The Institute of Chartered Accountants of Pakistan

Information Technology

Instructions to Candidates:
(i)   *All the Questions from Section-A are compulsory.*
(ii)   *Attempt any TWO out of THREE Questions from Section-B.*

Section-A

Q.1   Target Distribution (TD) is a small-sized distributor of FMCG. Presently the firm is using standalone computers for its operations. Data is transferred internally either through USBs or through the Internet. In view of the expansion of business and increase in workload, Manager Operations has proposed that the computers may be connected through a Local Area Network (LAN).

    (a)   Briefly explain how the creation of a LAN may be advantageous for the operations of TD. **(04)**

    (b)   Briefly describe star and ring topologies. Compare these topologies in the context of the following:

- single point of failure
- network expansion
- Security
- cost

        Also recommend which topology would be most suitable for the operations of TD. **(07)**

Q.2   (a)   What do you understand by 'Decision Support System' (DSS)? State any three features of a DSS. **(04)**

    (b)   A spreadsheet is a type of decision support system which is useful for strategic, tactical as well as operational level of management.

        Identify any *two* generally used spreadsheet packages and list *two* uses of spreadsheets for each level of management. **(04)**

Q.3   (a)   Explain 'Web Browser' and 'Internet Search Engine'. Give names of two commonly used web browsers and internet search engines. **(06)**

    (b)   Briefly describe how Internet Search Engine works. **(04)**

Q.4   The new Chief Executive of Gravity Limited (GL) has instituted a number of reforms in the company. Consequently, GL's IT system requires a lot of changes. Aleem, the IT manager of the company is confident that he can manage these changes but is concerned about the process of documentation of these changes.

    (a)   Specify *five* good practices that Aleem may follow in order to ensure proper documentation. **(05)**

    (b)   Identify any *six* types of Computer Aided Software Engineering (CASE) tools and specify how Aleem may use these tools in the system development process. **(06)**

Section-B

Q.5 Space Communication (SC) is a leading telecom operator of the country. It is in the process of replacing its existing IT system with a new and more efficient system. The new system has better processing capability, wide range of reporting options and is more user-friendly. The management is however divided over the system changeover methodology, i.e., whether to make a parallel-phased changeover or use the direct changeover approach.

(a) Prepare a comparison of the two changeover methods which are under management's consideration and recommend which of them would be suitable for SC. **(06)**

(b) Identify the matters that management should consider to ensure successful system changeover. **(04)**

Q.6 International Finance Limited (IFL) is an emerging brokerage house with branches in three cities. The management is planning to establish a centralised computer data centre. Besides, logical security of the data centre, the management is keen to identify possible physical threats and deploy appropriate mitigating controls at the data centre.

(a) List *four* exposures/risks that may arise due to weak physical access security at the data centre. **(03)**

(b) Identify *ten* physical access controls that you would recommend to address these risks. **(05)**

(c) How can IFL mitigate the losses from the physical threats? **(02)**

Q.7 The management of POW Paints has decided to develop a new software application for recording its sales and purchases. As IT Head of the company, you are well aware of the importance of effective planning and user co-ordination in the successful completion of the project.

(a) Write a memo to the users describing their key responsibilities. **(05)**

(b) Briefly describe the key strategies that would help in achieving the objectives of cost efficiency and timely completion of assignment. **(05)**

(THE END)