UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Advanced Subsidiary Level and Advanced Level

GEOGRAPHY

9696/02

Paper 2 Advanced Physical Options

May/June 2006

1 hour 30 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in. Write in dark blue or black pen.

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

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **two** questions only. Each question answered must be from a different topic. Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer. You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question. All the Figures referred to in the questions are contained in the insert.

At the end of the examination, fasten all your work securely together. The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 3 printed pages, 1 blank page and 1 insert.

Tropical Environments

Only **one** question may be answered from this topic.

- **1** (a) Using examples, describe and explain the characteristics of monsoon climates. [10]
 - (b) Describe the weathering processes that occur most commonly in the humid tropics and the seasonally humid tropics. Explain how these can produce landforms in the two environments. [15]
- 2 (a) Fig.1 shows the development of climax and plagioclimax vegetation.

Using Fig.1, explain how the development of priseres, subseres and plagioseres have produced different types of tropical plant communities. [10]

(b) Explain how human activities may have affected vegetation and the fertility of tropical soils. [15]

Coastal Environments

Only **one** question may be answered from this topic.

- 3 (a) Describe the processes of wave erosion and demonstrate how they can produce a wave cut platform.
 [10]
 - (b) With the help of diagrams, describe how sediment is transported along coasts and explain how the deposition of sediment may form simple and compound spits. [15]
- **4** (a) Fig. 2 shows the refraction of waves as they approach a coast.

Explain the refraction of the wave crests and suggest the effects of refraction upon the headland cliff and the bayhead beach. [10]

(b) Explain the extent to which the natural characteristics of coastal dunes and salt marshes can be changed by human activities. [15]

Hazardous Environments

Only **one** question may be answered from this topic.

- 5 (a) Why is a knowledge of plate tectonics important in understanding the distribution of many natural hazards? [10]
 - (b) Using the example of one type of natural hazard, evaluate the attempts made to limit its effects on the environment. [15]
- **6** Fig. 3 shows the areas of damage and the deposits produced by the lateral blast of Mount St Helens in 1980.
 - (a) Describe the effects of the eruption on the area around Mount St Helens. [10]
 - (b) To what extent is it possible to predict volcanic eruptions and to limit their hazardous effects? [15]

Arid and semi- arid environments

Only **one** question may be answered from this topic.

- 7 (a) Describe and briefly explain the characteristics of climates in hot arid areas. [10]
 - (b) To what extent can human activities be blamed for the problems of sustainable management in arid or semi-arid environments? [15]
- 8 (a) Fig. 4 shows some types of dunes found in desert areas.

Identify the dunes shown in Fig. 4 and explain how each may have been formed. [10]

(b) To what extent has running water played a role in shaping hot arid environments? [15]

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