



RAFFLES INSTITUTION

Preliminary Examinations 2014

H1 GEOGRAPHY

8812/01

Paper 1

Duration: 3 hours

Additional material: Writing Paper

Insert 1

World Outline Map (to be supplied upon request)

READ THESE INSTRUCTIONS FIRST

Section A: Answer **four** questions.

Section B: Answer **one** question.

Section C: Answer **one** question.

You are advised not to spend more than one hour 30 minutes on Section A.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

The number of marks is given in brackets [] at the end of each question or part question.

Insert 1 contains all the figures & photographs referred to in the question paper.

Diagrams and sketch maps should be drawn whenever they serve to illustrate an answer.

The world outline map may be annotated and handed in with relevant answers.

You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, fasten all your work securely together using the string provided.

This document consists of 8 printed pages including this page.

Section A

Answer all the questions in this section.

Questions 1, 2 and 3 carry 12 marks each and Question 4 carries 14 marks.

You should allocate your time accordingly.

Lithospheric Processes, Hazards and Management

1. Figure 1 shows the cross-section of a limestone scenery.

(a) Describe the course of the river from X to Y.

[2]

(b) Explain how the characteristics of limestone help to account for the development of the drainage system in the region.

[10]

The Globalisation of Economic Activity

2. Figure 2 shows upcoming new research centres across the globe.

(a) Name 1 research centre found in a LDC.

[1]

(b) Using the figure, give 3 reasons for the concentration of these research centres in Europe.

[5]

(c) Suggest some impacts of Health City Novena on Singapore.

[6]

Hydrological Processes, Hazards, and Management

3. EITHER

Figure 3 shows discharge patterns for two rivers receiving similar rainfall events.

- (a) Describe the patterns of discharge shown in the two hydrographs on Figure 3. [4]
- (b) Suggest reasons for the differences in the discharge patterns shown in the two hydrographs. [8]

Urban Issues and Challenges

3. OR

Figure 3 shows the transformation of the City of Lawrence, State of Kansas, USA.

- (a) Define brownfield development. [2]
- (b) Suggest two ways brownfield sites can be redeveloped. [4]
- (c) Evaluate the difficulties associated with brownfield development. [6]

Lithospheric Processes, Hazards and Management and Hydrological Processes, Hazards and Management

4. EITHER

Figure 4 shows the positive and negative connections between the subsystems of slopes of a valley side and the river channel.

- (a) Describe the connections between the river channel subsystem and the valley slope subsystem. [6]
- (b) Describe how the processes of river erosion might affect the angle of slope of the valley sides. [8]

The Globalisation of Economic Activity / Population Issues and Challenges

4. OR

Figure 4 shows the ecological footprint and biocapacity for USA, Germany, China and Singapore.

- (a) Biocapacity stands for biological capacity. The biological capacity of an ecosystem is dependent on its production of useful biological materials and in return the absorption of wastes like carbon dioxide emissions.

With reference to Figure 4, compare the biocapacity between Germany and USA. [3]
- (b) Suggest reasons for the above observations. [4]

- (c) With reference to China and Singapore, suggest why limiting population growth may not be the answer to reducing ecological footprint. [7]

Section B Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management**5. EITHER**

- (a) Review the main lines of evidence on which the modern theory of plate tectonics is based. [9]
- (b) Using examples, and with the help of diagrams, explain how landforms are related to plate movements at
 - i. constructive plate margins and
 - ii. destructive plate margins. [16]

5. OR

- (a) Briefly describe the differences between igneous, sedimentary and metamorphic rocks. [9]
- (b) With the aid of case studies, discuss the extent to which human activities are responsible for the occurrence of mass movements on slopes. [16]

Hydrological Processes, Hazards, and Management**6. EITHER**

- (a) Explain what is meant by the term water balance. How may water balance vary seasonally? [9]
- (b) How does climate, together with drainage density, geology and relief, affect discharge within catchment areas? [16]

6. OR

- (a) With the aid of a diagram, describe the ways in which water flows through a catchment system. [9]
- (b) What is meant by the term channel morphology? Why is an understanding of channel morphology important in explaining the processes occurring in river channels? [16]

Section C Human Geography

Answer **one** question from this section.

The Globalisation of Economic Activity

7. EITHER

- (a) Distinguish between the terms *deskilling* and *reskilling*, and explain why an understanding of these terms are important in the global labour market. [9]
- (b) “No two countries that both had McDonald's had fought a war against each other since each got its McDonald's”.
Evaluate how the growth of transnational corporations (TNCs) has narrowed the gap between developed and developing nations. [16]

7. OR

- (a) Explain how the presence of transnational corporations (TNCs) has benefitted small and medium enterprises (SMEs). [9]
- (b) “The political, economic, and legal structures explain why the corporations in the United States have moved to Latin America and Asia.”
With reference to examples, discuss the extent to which labour costs are the main factor in TNCs' locational decisions. [16]

Urban Issues and Challenges

8. EITHER

- (a) With reference to examples, discuss the factors causing socio-economic polarisation in urban areas. [9]

- (b) "Public transport is a panacea to transport problems in DCs and LDCs." Assess the above statement. [16]

8. OR

- (a) Discuss the characteristics and functions of world/global cities. [9]
- (b) "The structure of city today is influenced by historical factors more than the changes in the global economy." Do you agree? [16]

END
