

OXFORD CAMBRIDGE AND RSA EXAMINATIONS Advanced GCE

INFORMATION AND COMMUNICATIONS TECHNOLOGY 2517

ICT Systems and Systems Management

Monday 24 JANUARY 2005 Morning 1 hour 30 minutes

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

Candidate Name	Centr	e Nur	nber		andi Num	

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 EX	AMINER'S U	SE
1		8
2		13
3		30
4		27
5		8
QWC		4
TOTAL		90

Answer all questions.

A company provides information for students who wish to take a year out when they leave school. The company runs a website which contains information and advice about adventure holidays, community work and voluntary work overseas.

1	(a)	Explain why it is important for the information on the website to be accurate and up-to-date.
		[4]

D)	(1)	What is a Management Information System (MIS)?
		[2]
	(ii)	Describe how the company would make use of a MIS.

2	(a)	The student can access the website from school using an ISDN connection. At hom the student uses a modem.					
		(i)	Identify which of these methods of connection is digital.				
			[1]				
		(ii)	Describe the differences between an analogue and a digital connection to the Internet.				
			[4]				

orotect the	data.					
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The company decides that it must upgrade its systems to embrace new technology.

3	(a)	Ехр	lain the advantages for the company in using the latest technology to run the website.
			[4]
	(b)	The the	company is to change the website design. Explain how each of the following affects design:
		(i)	perception
			[2]

(ii)	attention
	[2]
(iii)	memory
	[2]
(iv)	learning.
	[2]

(6)		ign of the user interface.
	(i)	Describe two process modelling techniques.
		[N]

(11)	Describe two data modelling techniques.	
	[4]	
(iii)	Describe how prototyping could be used to develop the user interface.	
	[41]	

(d)		students using the new website will require support. Describe the support the pany could provide:
	(i)	before the installation of the new website
		[3]
	(ii)	after the installation of the new website.
		[3]

4	(a)	The company passes information about students to an overseas agency that recruits volunteers to help teach ICT. The agency has a computer based information system which needs maintaining.
		Explain the need for the maintenance of this system.
		[6]

)	Discuss why the company and the overseas agency need to make use of agreed standards for the quality and reliability of the information system.
	[6]

(c)	In a	country where the overseas agency is based suffers from frequent power blackouts. addition the telephone system is unreliable and confidentiality of transmitted data not be guaranteed.
	(i)	Identify problems for the agency that may arise from loss of power to the computer system and give measures that could be taken to reduce these problems.
		[4]
	(ii)	The overseas agency would like to reduce dependence on the telephone system for data transmission.
		Explain how this could be done and how the confidentiality of data could be maintained.
		[3]

(i)	lost limbs
(ii)	damaged eyes.

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Explain how these two methods differ from each other.
Describe the disadvantages of using these methods to train the volunteers.
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