GEOGRAPHY

Paper 1  Core Physical Geography

SPECIMEN PAPER

For Examination from 2018

1 hour 30 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Section A
Answer all questions.

Section B
Answer one question.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.
All the resources referred to in the questions are contained in the Insert.

The number of marks is given in brackets [ ] at the end of each question or part question. The total number of marks for this paper is 60.
Section A

Answer all questions in this section. All questions carry 10 marks.

Hydrology and fluvial geomorphology

1 Photograph A shows a meandering river.
   
   (a) Draw a sketch map of the meander in Zone X in Photograph A. Label the main features. [4]
   
   (b) Explain the formation of one feature you identified in (a). [3]
   
   (c) Using Photograph A, suggest how the river might change course. [3]

Atmosphere and weather

2 Fig. 1 shows the temperature at midnight across an urban area.
   
   (a) Using Fig. 1, identify:
       
       (i) the location of the maximum temperature; [1]
       
       (ii) the value of the minimum temperature. [1]
   
   (b) With reference to evidence from Fig. 1, describe the relationship between land-use and temperature shown. [3]
   
   (c) Explain why night time temperatures vary across an urban area such as the one shown in Fig. 1. [5]

Rocks and weathering

3 Fig. 2 shows types of weathering, rainfall and temperature.
   
   (a) (i) Identify the main type of weathering occurring at A. [1]
       
       (ii) Identify the main type of weathering occurring at B. [1]
   
   (b) With reference to evidence from Fig. 2, describe the relationship between temperature and type of weathering. [4]
   
   (c) Explain the role of water in one weathering process. [4]
Hydrology and fluvial geomorphology

4 (a) (i) Define the hydrological terms overland flow and infiltration. [4]

(ii) Briefly describe the process of transpiration. [3]

(b) Explain how rock type and soils can affect stores of water in a drainage basin. [8]

(c) With the aid of examples, discuss the view that river floods cannot be prevented but their effects can be reduced. [15]

Atmosphere and weather

5 (a) (i) Briefly describe how some incoming solar radiation is prevented from reaching the earth’s surface. [3]

(ii) Briefly explain why some surfaces absorb more solar energy than others. [4]

(b) Describe and explain how temperatures are influenced by distance from the sea. [8]

(c) ‘Global warming is caused as much by individual people as by large organisations.’

With the aid of examples, how far do you agree? [15]

Rocks and weathering

6 (a) (i) Define the tectonic terms volcanic island arc and ocean trench. [4]

(ii) Briefly describe the process of sea floor spreading. [3]

(b) Describe and explain the formation of fold mountains. [8]

(c) With the aid of examples, assess the extent to which human activities can affect the stability of slopes. [15]