

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Advanced GCE

INFORMATION AND COMMUNICATIONS TECHNOLOGY 2515

Communications Technology and its Applications

Tuesday

20 JUNE 2006

Morning

1 hour 30 minutes

No additional materials are required.
Candidates answer on the question paper.

Candidate Name	Centre Number	Candidate Number												
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TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name in the space above.
- Write your Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, in the spaces on the question paper.
- 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, of which 4 marks are allocated to the assessment of the quality of written communication.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE		
1		8
2		28
3		14
4		10
5		18
6		8
QWC		4
TOTAL		90

This question paper consists of 14 printed pages, 3 lined pages and 3 blank pages.

2 Find-A-Home is a national chain of estate agents with offices spread throughout the country. The estate agents operate local area networks (LANs) in their local branch offices, and a wide area network (WAN) to enable branches to communicate with each other. All workstations also have Internet access.

(a) Describe the facilities of the Internet which would be useful to the estate agency.

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(b) The company is considering using wireless networks in the branch offices.

(i) Describe wireless communication in LANs.

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(ii) Describe **two** advantages and **one** disadvantage of wireless communication for the branches of Find-A-Home.

Advantages

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Disadvantage

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(c) What is meant by the term *communication protocol*?

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(d) What is meant by the term *layering*?

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(e) Describe the benefits of the Open Systems Interconnection (OSI) model.

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(c) Describe **two** other services which the cable TV company could offer to their customers.

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5 A small independent travel agency has a single office equipped with a number of stand-alone PCs.

(a) (i) Describe the characteristics of a memory stick.

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(ii) Explain how the travel agency might make use of memory sticks.

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(b) The travel agency currently books holidays for clients by telephone.

Explain the limitations of this current system.

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A new manager is appointed who decides to implement a local area network (LAN) with Internet access.

(c) Explain how the new system will improve the efficiency of the company.

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