

OXFORD CAMBRIDGE AND RSA EXAMINATIONS Advanced GCE

INFORMATION AND COMMUNICATIONS TECHNOLOGY 2517

ICT Systems and Systems Management

Tuesday 21 JUNE 2005 Morning 1 hour 30 minutes

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

Candidate Name	Cent	re Nu	umbe	er		idat iber	

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		18
2		19
3		22
4		17
5		10
QWC		4
TOTAL		90

Answer **all** questions.

A student has the idea of selling laptop computers to other students.

1	(a)	The student wants to set up an office at home. Describe the use of three software applications the student might use as part of an integrated office system.
		[6]

(b)	that could be used for strategic planning.
	[4]
(c)	Explain why the student must manage this information effectively.
•	
	[2]

(d)	Identify three peripheral devices the student will need to purchase for the office, other than a mouse, keyboard and monitor, and in each case describe what the device will be used for.
	[6]

2	(a)	The	student wants to set up a website to advertise and sell the laptop computers.
		(i)	Describe the planning that needs to take place before starting the project.
			[4]
		(ii)	Identify two tools that could be used to help with planning this project.
			[2]

(b)		rototype of the user interface for the website is to be created. Ilain how iteration is used in the process of prototyping.
		[3]
(c)	con	student decides to use a voice recognition system to dictate letters. Different factors tribute to the design of this type of human computer interface. lain how each of the following affects the design:
	(i)	Cognitive psychology
		[2]
	(ii)	Artificial Intelligence.
		[2]

(d)	Describe the 'Model Human Processor', developed by Card, Moran and Newell.
	[4]
(e)	Explain the importance of designing the voice recognition system to closely match the student's mental model.
	[2]

3

,	Disc	cuss the costs and benefits of using off-the-shelf software to set up the database.
)	The	database could be searched using a complex query.
	(i)	Describe what is meant by a complex query.
	(-)	

	Explain how the results of a complex query could be integrated into a word processed document.
	[2]
(iii)	Explain a problem when integrating the result of a query with a word processed
	document.

(c)	Eventually this database software will have to be upgraded. Explain the factors which will affect the decision to upgrade.
	[5]

(d)	The	upgrade will have to be implemented.
	(i)	Explain why it is important to plan the implementation.
		[2]
	Dire	ect changeover is to be used for this implementation.
	(ii)	Give two advantages and one disadvantage of using direct changeover.
		[3]

Describe the factors that must be considered when managing this change.

Jiscuss	alternativ	e method	is the sa	iles stat	t could	use to ir	nmediate	ely proces	ss the ord
•••••									
						• • • • • • • • • • • • • • • • • • • •			
•••••		•••••		•••••					

5	wall	or selling the business the student decides to take time off. He decides to go mountain king. To help navigate in the mountains the student buys a wrist-watch which includes a bal positioning system (GPS).
	(a)	Describe the advances in hardware and software that have made it possible to include a GPS in a wrist-watch.

(b)	Apart from the date and time functions, describe other functions you might find on the GPS wrist-watch.
	[4]

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.