THE INSTITUTE OF CHARTERED ACCOUNTANTS OF PAKISTAN

Final Examinations   Winter 2009

December 7, 2009

INFORMATION TECHNOLOGY MANAGEMENT, AUDIT AND CONTROL
(MARKS 100)
(3 hours)

Q.1   Mobile and wireless market is one of the fastest growing markets in the country. There are estimated to have more than 30 million mobile phone users in Pakistan. The fast growing use of mobile phone has induced the financial institutions to offer value added services via mobile.

Required:
Explain the limitations and risks associated with mobile banking services from the perspective of data and network security. **(06)**

Q.2   Chic Technologies (CT) is working on a highly sophisticated customised application for Mobin Industries (MI). The development work of the application and the system testing has been completed. User Acceptance Testing (UAT) is now being planned.

Required:
As IT Manager of MI, prepare a brief presentation for the guidance of various levels of users / executives, as regards the following:
(a)   Difference between System Testing and UAT. **(03)**
(b)   Steps that are generally involved in UAT process. **(03)**
(c)   The people and process related risks in the implementation phase. **(07)**

Q.3   RCOM Consulting is a global leader in IT consulting services. RCOM has a team of highly trained professionals who support a large number of clients worldwide. In certain cases, their support staff has to contact the customers over telephone to provide immediate solutions. Quite often, these calls consume a lot of time. One of the directors of RCOM has therefore, suggested the use of VoIP solution to reduce costs.

Required:
Briefly explain the following:
(a)   What do you understand by VoIP technology? **(02)**
(b)   Some of the disadvantages (including security issues) related to the use of VoIP. **(03)**

Q.4   The management of Gemini Shipping Lines Limited (GSLL) is not satisfied with the performance of its IT department. It also believes that the internal audit department of the company is not monitoring the IT related controls.

Required:
(a)   Identify the key indicators which can be used to measure the performance of IT department and IT processes. (List eight key indicators) **(04)**
(b)   Identify six critical success factors that may be lacking and on account of which the performance of the internal audit department in monitoring IT related controls, may have suffered. **(06)**

Q.5 Universal Medical Store (UMS) has a countrywide chain of stores. The management is planning to upgrade their website and launch a medical services portal where pre registration would be allowed to their customers and they would be able to ask questions from renowned medical specialists. The customers data recorded at the time of registration would remain in the UMS database unless the customer decides to relinquish the registration. However, their questions and the doctor's replies would be removed from UMS server after twelve months.

Required:
(a) List the key steps which UMS should perform to ensure that it is complying with all the relevant privacy laws. **(04)**
(b) Briefly describe the basic principles which should form part of UMS's privacy policy, in the above situation. **(08)**

Q.6 TN Limited (TNL) had so far been using simple back-up procedures to safeguard its data. It has now developed a comprehensive Business Continuity Plan (BCP) under which arrangements have been made with a third party for using their processing facilities. Under the proposed agreement, the third party would provide the necessary hardware on which TNL's software will remain installed, for its use, in case of a disaster.

Required:
(a) Which issues must be covered in the above agreement, with the third party? **(06)**
(b) Briefly describe the following three types of tests which the TNL plans to carry out, soon after the agreement is finalized:
      (i)   Paper Walkthrough Test
      (ii)   Preparedness Test
      (iii)   Full Operational Test **(06)**

Q.7 King Limited (KL) has decided to engage Queen Limited (QL) for maintenance of its IT hardware, including printers, scanners, monitors, network related devices and cabling. Important clauses of the draft Service Level agreement between them, are as follows:

(i) The agreement will commence on December 13, 2009 and will be terminated automatically if not formally extended, on December 12, 2010.
(ii) KL will ensure that the equipment will be in proper mechanical and electrical condition on the commencement date. Any work involved in putting the equipment into such condition will be charged separately.
(iii) Fifty visits per annum will be made by qualified technical personnel of QL.
(iv) Emergency visits will be provided as and when required. However, emergency visits made after office hours or on holidays will be charged separately, at the rates prevailing at that time.
(v) Routine maintenance services will be carried out during normal business hours, at regular intervals.
(vi) All faulty parts and consumables will be replaced at extra cost after the approval by KL.
(vii) This agreement does not cover any work necessitated by neglect, misuse, accident or voltage fluctuation.
(viii) QL reserves the right to discontinue services under this agreement whenever it finds that sub-standard or non-genuine supplies are being used thus hampering the proper fulfillment of their responsibilities.
(ix) Payment will be made in advance, on or before the commencement date.

Required:
Review the above clauses of the draft agreement and identify the short comings thereof. **(07)**

Q.8 The management of Apollo Ltd is concerned with the increase in IT Governance issues being faced by the company. You have discussed the issue with the head of the IT department and he is of the view that he is not receiving appropriate support from other departments.

Required:
Briefly describe the following:
(a) Domains covered by IT Governance. **(05)**
(b) The extent of responsibilities of the head of IT department in respect of the above domains and what type of co-operation should be received by him, from the management and other departments of the company. **(08)**

Q.9 Challenger Limited is a leading FMCG company. It is in the process of reviewing its information technology risk management program.

Required:
In the above context, apprise the management as regards the following:
(a) Key Success Factors for an effective information technology risk management program**.** **(04)**
(b) Responsibilities of the information technology risk management function. **(05)**

Q.10 Smooth Brokerage House (SBH) has a large setup of computers connected through a well configured network. The newly appointed Network Administrator of SBH has strongly suggested deploying firewall on SBH's network. However, the IT Manager is of the view that firewalls just add expenses and do not add any value in protecting the network. He also gave some examples where networks were crashed by external intruders even in the presence of firewall.

Required:
(a) Explain why in some setups, firewalls are not as successful, as in others. **(04)**
(b) Briefly explain the following types of firewall configurations:
  (i) Bastion host
  (ii) Screened host
  (iii) Screened subnet **(09)**

(THE END)