THE INSTITUTE OF CHARTERED ACCOUNTANTS OF PAKISTAN

Intermediate Examinations   Spring 2008

March 10, 2008

INFORMATION TECHNOLOGY
Module D

(Marks 60)
(1 hour 45 minutes)

Q.1 Soft Revolution (SR) is a large IT solution provider. Recently it has purchased an old building in a coastal city for their branch office. Since SR's business is dependent on information technology function, the effects of physical environment require careful consideration. The management has identified three major types of physical threats to its operation i.e. fire, flooding and unauthorized physical access.

You are required to advise the management about the following:
(a) At least three types of controls applicable in each of the above situation. **(04)**
(b) What measures the company should take to mitigate the losses from the above threats? **(03)**

Q.2 Classify the following controls as preventive, detective, or corrective controls. Give very brief reasons to justify your answers.

(i) Strong passwords
(ii) Exception reports
(iii) Digital signatures
(iv) Segregation of duties
(v) Backups
(vi) Review of system activity logs **(06)**

Q.3 E–mail, Instant Messaging (IM) and other chatting programs are very popular among home Internet users. Few years back, these were equally popular in corporate environment where users did have one or other messenger for sharing information with friends and colleagues. However, with increasing risks and threats, the use of IM and chatting programs is generally prohibited in the corporate environment but e–mail is still widely used.

(a) Explain the difference between an e–mail and an instant message. **(02)**
(b) List the factors which prompted the corporate world to prohibit the use of IM and chatting programs. **(04)**

Q.4 Internet is an important source of gathering information on different topics.

(a) List any six search engines which are popular among Internet users. **(03)**
(b) Explain with the help of an example, how a search engine will respond if the information to be searched is entered:
(i) within inverted commas;
(ii) without inverted commas. **(03)**

Q.5 (a) Networks have played an important role in the significant growth of computer applications and office automation. Large as well as small businesses are using networking. You are required to briefly explain the benefits of networking, in corporate environment. **(04)**

(b) Data is transmitted over a channel in three different modes. i.e. simplex, half duplex and full duplex.
    (i) Explain the difference between each of the above modes. **(03)**
    (ii) Give two examples of data transmission under each mode. **(03)**

Q.6 (a) An operating system controls the running of programs in a computer. You are required to explain how the operating system controls and facilitates application programs. Also list the services which an operating system provides to the users. **(04)**

(b) System Software comprises of various system and utility programs. These programs are used in the design, processing and control of all computer applications. Operating System is an example of System Software. You are required to list six other types of system/utility programs. **(03)**

Q.7 The management of Beta Textiles is not satisfied with the performance of its information processing system. The processing is carried out through a comprehensive software which was developed in-house about two years back. However, soon after its implementation, users started complaining that the software is not user friendly. They also complained that there are frequent hang-ups and the processing is slow. The recently appointed IT Manager is of the view that main causes of these problems are lack of software maintenance and ineffective post implementation review (PIR). The PIR team had recorded users' concerns and various system irregularities during their review but their findings were not formalised and no action was taken to address users' concerns.

You are required to:
(a) List down the matters that should be contained in a formal PIR report. **(04)**
(b) Explain the importance of software maintenance. **(04)**

Q.8 International Consumers Products Limited (ICPL) is a large FMCG company with country-wide presence. In a meeting of the executives of the company the Marketing Manager proposed the development of an Expert System (ES) for analyzing the customer trends, their preferences and anticipating the future demands. However, the IT Manager was of the opinion that ES is not suitable in their case. Since the CEO does not have adequate knowledge about application of ES, he asked the IT Manager to prepare a note, for discussion in the next board meeting.

On behalf of the IT Manager, you are required to:
(a) Identify three major components of an ES and the specific contribution which each of them makes in the working of the system. **(05)**
(b) Explain why the IT Manager feels that ES is not suitable for ICPL. **(05)**

(THE END)