution (air, water, visual and noise), the results of urban sprawl on surrounding areas, the growth of out-of-town urban activities - shopping areas, sports facilities, etc.



## 2. The Natural Environment

### 2.1 Structure, landforms and landscape processes

#### Structure

*Candidates should be able to*

- Describe the general distribution of fold mountains, volcanoes and earthquakes and explain how this distribution is related to movements at plate boundaries
- Show a basic understanding of plate tectonics, describing the global pattern of plates, their structure, and be aware of plate movements and their effects - plates moving away from each other (sea floor spreading), plates moving towards each other (subduction) and plates sliding past each other.
- Demonstrate an understanding of the main features of volcanoes (and their eruptions) and earthquakes.

#### Landforms and Landscape Processes

##### Weathering

*Candidates should be able to*

- Recognise that weathering involves the breakdown of rock *in situ*, and as such should be distinguished from erosion.
- Describe what is meant by different types of weathering - physical/mechanical (freeze-thaw action, exfoliation), chemical (carbonation, oxidation) and biological.
- Explain the main factors influencing the type and rate of weathering - climate and rock features (mineral composition, grain size of the rock, presence of lines of weakness). The influence of climate on the rate of weathering could be illustrated with reference to simple explanation as to why weathering is more rapid in humid tropical regions of the world than in temperate regions.

##### River Processes

*Candidates should be able to*

- Demonstrate an understanding of the work of a river in eroding, transporting and depositing. Reference should be made to the erosional processes of hydraulic action, corrasion, corrosion (solution) and attrition. River transport should include the processes of traction, saltation, suspension and solution. Reasons why and where in a river's course deposition takes place should be studied. It should be realised that the effectiveness of the river processes concerned will vary according to the volume and velocity of the running water and the nature of the load (boulders, pebbles, sand and silt) which in turn will be affected by the bedrock along the course of the river.
- Describe and explain the landforms associated with these processes.

*A study should be made of the following*

Forms of river valleys - long profile and shape in cross section, rapids, waterfalls, potholes, meanders, oxbow lakes, deltas, levées and flood plains.

##### Marine Processes

*Candidates should be able to*

- Demonstrate an understanding of wave processes in eroding a coastline and re-sorting and depositing materials removed through erosion. Candidates should understand the types of waves (constructive and destructive) and the components of waves, swash and backwash. The erosional processes of wave action should include an understanding of corrasion, hydraulic action, corrosion and attrition. Transport of material along a coastline should be appreciated; onshore and offshore movements together with an understanding of movement along a coastline (longshore drift). The action of wind in shaping coastal sand dunes should also be understood.
- Describe and explain the landforms associated with these processes.

*A study should be made of the following coastal landforms*

*Cliffs, wave-cut platforms, caves, arches, stacks, bay and headland coastlines, beaches, spits and bars, coastal sand dunes and marsh.*

- Describe the conditions required for the development of coral reefs.
- Describe fringing and barrier reefs and atolls

### 2.2 Weather, climate and natural vegetation

#### Weather

*Candidates should be able to*

- Draw, describe and explain the use and siting of the following instruments at a weather station: rain-gauge, maximum-minimum thermometer, wet and dry bulb thermometer (hygrometer), barometer, anemometer and wind vane.

- Make calculations using information from these instruments.
- Use and interpret graphs and other diagrams showing weather data.
- Describe and explain the characteristics, siting and use made of a Stevenson screen.
- Describe the main types of cloud and be able to estimate the extent of cloud cover.

**Climate**

*Candidates should be able to*

- Describe and explain the main characteristics of the climate in the regions listed in the Syllabus [tropical rain (evergreen) forest and tropical desert]: temperature - mean temperature of the hottest month, mean temperature of the coolest month, therefore the annual range; rainfall - the amount and seasonal distribution; other climate features - wind, cloud, humidity etc. Factors influencing these characteristics should be noted such as latitude, pressure systems and the winds to which they give rise, distance from the sea, altitude and ocean currents. Candidates should be familiar with climatic graphs showing the main characteristics of temperature and rainfall of the climates in the regions listed.

**Ecosystems**

*Candidates should be able to*

- Describe the characteristics and distribution of the two ecosystems listed in the Syllabus [tropical rain (evergreen) forest and tropical desert].
- Explain the relationship in each ecosystem of natural vegetation and climate.

**2.3 The inter-relationship of physical and human geography**

*Candidates should be able to*

- Demonstrate an understanding that the natural environment presents hazards and offers opportunities for human activities. Reference should be made to the hazards posed by volcanic eruptions, earthquakes, tropical storms, flooding and drought.

Use could be made of the study of contemporary examples to illustrate. This information would provide candidates with valuable case study information. Such examples could form resource material given in examination questions when candidates might be expected to illustrate inter-relationships between the natural environment and human activities from the data presented. Reference to the opportunities and problems posed for people could be incorporated when studies are made of the natural environment, for example the advantages and difficulties offered by river flood plains and deltas. The impact of human activities on the two ecosystems named in 2.2 should be considered.

**3. Economic Development and the Use of Resources****3.1 Agricultural systems**

*Candidates should be able to*

- Describe in general terms the main features of an agricultural system: inputs, processes and outputs.
- Describe the influence of natural and human inputs on the processes and outputs of the two agricultural systems listed in the Syllabus [a large-scale system of commercial farming and small-scale subsistence farming]. Studies should include natural inputs (relief, climate and soil) and human inputs (economic, social and sometimes political). Their combined influences on the scale of production, methods of organisation and the products of each system should be studied. Reference may be made to an example such as plantation agriculture or extensive commercial cereal farming or extensive livestock production etc., to illustrate a large-scale system of commercial farming. Examples such as intensive subsistence rice cultivation or shifting cultivation etc. could profitably illustrate a system of small-scale subsistence farming. Other illustrations might be selected rather than the above. In each case reference should be made to a detailed case study.
- Recognise the causes and effects of food shortages. Shortages of food may be related to natural problems such as soil exhaustion, drought, floods, tropical cyclones, pests, disease etc. There should be an awareness of the effects of these natural problems on selected areas within LEDCs. Economic and political factors and their effects upon food shortages should be noted, for example low capital investment, poor distribution/transport difficulties, wars etc. The effects of food shortages in encouraging food aid and measures such as those of the 'Green Revolution' to produce more food should also be considered.

**3.2 Industrial systems**

*Candidates should be able to*

- Classify industries into primary, secondary and tertiary and be able to give illustrations of each. Describe and explain how the proportions employed in each sector changes with respect to the level of development, including Newly Industrialised Countries (NICs).

- Demonstrate an understanding of an industrial system: inputs, processes and outputs (products and waste). Specific illustrations of high technology industries should be studied along with one other processing/manufacturing industry.
- Describe how a variety of factors must be considered when seeking the location for high technology industries and the selected industry

**3.3 Leisure activities and tourism**

*Candidates should be able to*

- Describe and explain the growth of leisure facilities and tourism in relation to the main attractions of the physical and human landscape in an area or areas selected for study.
- Demonstrate an understanding that the effects of a growth in tourism are generally positive and that careful management is needed if problems are to be avoided. Reference could be made to advantages accruing from tourism such as growth in income, an increase in foreign exchange, employment opportunities, the development of infrastructure and facilities which may be used by the local population, the encouragement of other developments to take place in an area, cultural advantages etc. Disadvantages might include seasonal unemployment, under-use of facilities at certain times of the year, increased congestion, pollution, a shortage of services e.g., water supplies, social/cultural problems, damage to the physical landscape etc. A selected sample study should be used to illustrate both the benefits and disadvantages associated with the growth of tourism.

**3.4 Energy and water resources**

*Candidates should be able to*

- Describe the significance of fuelwood in LEDCs and of non-renewable fossil fuels in terms of their availability in certain areas and in terms of the contribution made by coal, oil, natural gas and wood in supplying vast amounts of energy.
- Describe the growing significance of renewable energy supplies [geothermal, wind, running water, solar, biogas] to reduce dependence upon fossil fuels, to alleviate the world's energy crisis, and to offer opportunities for the development of alternative energy sources.
- Describe the factors influencing the siting of different types of electrical power stations with reference to those listed in the Syllabus [thermal, hydro-electric power, nuclear].
- Describe the uses made of water for agriculture, domestic and industrial demand. Candidates should also recognise that in certain areas there are water shortages which impact upon the local people and the potential for development. This leads to competition for the use of the available water resources and requires careful management.

All these aspects would benefit from the selection of appropriate case studies.

**3.5 Environmental risks and benefits: resource conservation and management**

*Candidates should be able to*

- Demonstrate the need for sustainable development, resource conservation and management in different environments. It is not intended that candidates should be familiar with a wide variety of illustrations here. Rather that by the use of well selected case studies, possibly integrated with the study of other concepts referred to above, candidates become familiar with general principles and can illustrate from these examples.
- Identify and describe the benefits associated with the development of agriculture, manufacturing industries, energy production, tourism and transport. This could be incorporated with the studies outlined above (3.1 - 3.4).
- Describe how these developments may also pose threats to the environment when natural ecosystems are interfered with including: soil erosion, global warming, and pollution (air, water, noise and visual).
- Identify areas at risk from these threats to the environment and describe attempts made to maintain, conserve or improve the quality of the environment.

# PAPER 1

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## STUDY NOTES

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The curriculum content outlined in the syllabus booklet and described in these Notes is to be pursued by all candidates.

Questions on the paper are resource based. The resources presented to candidates are for analysis and interpretation in answering a part question or part questions. All of the information required to answer these part questions is contained within the resource itself. No previous knowledge is needed of the particular illustration presented. What is required is that candidates use the data provided to illustrate their understanding of the particular concept being assessed.

The resources offered may be photographic, map extracts, sketch maps, drawings, diagrams, graphs, text extracts, statistics and tables of data. Resource materials are selected from various world areas in order to match the aims of an international syllabus and examination. As a result candidates may be dealing with world areas with which they are not familiar. The resources used **do not** require specific regional knowledge. This should be stressed to the candidates as they may be influenced in their question selection by the nature/location of the resource included.

Throughout a study of the curriculum content it is stressed that for Paper 1 reference should be made to appropriate case studies to illustrate the individual themes. It is suggested that much of the preparation of themes could be undertaken through case studies. Some case studies could incorporate a number of concepts and assessment objectives and present candidates with an integrated approach to the study of curriculum content.

A case study may be selected because it relates to

- the local school area,
- a contemporary development such as the occurrence of a natural hazard in part of the world,
- a particular illustration with which the teacher is familiar,
- a presentation in a newspaper, on video, film, a well documented illustration in a textbook etc.

A case study may also be based upon a field study undertaken as part of the work for Paper 3 (Coursework) or Paper 4 (Alternative to Coursework). Whilst specific questions will not be set in Paper 1 based upon fieldwork, candidates may use this information to illustrate answers on these papers.

The essence of a good case study is that it provides candidates with details of a particular illustration which can be profitably used in answers to certain questions on Paper 1. Some part questions on the paper request that reference is made to information from specific case studies made by candidates and opportunity is also provided for candidates to volunteer such details in answering other part questions.

**NOTE:** Specific named illustrations of case studies have not been included in either the syllabus or these Notes. This is to give teachers complete freedom in selecting examples which they feel are most appropriate for their candidates.

It is important that candidates comply with the rubric. **Three** questions only are to be selected. Sometimes within individual questions a choice is provided. It is very important that candidates make the correct choice and do not answer more than is required.

Candidates are also advised to heed closely the sub marks printed on the question paper. These are included in order to guide candidates to the amount of detail and length of response anticipated.



# PAPER 2

## STUDY NOTES

Paper 2 will be taken by all candidates. Candidates must answer all the questions. The paper will be entirely skills-based and will test a candidate's ability to handle various ways of depicting geographical information e.g., topographical maps, other maps, diagrams, graphs, tables of data, written material, photographs and pictorial material. The questions in Paper 2 will be neutral in that they will not require specific information of place. Candidates will be able to demonstrate skills of analysis and interpretation and application of graphical and other techniques as appropriate.

### EQUIPMENT

It is essential that candidates have the following equipment with them in the examination room: a pencil, rubber, ruler, set square and a protractor. It is also advisable that they should have access to a straight edged piece of paper for measuring distance on the large scale topographic map.

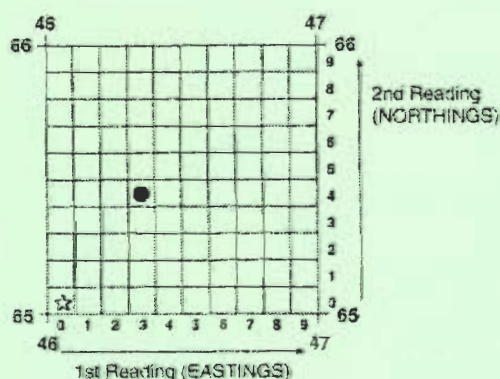
### Topographical mapwork question

One question, worth 20 marks, will be based on a topographical map.

The large-scale maps chosen for examination purpose will be on a scale of either 1:25 000 or 1:50 000 and will always contain a full key. The maps will be of a tropical area such as Zimbabwe, the Caribbean or Mauritius.

Candidates should recognise that one third of the marks available on this paper are awarded to the mapwork question and, therefore, it is essential that they become proficient in map reading and interpretation skills to enable them to describe and analyse topographical maps.

Candidates should be able to use a co-ordinate reference system and be able to give and to read four figure and six figure grid references to locate places. For example the four figure reference for the dot is 4665 whilst the six figure grid reference for the dot would be 463654.



To give the six figure grid reference, first of all identify the grid square, in this case 4665. The third figure is obtained by dividing the space between grid lines 46 and 47 into ten equal parts. Similarly the sixth figure is obtained by a similar division of the gap between northings 65 and 66. This would result in a grid reference of 463654 for the dot and 460650 for the star. It should be noted that the first tenth is 0 and the last tenth is 9 in the divided grid square.

Candidates should be able to give directions, both as a point of the compass, such as north, north-east, etc. and as a bearing from grid north of one place from another. It is, therefore, important that candidates have protractors in the examination room with them.

Candidates should be able to measure horizontal distances. This is most accurately done by using a straight edged piece of paper and the scale line. If the line to be measured is curved, divide the curve into straight sections and rotate the paper after each straight section to follow the next straight section. Finally place the completed straight edged piece of paper along the linear scale line on the map

extract and read off the distance in kilometres/ metres. This method avoids complicated mathematical calculations which can arise when rulers are used.

Contour reading, which enables candidates to calculate differences in height, should be practised. The information gained from measuring horizontal and vertical distances should enable candidates to calculate gradients using the formula:

$$\frac{\text{Vertical Interval}}{\text{Horizontal Equivalent}} = \frac{\text{(Difference in height)}}{\text{(Horizontal distance)}}$$

It should be noted that both measurements must be made in the same units before the calculation can be made.

Cross-sections may be set for interpretation but candidates will not be asked to construct them.

Candidates should be able to translate the scale of a feature by describing its size and shape in real terms. They should also be proficient in using the key to the map to enable them to identify features on the map.

Candidates should be able to draw inferences about the physical and human landscape by interpretation of map evidence such as patterns of relief, drainage, settlement, communication and land use.

Candidates are advised to practice identifying basic landscape features such as river valleys and uplands and to give brief descriptions of them using appropriate geographical terms (such as ridge, plateau, scarp, flood plain) and simple adjectives showing an appreciation of their nature (such as broad, flat, steep sided, deeply cut, gently sloping). To interpret these maps candidates should be able to recognise essential differences in density of drainage, stream patterns, gradients or sizes of streams in relation to the relief. They should be able to describe the physical features of coastlines and the shape and form of river channels as they are shown on large-scale maps.

Practice in describing variations in land use should be part of the preparation for the examination. The interpretation of 'human' features would also require candidates to recognise and analyse patterns of settlement (dispersed, nucleated, linear) and candidates should be able to draw sketch maps illustrating these patterns. Candidates should be able to interpret and describe features of urban morphology as represented on large scale maps and be able to describe the functions of and services provided by settlements. They should also be able to give reasons for the site and growth of individual settlements. Communication networks should be recognised in terms of their type and density in relation to physical and human features.

Explanations should be based entirely on map evidence showing the interaction between humans and their physical environment e.g., differences in land use between upland and lowland, differences in land use within a town, differences between dense settlement on river plains and sparse settlement on steep upland slopes.

**NOTE:** It must be stressed that all answers to this question must be based on map evidence only.

**Maps, Diagrams, Graphs  
Tables of Data, Written Material**

Questions will be set using some or all of these resources. They should be regarded as important ways of representing geographical data. They may be used to illustrate a basic principle and it is essential that candidates should be directed towards their interpretation. For example, a population pyramid may be used to illustrate the age and sex structure of a country. With such a resource a candidate may be required to describe the broad features of the population structure to show comparisons and contrasts between the male and female populations, the working and non-working population and the young and old age groups.

Maps based on global and other small scales may be used and candidates may be asked to identify and describe significant features of the human and physical landscape on them, e.g., population distribution, population movements, transport networks, settlement lay-out, relief and drainage, etc. Candidates may be asked to recognise patterns and deduce relationships.

Candidates will be expected to be able to extract specified geographical information from graphs, diagrams, tables of data and written material. Pie graphs, line graphs,

triangular graphs, radial graphs, bar graphs and scatter graphs may be used and candidates may be asked to describe variations and identify trends in information. Graphs may show, for example, temperature, birth rate, death rate, energy, rainfall distribution, river discharge, etc.

Candidates may be required to plot information on graphs when axes and scales are provided.

Data tables may provide information on physical phenomena, on economic activities, on population/settlement, on agricultural and manufacturing output, etc. and candidates may be asked to describe and analyse features and trends from the data provided. They may also be asked to suggest an appropriate form of graphical representation for the data provided.

Written material may be extracts from books, periodicals and newspapers and candidates will be expected to show an understanding of the material presented.

***Photographic and Pictorial Material  
(including Field Sketches)***

Oblique photographs will be used. Candidates should be able to describe human and physical landscapes (landforms, natural vegetation, land use and settlement) and geographical phenomena from photographs. Simple descriptions only will be required. Candidates may be expected to add specified detail on maps or other material provided, thereby applying geographical knowledge and understanding. Field sketches of physical and human landscapes may be used to stimulate geographical description and annotation. Cartoons illustrating a geographical theme may be set for interpretation and analysis.

Candidates may also be asked to use supporting material in conjunction with large-scale maps to identify, describe and analyse features and thereby recognise patterns and deduce trends.

The time spent on the **two** Coursework assignments should reflect the weighting of the component in the total assessment (i.e. 27.5%). In this context the prime consideration will be the quality of the content of the assignment in relation to the criteria on which assessment is based.

School-based assessment will provide a complementary assessment of the assessment objectives tested in Papers 1 and 2 with an emphasis on the Investigative Assessment Objective D. The two coursework assignments must individually cover the assessment objectives in the proportions given below.

Assessment criterion	Marks allocated
Knowledge with Understanding	12
Investigation : Observation and collection of data	12
Organisation and the presentation of data	12
Analysis	12
Judgement and decision making(Conclusion and Evaluation)	12
	<b>Total 60 marks</b>

The teacher's role is vital in devising and structuring coursework assignments to enable all candidates to fulfil these assessment criteria. Differentiation should be achieved by candidates pursuing common enquiries appropriate to their abilities which allow them to display positive achievement.

- Coursework assignments should be structured to promote the acquisition of geographical knowledge, the understanding and application of ideas, the development of skills and the clarification of values in a geographical context.
- While each assignment should be common to all pupils at a Centre, there should be sufficient variety and differentiation of tasks and opportunity for individual initiative to fulfil all levels of achievement.
- Coursework assignments should follow the accepted 'route to geographical enquiry' as below.

(i)	Identification of issue, question, problem	A topic for investigation is recognised through observation, discussion, reading or previous study. The design of hypotheses to test the issue, question or problem.
(ii)	Formulation of design of work	The objectives of the study are defined in specific terms. Decisions are made concerning: (a) what data is relevant to the study, (b) how can the data be collected.
(iii)	Collection of data	Candidates carry out a group or individual set of tasks which may include fieldwork undertaking questionnaires, mapping or sketching observation, recording counts or measurements.
(iv)	Selection and collation of data	Teacher collates data for class use. Candidates select data to develop the aims or hypotheses for the topic.
(v)	Representation and recording of results	Candidates individually record results and represent findings in an appropriate form using a variety of maps, graphs etc.
(vi)	Analysis and interpretation	Candidates individually analyse and interpret their findings in response to the issue/question/problem with reference to relevant geographical concepts.
(vii)	Making effective conclusions, suggesting solutions, evaluation.	Candidates individually conclude the results of their findings and make evaluations related to the original objectives. If appropriate, comments may be made on the limitations of the data and possibilities for further study.



Examples of suitable Coursework assignments:**The Human Environment (Syllabus Themes 1.1 and 1.2 and 3.1, 3.2, 3.3, 3.4)**

- The varying pattern of land use with distance from the centre of a settlement
- The differences between residential environments within a settlement
- The hierarchical distribution of shopping centres/leisure amenities within a settlement
- Possible locations for a new hypermarket
- Does the influence of a town decrease with distance from it?
- The problems caused by an uneven/unreliable supply of water within a selected area
- A study of agricultural patterns within an area
- Ways in which the industrial structure has changed in an area
- Are the leisure facilities of an area/town adequate for the needs of its population?
- The development of tourism in an area

**The Natural Environment (Syllabus Themes 2.1, 2.2 and 2.3 and 3.5)**

- An analysis of the distribution, nature and possible reasons for the formation of selected landforms, e.g. along the course of a stream or at the coast
- The effects of anticyclones and depressions in influencing the weather recordings at a school weather station
- The nature of the environmental conflicts in an area
- Problems of landscape management and conservation in a National Park

**Each coursework assignment outline showing the specific 'route to the enquiry' (and the associated Mark Scheme) is required to be submitted to CIE for approval and constructive comment in advance to ensure it complies with the requirements of the syllabus. Coursework proposals, and associated Mark Schemes, should be submitted no later than 30<sup>th</sup> September 2005 for the June 2007 examination and 31<sup>st</sup> January 2006 for November 2007 examination.**

An example of an outline submission to CIE

An investigation related to Syllabus Theme 1.2, Types of Settlement:

'Is there a pattern to the distribution of rural settlements in Area X and the types of services they offer?'

- (i) Identification of the problem. Definition of the area to be studied. Relationship to concepts studied for 1.2 of the syllabus - in particular, site, situation and functions of small settlements; services in relation to settlements - threshold, range of a service. Candidates will select hypotheses from the following list and devise one additional statement:
  - 'larger settlements will have a higher number of services'
  - 'residents travel further to obtain high level goods'
  - 'services in smaller settlements serve the local community'
  - 'the number of services in smaller settlements has decreased recently'
- (ii) Objectives of the study are defined - the characteristics of each settlement - its site, situation, size, population, shops and other services, sphere of influence  
How may each of these characteristics be investigated?  
What data collection methods are appropriate? The role of map study both modern and older maps, counts, observations and questionnaire layout and sampling techniques are discussed as a group and decisions made.
- (iii) Field work procedure - the methods of field investigation are outlined and carried out:  
The site and situation of the settlements are described by combining visual evidence recorded at each location with mapwork using a large scale topographical map.  
The size of each settlement - a count of the number of inhabited and uninhabited houses.  
The population of each settlement calculated using an average head per household figure or secondary data found.  
Recordings are made of the numbers and types of services found in each settlement - shops, telephone boxes, post boxes, bus stops, etc. Candidates encouraged to make individual additional observations + photographs  
Questionnaires to residents to identify spheres of influence. More able candidates will devise 3 questions of their own to include in the group questionnaire.
- (iv) Selection and collation of data produced in the field to be completed by the teacher but candidates will select the data related to their chosen hypotheses
- (v) Representation of results - drawing of maps to show settlement distribution, desire lines for certain services, graphs, etc. Candidates will select appropriate graphs to present their results.

Analysis and conclusion will be completed by candidates individually following a suggested framework for each criterion and linking closely to the relevant geographical concepts and the stated original hypotheses.

**Undertaking Coursework assignments**

- The teacher should give guidance to all candidates in the identification of the issue, question or problem, the data collection and the collation of the results. The teacher is also required to introduce all the appropriate presentation techniques although the final choice should be left to the candidate. Any help beyond this stage should be taken into consideration when marks are awarded.
- The amount of time devoted to any one assignment will vary. However, in practice, each assignment should normally assess the outcomes of about **three or four weeks'** work in the classroom plus homework and should usually follow a programme of introductory work. Coursework assignments should be incorporated into the teaching syllabus at appropriate times during the course.
- The use of computers for the production of coursework for Geography is allowed, both for word-processed text and for computer generated maps, diagrams and graphs. Candidates will gain credit for selecting and using the most appropriate method for data presentation for Assessment Objective D. Candidates should be reminded that hand drawn maps, diagrams and graphs are often more appropriate and useful than those generated by computer.

**The assessment of a coursework assignment**

For each assignment, Teachers must devise a marking scheme which allocates marks out of a total of 60. A candidate's total for the two assignments (maximum 120) will be divided by 2 to give the total for this component.

In devising a marking scheme, Teachers should refer to Table 1. Table 1 includes general statements identifying types of criteria on which assessment may be based. The development of a marking scheme for a topic requires in the first instance the general criteria on which assessment will be made to be identified for each of the assessment objectives. The mark scheme should then be finalised by identifying for the general criteria selected *specific qualities* appropriate to each level of achievement for each of the assessment objectives.

It is recommended that a marking scheme is devised at the same time as the outline for a Coursework topic is prepared. This should ensure, for example, that a topic will provide an opportunity for different levels of achievement to be demonstrated for each of the assessment objectives.

The best approach to marking a coursework assignment is using a 2 stage strategy.

Stage 1: Using the criteria stated in the assignment specific mark scheme, identify the *level* of achievement (marks 0-4, 5-8 and 9-12) for each assessment objective.

Stage 2: For each assessment objective, decide which *mark* within a level of achievement best fits the standard achieved for an assignment.

The marks for each assessment objective and the total mark for a study are recorded by the Teacher on the Individual Candidate Record Card.

**Coursework Moderation****(a) Internal Moderation**

When several Teachers in a Centre are involved in internal assessments, arrangements must be made within the Centre for all candidates to be assessed to a common standard. It is essential that within each Centre the marks for different teaching groups (e.g. different classes) are moderated internally for the whole Centre entry.

**(b) External Moderation**

The Centre assessments will then be subject to external moderation. Individual Candidate Record Cards and Coursework Assessment Summary Forms must be received by CIE no later than 30 April for the June examination and 31 October for the November examination along with a sample of the Coursework undertaken by the candidates and the schemes of assessment for each assignment.

The samples should cover the full ability range. The size of the coursework sample should be as follows:

number of candidates entered	number of candidates in sample
0-10	all candidates
11-50	10
51-100	15
above 100	20

The Centre should select candidates covering the whole mark range, with the marks spaced as evenly as possible from the top mark to the lowest mark. If appropriate the samples should be selected from the classes of different teachers. A further sample of Coursework may subsequently be required. All records and supporting written work should be retained until after the publication of the results.

**(c) Feedback from Moderators**

Moderators will comment on a Centre's application of the assessment criteria in a short report.

TABLE 1: LEVELS OF ACHIEVEMENT

Assessment Criteria	0-4 Marks	5-8 Marks	9-12 Marks
Knowledge with understanding (within the context of teaching and guidance) (Max 12)	Describes information in <b>simple</b> geographical terms and shows a <b>tentative grasp</b> of the aims.	Outlines relevant information using <b>appropriate geographical terms</b> and develops a link between the aims and the key geographical ideas.	Provides <b>comprehensive</b> information with a <b>careful use of geographical terms</b> and shows a <b>sound grasp</b> of the aims clearly linked to the relevant key geographical ideas.
Investigation (a) Observation and collection of data (Max 12)	Shows evidence of following <b>basic guidance</b> of the teacher on what to look for and how to record it, with some notion of planning.	<b>Carefully applies basic guidance</b> as explained in the planning of the investigation. <b>Some personal initiative</b> will also be evident.	Uses guidance to good effect and makes <b>thorough observations and accurate recordings</b> . Shows <b>initiative</b> in carrying out these tasks with some <b>evidence of collecting information beyond the original design</b> .
(b) Organisation and presentation (Max 12)	The presentation is <b>loosely ordered</b> and uses <b>at least one technique</b> effectively.	The presentation is <b>logically ordered</b> using a <b>range of techniques</b> applied competently and selectively.	A <b>coherent presentation</b> using a range of appropriate techniques. <b>Individual flair</b> apparent.
Analysis (Max 12)	Makes <b>descriptive</b> and <b>simple</b> analytical statements about the data.	Makes a number of <b>valid statements</b> about the data with <b>some explanations</b> attempted.	A <b>thorough interpretation</b> of the data with <b>reasoned explanations</b> and comments.
Conclusions and Evaluation (Max 12)	States <b>superficial conclusions</b> showing <b>tenuous</b> links to the original aims.	States <b>tentative conclusions</b> linked to the original aims. Some judgements are substantiated by the information collected. <b>Simple evaluations</b> of the investigation are outlined.	Directly <b>relates to the original aims in reaching conclusions</b> . Makes a <b>critical appraisal</b> of the assignment and may recognise its limitations and the difficulties of reaching definite conclusions.

*\*Bold words are level indicators.*

# PAPER 4

## (ALTERNATIVE TO COURSEWORK)

As an alternative to Coursework, candidates will be set a series of tasks on this paper on issues relating to one or more of the syllabus themes (Curriculum Content). Candidates must answer all the questions on the paper. It provides a complementary assessment of the syllabus assessment objectives with an emphasis on the Investigative Assessment Objective D.

### STUDY NOTES

Students should be made aware of the general requirements for this paper. Some practical experience, however limited, of coursework methodology is preferable in preparation for this paper. One approach is to introduce the appropriate enquiry skills and techniques relevant to Paper 4 after the teaching of a specific topic for Paper 1 from one of the syllabus themes. For example after the river topic (Theme 2.1) time could be spent discussing how rivers could be measured, the plotting of depth data and the calculation of cross sectional area and discharge. The skill required for questionnaires, counts and observations may be introduced in a variety of topics where practical for the Centre.

References should be made to the range of aspects involved in coursework assignments, such as (i) formulating aims and hypotheses (ii) using enquiry skills to collect data (iii) presentation techniques to display data (iv) making analyses of data and (v) the formulation of conclusions. Further reading on the enquiry skills involved in coursework assignments are stated in items (i) to (vii) of 'The route of geographical enquiry' in Paper 3 Coursework (School-based assessment) section of the syllabus.

### ENQUIRY SKILLS FOR PAPER 4

#### (i) Formulating aims and hypotheses

Candidates should be familiar with hypotheses as statements that form the basis of coursework assignments. The hypotheses may investigate a geographical concept e.g. 'A CBD has the highest concentration of comparison shops'. Collecting relevant data, analysis and drawing conclusions using the data as evidence can test these.

#### (ii) Enquiry skills to collect data

Questions on this paper will test knowledge and application of the methodology used in the following range of data collection enquiry skills.

**Questionnaires** – Questionnaires can be oral or written to gain information from an individual or a group of individuals. Suitable themes in the syllabus where questionnaires may be appropriately studied include spheres of influence, use of services, shopping habits, a farm study, a factory or industrial study, leisure activities, tourism, or attitudes of the public to developments associated with resource development. Consideration should be given to factors influencing the successful design of questionnaires e.g. layout, format of questions, the appropriate wording of questions and the number of questions. The practical considerations of conducting a questionnaire e.g. the sampling methods, pilot survey, and location of survey should also be discussed.

**Observation** – Examples of using observations as an enquiry skill to collect data include the recording of land use in an urban area or observations of river or coastal features. Maps, recording sheets, field sketches and annotated photographs may all be used to record student observations.

**Counts** – Pedestrian and traffic counts are two significant examples of this enquiry skill. Appropriate methods for recording the counts should be discussed including the layout of recording sheets, instructions and the necessary information required to identify the sheet following the count (i.e. time, date, location and name of recorder)

**Measurement** – When recording measurements, due consideration should be given to planning the layout of the recording sheet, the location of instruments and the sampling methods adopted to provide reliable data. Knowledge of the equipment used in measurement is required such as the quadrat, the clinometer and the pebbleometer or callipers. Candidates should be familiar with river measurements of channel width, depth, speed of flow and the size and shape of bedload; beach studies of beach profile, the size and shape of pebbles and the movement of beach material and weather study instruments closely linked to Theme 2.2.

#### (iii) Data presentation techniques

A knowledge of the illustrative techniques to present data across the topics for Paper 4 is required. This should include, various types of graphs, maps and diagrams for example line graphs, bar graphs, divided bar graphs, histograms, flow diagrams, wind rose graphs, isoline maps and scattergraphs.

**(iv) Analysis**

Candidates should be able to describe the patterns in data presented in graphs and tables of results. Reference to relevant geographical knowledge and understanding is often required in the interpretation of the data. Practise of this skill will improve success in Paper 4 questions.

**(v) Formation of Conclusions**

Using the evidence from the data, candidates should be able to make judgements on the validity of the original hypothesis or aims of the assignment. Reference is also required of the reliability of the collected data and a critical evaluation of the chosen data collection methods.

# GLOSSARY OF COMMAND WORDS

It is hoped that this glossary of command words used in the Geography Papers (and which is relevant only to Geography) will prove helpful to candidates as a guide, i.e., it is neither exhaustive nor definitive. Command words are those words in a question that tell the candidate what they have to do. The glossary has been deliberately kept brief with respect to the descriptions of meanings. Candidates should appreciate that the meaning of a term must depend in part on its context.

<i>Annotate</i>	Add labels of notes or short comments, usually to a diagram, map or photograph to describe or explain.
<i>Calculate</i>	Work out a numerical answer. In general, working should be shown, especially where two or more steps are involved.
<i>Compare</i>	Write about what is similar and different about two things. For a comparison, two elements or themes are required. Two separate descriptions do <b>not</b> make a comparison.
<i>Complete</i>	To add the remaining detail or details required.
<i>Contrast</i>	Write about the differences between two things.
<i>Define or State the meaning of or What is meant by</i>	Give the meaning or definition of a word or phrase.
<i>Describe</i>	Write what something is like or where it is. Describe may be used for questions about resources in the question paper (describe the trend of a graph, the location of a settlement on a map, etc.). It may also be used when you need to describe something from memory (describe a meander, etc.). It is often coupled with other command words such as <i>Name and describe</i> (name the feature and say what it is like), <i>Describe and explain</i> (say what it is like and give reasons for).
<i>Devise or Plan</i>	Presentation of a particular feature such as a form or questionnaire to meet a specific requirement or requirements.
<i>Draw</i>	Make a sketch of. Often coupled with a <i>labelled diagram</i> (draw a diagram/illustration with written notes to identify its features).
<i>Explain or Account for or Give reasons for</i>	Write about why something occurs or happens.
<i>Giving your views or Comment on</i>	Say what you think about something.
<i>How</i>	In what way? To what extent? By what means/method? May be coupled with <i>Show how</i> (prove how, demonstrate how).
<i>Identify</i>	Pick out something from information you have been given.
<i>Illustrating your answer</i>	Account for by using specific examples or diagrams. Often coupled with <i>by a labelled diagram</i> .
<i>Insert or Label</i>	Placing specific names or details to an illustrative technique in response to a particular requirement.
<i>Justify</i>	Say why you chose something or why you think in a certain way.
<i>List</i>	Identify and name a number of features to meet a particular purpose.
<i>Locate</i>	Find where something is placed or state where something is found or mark it on a map or diagram.
<i>Measure</i>	Implies that the quantity concerned can be directly obtained from a suitable measuring instrument.
<i>Name</i>	To state or specify or identify. To give the word or words by which a specific feature is known or to give examples which illustrate a particular feature.
<i>Predict</i>	Use your own knowledge and understanding, probably along with information provided to state what might happen next.
<i>Refer to or With reference to</i>	Write an answer which uses some of the ideas provided in map/photograph/diagram, etc. or other additional material such as a case study.
<i>State</i>	Set down in brief detail. To refer to an aspect of a particular feature by a short statement or by words or by a single word.
<i>Study</i>	Look carefully at (usually one of the Figures in the question paper).
<i>Suggest</i>	Set down your ideas on or knowledge of. Often coupled with <i>why</i> [requires a statement or an explanatory statement referring to a particular feature or features].

*Use or Using the information  
provided  
With the help of information in*

*What*

*What differences are shown  
between A and B*

*Where*

*Why*

Base your answer on the information.

Write an answer which uses some of the information provided as well as additional material.

Used to form a question concerned with selective ideas/details/factors.

Use comparative statements to describe the changes involved as A changes to B. Factual descriptions of A and B are not required.

At what place? To what place? From what place?

For what cause or reason?

GEOGRAPHY  
Individual Candidate Record Card  
IGCSE

Please read the instructions printed overleaf and the General Coursework Regulations before completing this form.

Centre Number				Centre Name				June/November	2   0   0		
Candidate Number				Candidate Name				Teaching Group/Set			

Titles or Subjects of Assignments & Curriculum Themes	Knowledge with Understanding	Investigation		Analysis	Judgement and Decision Making	Totals	
		Observation and Collection	Organisation and Presentation				
1	(max 12)	(max 12)	(max 12)	(max 12)	(max 12)	(max 60)	
2	(max 12)	(max 12)	(max 12)	(max 12)	(max 12)	(max 60)	
Average of marks	(max 12)	(max 24)		(max 12)	(max 12)	(max 60)	
Amount of Scaling (if relevant)						Internally Moderated Mark	(max 60)

\* Indicates mark to be transferred to Coursework  
Assessment Summary Form



## INSTRUCTIONS FOR COMPLETING INDIVIDUAL CANDIDATE RECORD CARDS

1. Complete the information at the head of the form.
2. Mark the Coursework assignment for each candidate according to the mark scheme devised by the Centre for the Coursework unit. This mark scheme should be developed using the criteria comparable to that listed in the Syllabus booklet.
3. Enter marks and total marks in the appropriate spaces. Complete any other sections of the form required.
4. Ensure that the addition of marks is independently checked.
5. **It is essential that the marks of candidates from different teaching groups within each Centre are moderated internally.** This means that the marks awarded to all candidates within a Centre must be brought to a common standard by the teacher responsible for co-ordinating the internal assessment (i.e. the internal moderator), and a single valid and reliable set of marks should be produced which reflects the relative attainment of all the candidates in the Coursework component at the Centre. The outcome of internal moderation, in terms of the number of marks added to or subtracted from the initial total, must be clearly written in the box marked 'Amount or scaling if relevant'. If no scaling is necessary, please indicate by writing a zero in this box.
6. Transfer the marks to the Coursework Assessment Summary Form in accordance with the instructions given on that document.
7. Retain all Individual Candidate Record Cards and Coursework **which will be required for external moderation.** Further detailed instructions about external moderation will be sent in late March of the year of the June examination and early October of the year of the November examination. See also the instructions on the Coursework Assessment Summary Form.

**Note:** These Record Cards are to be used by teachers only for students who have undertaken Coursework as part of their IGCSE.





**INSTRUCTIONS FOR COMPLETING COURSEWORK ASSESSMENT SUMMARY FORMS**

**A.**

1. Complete the information at the head of the form.

2. List the candidates in an order which will allow ease of transfer of information to a computer-printed Coursework mark sheet MS1 at a later stage (i.e. in candidate index number order, where this is known; see item B.1 below). Show the teaching group or set for each candidate. The initials of the teacher may be used to indicate group or set.

3. Transfer each candidate's marks from his or her Individual Candidate Record Card to this form as follows:

- (a) Where there are columns for individual skills or assignments, enter the marks initially awarded (i.e. before internal moderation took place).
- (b) In the column headed 'Total Mark', enter the total mark awarded before internal moderation took place.
- (c) In the column headed 'Internally Moderated Mark', enter the total mark awarded *after* internal moderation took place.

4. Both the teacher completing the form and the internal moderator (or moderators) should check the form and complete and sign the bottom portion.

**B. PROCEDURES FOR EXTERNAL MODERATION**

1. University of Cambridge International Examinations (CIE) sends a computer-printed Coursework mark sheet MS1 to each centre (in late March for the June examination and in early October for the November examination) showing the names and index numbers of each candidate. Transfer the total internally moderated mark for each candidate from the Coursework Assessment Summary Form to the computer-printed Coursework mark sheet MS1.

2. The top copy of the computer-printed Coursework mark sheet MS1 must be despatched in the specially provided envelope to arrive as soon as possible at CIE but no later than 30 April for the June examination and 31 October for the November examination.

3. Send samples of the candidates' work covering the full ability range with the corresponding Individual Candidate Record Cards, this summary form and the second copy of MS1, to reach CIE by 30 April for the June examination and 31 October for the November examination.

4. Indicate the candidates who are in the sample by means of an asterisk (\*) against the candidates' names overleaf. The size of the coursework sample should be as follows:

number of candidates entered	number of candidates in sample
0-10	all candidates
11-50	10
51-100	15
above 100	20

5. Where more than one teacher is involved in marking the work, the sample must include candidates marked by all teachers. Candidates must be selected so that the whole range is covered, with marks spaced as evenly as possible from the top mark to the lowest mark.

6. CIE reserves the right to ask for further samples of Coursework.

7. Send, with the sample work, instructions given to candidates and information as to how internal moderation was carried out.

# GRADE DESCRIPTIONS

The scheme of assessment is intended to encourage positive achievement by all candidates. Mastery of the curriculum is required for further academic study,

A **Grade A** candidate must show mastery of the curriculum and an outstanding performance on the more academic problems.

A **Grade C** candidate must show mastery of the curriculum plus ability in answering questions which are pitched at a more academic level.

A **Grade F** candidate must show success in a majority of tasks set on the curriculum.

The grade descriptions are provided to give a general indication of the standards of achievement likely to have been shown by candidates awarded particular grades.

	Grade F	Grade C	Grade A
Ability	For Grade F, the candidate is likely to have shown the ability:	For Grade C, the candidate is likely to have shown the ability:	For Grade A, the candidate is likely to have shown the ability:
in relation to geographical knowledge with understanding	-to demonstrate an elementary level of knowledge of physical and human geography and demonstrate a comprehension of simple geographical ideas and simple geographical relationships	-to demonstrate a knowledge of physical and human geographical phenomena and demonstrate a comprehension of important geographical ideas, concepts, generalisations and processes	- to demonstrate a wide knowledge and comprehension of physical and human geography, and a clear understanding of their inter-relationships
in relation to geographical analysis	-to describe inter-relationships between people and their environment and analyse them in simple terms	-to analyse inter-relationships between people and their environment and to recognise the dynamic nature of changes in these relationships	-to analyse inter-relationships between people and their environment, to recognise the dynamic nature of these relationships and how and why they may change through time and space
in relation to judgement and decision making within a geographical context	- to recognise at an elementary level, the existence of differing systems of values which influence economic, environmental, political and social issues which have a geographical dimension	-to make balanced judgements on economic, political, environmental and social issues which have a geographical dimension through a recognition of conflicting viewpoints and solutions	- to make balanced judgements and to show an awareness of the different attitudes and priorities of individuals and groups, and hence the problematical nature of the interaction of people with the environment
in relation to geographical investigation	- (given specific guidance at all stages) to observe, record and attempt to classify geographical data; to use a range of source materials, including maps; to draw simple sketch maps and construct diagrams such as a bar graph; to communicate information by brief statements	- (given general guidance) to plan and carry out effectively a geographical enquiry using relevant data from a variety of primary and/or secondary sources; to apply geographical techniques, map interpretation at different scales, and a range of graphical, numerical and pictorial information such as flow-line diagrams, simple census extracts and photographs	- (given a minimum amount of guidance) to carry out independently, geographical enquiry in which appropriate methodology is applied; to communicate effectively the gathering, processing and analysis of the information, to recognise that solutions or conclusions may not readily be drawn from the enquiry

Copies of syllabuses, past papers and Examiners' reports are available on CD-ROM and can be ordered using the Publications Catalogue, which is available at [www.cie.org.uk](http://www.cie.org.uk) under 'Qualifications & Diplomas' – 'Order Publications'.