

Section III

40 marks

Attempt TWO questions from Questions 25–28

Allow about 1 hour and 10 minutes for this section

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

If you include diagrams in your answer, ensure that they are clearly labelled.

		Marks
Question 25 — Transaction Processing Systems (20 marks)		
Use a SEPARATE writing booklet.		
(a)	(i) Discuss the advantages of a ‘grandfather, father, son’ backup procedure.	2
	(ii) Many organisations establish alternative procedures to deal with transactions when the computer is not available. Explain why these alternative procedures should be tested periodically.	2

Question 25 continues on page 21

Question 25 (continued)

- (b) Country Bakers produces a wide variety of delicious pies made with fresh fruit. Each variety of pie is 'seasonal' as it is only made when the fruit is in season.

Some time ago Country Bakers established a website to advertise its pies and provide information about placing orders via the telephone, facsimile and e-mail. Since the establishment of the website, the number of orders received has increased markedly.

All orders received are entered into the Sales System. The Sales System processes all transactions relating to sales and stock, and maintains customer and stock databases.

A number of problems have arisen with the increase in orders:

- Staff are having trouble finding enough time to enter all the additional orders.
- Many of the orders received by e-mail and facsimile require changes as they include pies that are out of season. In these cases the customer has to be contacted, significantly slowing the fulfilment of orders.
- Many customers pay for the orders by credit card. Each of these payments is currently processed manually, which is time consuming and error prone.

The manager of Country Bakers is very happy with the increase in business, but wonders if the website could be used to solve the problems that have arisen from the increased number of orders.

- (i) Propose and justify ways in which the website could be modified or extended to address the current problems. **3**
- (ii) Discuss the issues that may arise from your proposed modifications or extensions to the website. **5**
- (c) Online banking allows customers to access account details, transfer funds between their accounts and make payments over the Internet. A number of banks have introduced a new facility that allows customers to transfer funds to accounts at other banks. **8**

Critically analyse the data accuracy, security and integrity issues that arise from the introduction of this new facility.

End of Question 25