The Institute of Chartered Accountants of Pakistan

Information Technology Management, Audit and Control

Final Examination	3 December 2012
Winter 2012	100 marks - 3 hours
Module E	Additional reading time - 15 minutes

Q.1 Your firm is conducting IS audit of Bolan Foods Limited (BFL). The observations reported by the audit staff and response of the IT head are given below:

Observation (i):
Certain key functions are performed by sharing User IDs.
Response of the IT head:
During the last month, few key employees left BFL and presently their work is being performed jointly by their respective team-mates who share the workload as per their convenience. Therefore, for the time being, such User IDs are being used by more than one person of the respective teams.

Observation (ii):
As per BFL's IT policy, staff is prohibited to use instant messaging service, browsing social networking sites and downloading all types of files. While testing the compliance of Internet use policy, it was observed that staff of IT department has unwritten immunity from the policy.
Response of the IT head:
His team uses instant messages to exchange views with their professional friends, during development and support activities. They often get very useful tips for their work from social sites and discussion forums. Moreover, the permission to download files is necessary as they have to download various types of security patches/updates and virus definitions regularly. Rest of the users are not allowed these relaxations as their productivity is likely to be affected as well as it is likely that most of them would misuse such rights and unnecessarily occupy the Internet bandwidth.

Required:
(a) Identify any three implications of sharing User IDs. **(03)**
(b) Identify any five risks that BFL faces if its employees visit social networking sites and/or discussion forums. Specify the implication of each risk and identify which of the above risks may be avoided/mitigated if they are prohibited to visit such sites from office. **(10)**
(c) Comment on the IT head's response on the audit observations. **(07)**

Q.2 The management of Elaaj Hospital (EH) has approached you to conduct a review of their lights out operation (tasks which can take place without human intervention) of IT systems. You have been informed that:
- EH offers round the clock inpatient services and the management ensures the availability of doctors and medical support staff.
- Patients' medical and billing record is maintained on a centralized information system.
- IT support staff is available during office hours only. However, in case of any problem they can be contacted on phone.
- Any problem encountered by the system during lights out operation, or otherwise, is recorded in an Error Reporting System (ERS) by the duty staff.
- All computers and critical electronic systems are supported by UPS and a generator is also available which is equipped with an automatic change over switch.

Required:
List the matters (any ten points) that you would consider while reviewing the lights out operation of EH's IT systems. **(10)**

Q.3 Mr. Hamid Ali joined a growing medium sized manufacturing company in the capacity of IT Manager. In his first meeting with the CEO of the company, he was informed that there is no formal Business Continuity Plan (BCP) of the company and the board of directors are now willing to introduce a formal BCP as soon as possible.

Required:
Identify the different phases of Business Continuity Planning Process and list the activities that would be performed in each phase.   **(15)**

Q.4 Computer based crimes are used to steal money, goods, corporate information, etc. Some of the common methods used to commit a computer crime by the perpetrators are Rounding Down Technique, Phishing, Denial of Service and Brute-force Attack.

Required:
Briefly explain the above mentioned methods used by the perpetrators and suggest appropriate controls to prevent or mitigate the threat in each case.   **(12)**

Q.5 It is an ongoing challenge to ensure security of an email transmission. Several methods have been developed to accomplish this goal. One such method is the use of digital signatures.

Required:
(a) What benefits can be achieved by using digital signatures?   **(03)**
(b) Illustrate the process through which two parties could exchange digitally signed email messages.   **(05)**

Q.6 Sultan Textile Mills Limited (STML) is a leading manufacturer and exporter of textiles and garments and has several manufacturing units located in Pakistan and Bangladesh. The units are currently using different platforms (Operating Systems) and collating the information using different software which disallow communication among the different units.

The company intends to centralize and consolidate the information flowing from the units to ensure timely availability of data for generation of MIS reports and financial statements. The management of STML has recently appointed your firm as a Consultant to offer recommendations for development of a new system to achieve this objective.

Required:
(a) Briefly list the problems that STML is experiencing at present.   **(03)**
(b) Identify and briefly explain the *six* areas which are required to be examined carefully in order to understand the present system.   **(09)**
(c) Would you suggest introduction of an ERP system to eliminate the current problems? Give reasons for your recommendations.   **(05)**

Q.7 Karim Associates is a partnership firm of legal attorneys and has offices in Karachi, Lahore and Islamabad. Up to 30 June 2012, the firm maintained its accounting records manually. With effect from 1 July 2012, it switched over to a software-based computerised accounting system.

However, the partners are not satisfied with the reports generated by the new software. The firm has asked you to review the accounting software.

Required:
List the **tests of controls** that should be performed in order to assess the weaknesses in the system/controls.   **(07)**

Q.8 Prompt Communications (PC) is a medium sized courier company. In 2010 the use of IT in PC was limited to the areas of booking, billing and finance. Realising the huge potential of IT, the Board of Directors had established a committee for development of IT strategy of PC. The committee is led by PC's IT Manager and comprises of senior officers from finance, marketing and operations. The committee had developed a strategy in 2011 which was approved by the CEO.

In the budget meeting for 2013, the Finance Manager pointed out that since the introduction of IT strategy; IT related expenditures have been increasing significantly. The Committee has again requested a considerable amount to be budgeted for the next year.

Required:
(a) Explain whether you agree with the composition of IT Strategy Committee of PC. **(05)**
(b) Assuming that you have been assigned the task to assess the performance of the Committee, what questions would you consider in your review? **(06)**

(THE END)