GEOGRAPHY
Paper 1 Core Geography

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 five questions.

Section B
Answer one question.

Section C
Answer one question.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Figures and the Photograph 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.
Section A

Answer five questions from this section. All questions carry 10 marks.

Hydrology and fluvial geomorphology

1  Fig. 1 shows a type of river channel.
   (a)  (i) Name the type of river channel shown in Fig. 1.  
   (ii) Draw a cross section from A to B shown in Fig. 1. Label the main features on your drawing.  
   (b)  Explain how features of the river channel shown in Fig. 1 were formed.

Atmosphere and weather

2  Fig. 2 shows the relationship between air temperature and relative humidity.
   (a)  (i) Describe the relationship shown in Fig. 2.  
   (ii) State the temperature when condensation would occur.  
   (b)  Describe the atmospheric conditions that can lead to condensation occurring near the ground.

Rocks and weathering

3  Photograph A shows some landform features.
   (a)  Describe the landform features shown in Photograph A.  
   (b)  Explain how the features you have identified in (a) may have been formed.
Population

4 Fig. 3 shows population ageing for selected countries.

(a) Using Fig. 3:

(i) State the year in which 14% of the population of the USA was aged 65 and over. [1]

(ii) Calculate the number of years it took in France to increase the percentage of the total population aged 65 and over from 7% to 14%. [2]

(b) Suggest two reasons why the population structure in many countries is ageing. [3]

(c) Explain some of the economic impacts of an ageing population. [4]

Migration/Population

5 Fig. 4 shows labour migration between the member countries of ASEAN in 2010.

(a) Using Fig. 4, name the country which was the largest:

(i) exporter of labour; [1]

(ii) importer of labour; [1]

(iii) net importer of labour. [1]

(b) Suggest why a country might be both an exporter of labour and an importer of labour. [3]

(c) Explain the impacts on the source area of a large outward migration of labour. [4]

Settlement dynamics

6 Fig. 5 shows sales by type of retail location in 2000 and 2011 for an MEDC.

(a) (i) Describe the changes in the pattern shown in Fig. 5. [3]

(ii) Suggest two reasons for the changes described in (i). [3]

(b) Explain how the competition for space influences the type of shops located in CBDs. [4]
Section B: The Physical Core

Answer one question from this section. All questions carry 25 marks.

Hydrology and fluvial geomorphology

7 (a) (i) Define the hydrological terms infiltration and stemflow. [4]

(ii) Explain how the type of soil can influence the rate of throughflow. [3]

(b) Briefly explain how both drainage density and vegetation can influence the shape of a storm hydrograph. [8]

(c) To what extent does urbanisation result in the increase of flows within the drainage basin? [10]

Atmosphere and weather

8 (a) (i) Define the terms evaporation and incoming solar radiation. [4]

(ii) Draw a labelled diagram to show what is meant by atmospheric stability. [3]

(b) Explain how latitudinal excesses and deficits of radiation result in atmospheric transfers. [8]

(c) To what extent is precipitation influenced by the landscape of both rural areas and urban areas? [10]

Rocks and weathering

9 (a) (i) Define the weathering terms oxidation and freeze-thaw. [4]

(ii) With the aid of a diagram, describe the main features of a debris flow. [3]

(b) Explain how mass movement processes can affect the shape of a slope. [8]

(c) Discuss the view that strong chemical weathering only occurs in climates of high annual precipitation. [10]
Section C: The Human Core

Answer one question from this section. All questions carry 25 marks.

Population/Migration

10 (a) (i) Outline the main components of population structure. [3]

(ii) Suggest two differences between the population structure of LEDCs and MEDCs. [4]

(b) Explain why population structure changes as countries develop. [8]

(c) ‘Governments face difficulties in managing the effects of population change.’
To what extent do you agree with this statement? [10]

Migration

11 (a) (i) Define the term stepped migration. [2]

(ii) Outline the advantages of stepped migration for the migrant. [5]

(b) Explain why the mobility of the population tends to increase as an area develops economically. [8]

(c) To what extent is international migration driven by social factors? [10]

Settlement dynamics

12 (a) Describe the differences between rural settlements and urban settlements. [7]

(b) Explain why in MEDCs some rural settlements are growing whilst other rural settlements are declining. [8]

(c) For your case study of a rural settlement or rural area, outline one of the issues of its development and evaluate the success of the response(s). [10]