

**GEOGRAPHY**

**9696/11**

Paper 1 Core Physical Geography

**May/June 2019**

**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.

This document consists of **3** printed pages, **1** blank page and **2** Inserts.

**Section A**

Answer **all** questions in this section.

**Hydrology and fluvial geomorphology**

- 1 Fig. 1.1 shows a photograph of a delta.
- (a) Draw a sketch map of the delta in Fig. 1.1. Label the main features. [4]
- (b) Briefly explain the formation of the features you labelled in (a). [3]
- (c) Using Fig. 1.1, suggest how the delta may change shape over time. [3]
- [Total: 10]

**Atmosphere and weather**

- 2 Fig. 2.1 shows the global pattern of ocean currents.
- (a) Using Fig. 2.1, describe the pattern of ocean currents in the Northern Hemisphere. [3]
- (b) Explain **two** ways in which the ocean currents described in (a) affect the seasonal variation of temperature in the Northern Hemisphere. [4]
- (c) Explain **one** factor, other than ocean currents, that affects the seasonal variation of temperature in the Northern Hemisphere. [3]
- [Total: 10]

**Rocks and weathering**

- 3 Fig. 3.1 shows a slope profile.
- (a) Using Fig. 3.1, name feature:
- (i) A [1]
- (ii) B. [1]
- (b) With reference to Fig. 3.1, describe the formation of feature B. [3]
- (c) Explain how water affects the movement of material on slopes. [5]
- [Total: 10]

**Section B**

Answer **one** question from this section.

**Hydrology and fluvial geomorphology**

- 4 (a) (i) Describe how drainage density is measured. [3]
- (ii) Briefly explain how velocity affects erosion in a river. [4]
- (b) Explain how catchment flows and stores are affected by urbanisation. [8]
- (c) 'River flooding impacts people more than it impacts the environment.'  
With the aid of examples, how far do you agree? [15]

[Total: 30]

**Atmosphere and weather**

- 5 (a) (i) Define the terms *sublimation* and *convection*. [4]
- (ii) Describe how clouds form. [3]
- (b) With reference to **one** urban area, describe and explain the effects of human activity on temperature and humidity. [8]
- (c) With the aid of examples, assess the extent to which albedo is the most important factor in determining the diurnal energy budget. [15]

[Total: 30]

**Rocks and weathering**

- 6 (a) (i) Define the terms *hydration* and *carbonation*. [4]
- (ii) Briefly describe how rock type affects the rate of physical weathering. [3]
- (b) Describe and explain the formation of ocean trenches. [8]
- (c) With the aid of examples, assess the extent to which mass movement on slopes can be reduced. [15]

[Total: 30]

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