

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**

**Advanced GCE**

**GEOGRAPHY A**

**2683**

Options in Physical and Human Geography

Tuesday **24 JANUARY 2006** Afternoon 1 hour 30 minutes

Additional materials:

8 page Answer booklet

Enclosed with this question paper:

Insert

**TIME** 1 hour 30 minutes

**INSTRUCTIONS TO CANDIDATES**

- Write your name, Centre number and Candidate number in the spaces provided on the answer paper/booklet.
- Answer two questions, one from Section A and one from Section B.
- Write your answers in blue or black ink.
- Read each question carefully and make sure you know what you have to do before starting your answer.

**INFORMATION FOR CANDIDATES**

- 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 90.
- Where relevant, you should include sketch maps and diagrams and make use of examples of places you have studied.
- You will be awarded marks for the quality of written communication.

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**This question paper consists of 6 printed pages, 2 blank pages and an insert.**

**Section A****Group A Options**

Answer **one** question from Questions 1 to 15.

**Option 1: Coastal Environments**

- Either:** 1 (a) Describe the formation and characteristics of different types of waves. [20]  
(b) Explain how sediment transport influences different types of beach plan. [25]
- Or:** 2 (a) Describe the marine processes involved in the formation and development of cliffs and shore platforms. [20]  
(b) Explain how human activities influence the rates of cliff erosion. [25]
- Or:** 3 (a) Describe the factors that contribute to the formation of salt marshes and mud flats. [20]  
(b) Explain why coastal sand dune systems are dynamic features of the coastal system. [25]

**Option 2: Fluvial Environments**

- Either:** 4 (a) Describe how a river transports its sediment load. [20]  
(b) Account for the variety of depositional landforms found along a river's course. [25]
- Or:** 5 (a) Describe the downstream changes in the cross-section and plan of a river channel. [20]  
(b) Explain the factors influencing downstream changes in cross-section and plan. [25]
- Or:** 6 (a) Describe the measures that can be taken to reduce the risks of river flooding. [20]  
(b) Explain how floods result from the interaction of several factors. [25]

**Option 3: Glacial and Periglacial Environments**

- Either:** 7 (a) Describe the past and present distribution of glacial and periglacial environments in the British Isles. [20]
- (b) Explain the effects of multiple periods of glaciation and deglaciation on upland landscapes. [25]
- Or:** 8 (a) Describe the processes of weathering and erosion associated with a period of glaciation. [20]
- (b) Explain how rock type affects the landforms resulting from a period of glaciation. [25]
- Or:** 9 (a) Describe the landforms associated with ground ice. [20]
- Fig. 1 shows the climate at a location in Siberia.
- (b) Explain the influence of the climate, represented in Fig. 1, on the weathering and slope processes operating in periglacial environments. [25]

**Option 4: Hot Arid and Semi-arid Environments**

- Either:** 10 (a) Describe the changing location and extent of hot desert environments in the past. [20]
- (b) Explain the role of flowing water in the formation of hot desert landscapes and landforms. [25]
- Or:** 11 (a) Describe the role of human activity in land degradation in desert areas. [20]
- (b) Explain how the location of desert areas is the result of the inter-action of several factors. [25]
- Or:** 12 (a) Describe the adaptations of animals to desert environments. [20]
- (b) Explain the role of water movement in the formation of desert soils. [25]

**Option 5: Applied Climatology**

- Either:** 13 (a) Describe how the energy budget of an urban area differs from that of surrounding rural areas. [20]
- (b) Explain the climatic consequences of these differences and their significance for human activities in urban areas. [25]
- Or:** 14 (a) Describe how human activity is affected by the frequency and severity of frost and fog. [20]
- (b) Explain the relationship between topography and the frequency of frost and fog. [25]
- Or:** 15 (a) Describe how human comfort varies in different parts of the world. [20]
- (b) Explain how human comfort influences the design of buildings in different parts of the world. [25]

**Section B****Group B Options**

Answer **one** question from Questions 16 to 27.

**Option 6: Agriculture and Food**

**Either: 16 (a)** Describe how agro-ecosystems modify natural ecosystems. [20]

**(b)** Explain why specialist farms have the greatest impacts on natural ecosystems. [25]

**Or: 17** Study Fig. 2 which shows the pattern of diffusion of an innovation.

**(a)** With reference to Fig. 2, describe the speed and spatial pattern of the diffusion of agricultural innovations you have studied. [20]

**(b)** Explain why the rate of diffusion of agricultural innovations varies from place to place. [25]

**Or: 18 (a)** Describe the pattern of nutrition at global and regional scales. [20]

**(b)** Explain the role that economic and social factors might play in causing food shortages and famines. [25]

**Option 7: Manufacturing Industry: Location, Change and Environmental Impact**

**Either: 19 (a)** Describe how modern industrial growth in LEDCs and NICs has affected the physical environment. [20]

**(b)** Explain how the internal organisation of firms influences their locational patterns. [25]

**Or: 20 (a)** Under what circumstances is labour quality more significant than labour costs to the location of manufacturing industry? [20]

**(b)** Explain how the social and economic consequences of unemployment vary with the type of manufacturing industry. [25]

**Or: 21 (a)** Describe the impact on regional economies of Foreign Direct Investment (FDI) and disinvestment in manufacturing. [20]

**(b)** How and why do governments and planners influence Foreign Direct Investment (FDI)? [25]

**Option 8: Service Activities: Location, Change and Environmental Impact**

- Either: 22** (a) Outline the theories and models of the location of retailing and offices within the CBD. [20]
- (b) How and why do real world retail and office locations within the CBD differ from these theories and models? [25]
- Or: 23** (a) Describe the main changes in the location of public services, such as schools and health care, in rural areas over the past 40 years. [20]
- (b) Explain how the interaction of several factors brings about changes in rural service provision. [25]
- Or: 24** (a) Outline how central place theory accounts for the location and numbers of service centres in a region. [20]
- (b) Explain why service provision rarely follows the patterns of central place theory. [25]

**Option 9: Tourism and Recreation and their Environmental Impacts**

- Either: 25** (a) Describe how patterns of international tourism can be affected by political factors. [20]
- (b) Explain how developments in transport have brought about changes in the destinations and scale of international tourism. [25]
- Or: 26** (a) With reference to examples, describe what is meant by natural, cultural and heritage tourist resources. [20]
- (b) Explain how tourism's use of cultural and heritage resources can have both positive and negative effects. [25]
- Or: 27** (a) With reference to examples, describe the physical, economic and cultural characteristics of mass tourism. [20]
- (b) Explain how issues of sustainability are playing an increasingly important role in the development of tourism in LEDCs. [25]



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