



Information Technology

Intermediate Examination
Spring 2012
Module D

12 March 2012
60 marks - 1 $\frac{3}{4}$ hours
Additional reading time - 15 minutes

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 Progressive Explorer (PE) is a small travel agency. Due to recent growth in PE's business, the management is planning to expand its staff and facilities. Presently, there are only two computers which are connected with each other through direct cable while the only printer is attached with one of the computers through local port. The new setup is likely to have ten computers and two printers which would be connected with each other through an appropriate network topology. One of the partners of PE, who has some experience of IT matters, has recommended the use of Mesh Topology.

Required:

- (a) Identify two advantages and two disadvantages of using Mesh Topology in the above situation. *(04 marks)*
(b) Suggest one other network topology which in your opinion is best suited for PE. Give reasons to justify your suggestion. *(04 marks)*

Q.2 Greek Laboratories Limited (GLL) is a drug manufacturer and has a Management Information System to control the decision making process.

Required:

- (a) Differentiate between a closed loop control system and an open loop control system. *(04 marks)*
(b) Give any three examples of decisions that may be taken by GLL using each of the above types of control systems. *(06 marks)*

Q.3 Usage of technology is dramatically altering the way business world operates. In an era of financial austerity and rising travel expenses, usage of video conferencing is one such technological development which is altering traditional modes of meeting people in other locations.

Required:

Specify any five issues which limit the use of video conferencing. *(05 marks)*

- Q.4 (a) Briefly explain three types of Decision Tables. *(05 marks)*
(b) State two advantages and two limitations of Decision Tables. *(04 marks)*

Q.5 You are the Business Development Manager of Web Potent which deals in development, administration, maintenance/support and hosting of websites. Your clients differ on account of their size, nature of operations and administrative set-up.

Required:

Prepare a brief summary of any four web hosting solutions and their key characteristics for uploading on your website, for the benefit and guidance of your clients. *(08 marks)*

Section B

Q.6 The internal auditor of Crest Securities Limited has highlighted the following issues in his report:

- (i) Most of the users have weak passwords.
- (ii) There is no password expiry policy.
- (iii) Locked user accounts are unlocked automatically after 24 hours.
- (iv) Users are allowed to use their smart phones, tablets and laptops for sending and receiving official emails/documents.
- (v) Firewall is installed with its default policy.

Required:

Suggest appropriate controls to address the above issues. *(10 marks)*

Q.7 A well developed system may fail to achieve its desired objectives if appropriate system changeover approach is not adopted. Sometimes a hybrid changeover approach is to be adopted depending upon the nature, resources and constraints of the organisation.

Required:

- (a) Discuss the comparative advantages of Direct changeover approach and Parallel changeover approach. *(04 marks)*
- (b) Identify and briefly explain two other changeover approaches. *(04 marks)*
- (c) Which changeover approach would you prefer to follow in the following cases? Give brief reason to support your point of view.
 - (i) Replacing manual attendance system of a local FM radio station with an automated biometric based solution.
 - (ii) Online ticket reservation system for domestic railway service. *(02 marks)*

Q.8 Post Implementation Review (PIR) is an important step in the long run success of any system. It is necessary to conduct the PIR at an appropriate time to get the desired results.

Required:

List down the important steps that should be performed during a PIR. *(10 marks)*

(THE END)