

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
Advanced Subsidiary GCE

GEOGRAPHY A



2680

The Physical Environment

Friday **26 MAY 2006**

Afternoon

1 hour 15 minutes

Candidates answer on the question paper.
 An insert is enclosed with this question paper.
 No additional materials are required.

Candidate
Name

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Centre
Number

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Candidate
Number

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TIME 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, in the spaces provided on the question paper.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do not write in the bar code. Do not write in the grey area between the pages.
- **DO NOT WRITE IN THE AREA OUTSIDE THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.**

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The Insert contains maps and diagrams for use with questions.
- The total number of marks for this paper is 100.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.
- Even where not specifically asked for, credit will be given for sketch maps and diagrams.

FOR EXAMINER'S USE	
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TOTAL	

This question paper consists of 9 printed pages, 3 blank pages and an Insert.

Hydrological Systems

1 (a) What is meant by the term 'infiltration'?

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.....[2]

(b) Study Fig. 1 (Insert), which shows the process of overland flow.

(i) State and explain **two** factors that may affect the position of the water table shown in Fig. 1.

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(ii) A rising water table is one cause of overland flow. Explain **one** other cause of overland flow.

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(iii) Suggest **one** reason why throughflow becomes slower with increased depth.

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(c) Using examples you have studied, describe and explain how different land uses will affect the flows, stores and outputs of water within a drainage basin.

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(b) Study Fig. 2b (Insert), which shows the trophic pyramid for a deciduous woodland.

(i) What is meant by the term 'trophic level'?

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(ii) Suggest reasons why Net Primary Productivity (NPP) decreases up the trophic pyramid shown in Fig. 2b.

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(c) State and explain **two** factors that might prevent an ecosystem from reaching its climax.

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[Total: 26 marks]

[Turn over

(b) Study Fig. 4 (Insert), which shows the variation of global energy budgets with latitude.

(i) Describe and suggest reasons for the pattern shown.

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(ii) Outline **two** ways in which energy is transferred from areas of surplus to areas of deficit.

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[Total: 24 marks]

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