



## Information Technology Management, Audit and Control

Final Examination  
Summer 2013  
Module E

3 June 2013  
100 marks - 3 hours  
Additional reading time - 15 minutes

Q.1 City Club (CC) is an established social and recreational centre having more than five thousand members. Besides cash/cheques, CC allows its members to pay their fee through CC's website using credit cards.

CC's management wishes to evaluate the process of collection of membership fees through its website and have appointed you as Information System Auditor. During the planning process, you have obtained the following information:

- (i) The member is required to input his name (as on the credit card), type of credit card (Visa/Master), credit card number, expiry date of card and billing address, on a Secured Socket Layer protected page at CC's website.
- (ii) The above data is stored on the CC's web server which is hosted by a third party.
- (iii) An automated email containing member's particulars in text format is generated by the web server and sent to the official email ID of CC's Assistant Manager Finance (AMF).
- (iv) The details of all emails received during the day are posted by the AMF in a single pre-formatted spread sheet. At the day end, these are sent to a designated employee of the commercial bank for the settlement of transactions.
- (v) The bank processes the transactions and sends the success and failure status of each transaction to AMF on the next working day.
- (vi) AMF sends the fee receipts to members whose transactions have been successfully processed and intimates the other members about the transaction failure.
- (vii) All computers in CC are interconnected via LAN.
- (viii) Backup of data on AMF's computer is stored on a backup file server automatically on daily basis. Only the Network Administrator is authorised to restore the data.
- (ix) The online fee payment procedure has been functioning satisfactorily for the past five years without any complaints or problems.

**Required:**

Identify *seven* control weaknesses/risks in the above system. Offer suggestions for implementing appropriate control measures to mitigate the related risks.

(14)

Q.2 Transpose Energy Limited (TEL) is a large importer and distributor of UPS, generators and solar panels. TEL has been using separate information systems for suppliers, customers, HR and Finance. These systems have been developed in-house but due to non-integration, several data items are required to be re-entered.

The CEO of TEL has recently received a proposal from Alternative Technologies (AT) for outsourcing TEL's IT function. AT proposes to implement a significantly improved and integrated information system in TEL. AT has offered to train the existing employees of TEL on the new system; however, the administrative rights of the system would remain with AT. AT's monthly billing would depend upon the number of man hours worked by their employees.

**Required:**

- (a) Identify *seven* business risks associated with AT's proposal.
- (b) Most of the risks identified in part (a) above can be covered by including appropriate clauses in the agreement with AT. What other measures can TEL take in order to mitigate the identified risk?

(07)

(04)

- Q.3 As an audit senior of a firm of chartered accountants, you are assigned to conduct an audit of Creative Insurance Company Limited (CICL). CICL places considerable reliance on its computer-based information systems for generation of operational and financial data.

CICL has formed a quality assurance (QA) department during the current year to review and monitor its information systems. In the course of your discussions with the QA Manager, you have been told that:

- (i) Due to time and resource constraints, QA plans were developed only for those information systems where:
  - the system is of material significance to the company as a whole;
  - all the stakeholders agree on the quality goals identified for that information system.
- (ii) QA plans will be developed for all the remaining information systems as soon as adequate resources are available and QA department has achieved necessary competencies.

Your review of the project documentation shows that presently 12 out of a total of 20 information systems meet the above criteria. The remaining 8 information systems include 5 financial information systems.

**Required:**

- (a) Describe the major concerns, which in your opinion, may restrict your decision to place reliance on QA function. (06)
- (b) Discuss the extent of reliance that you would place on those information systems which receive data from other information systems which do not meet the criteria of QA department. (04)

- Q.4 Superb Limited (SL) is a distributor of FMCG and is operating this business since the last fifteen years. SL's management is considering to automate the process of executing orders so that the time lag between receipt and supply of goods may be reduced. To achieve this objective, SL intends to provide smart phones with customized application to the sales force. This may enable them to immediately communicate the customers' orders to the company's system. Moreover, Area Sales Managers (ASMs) will be provided laptops with pre-installed application software of the company. This would enable ASMs to monitor the progress of their sales team at all times from any location.

**Required:**

The inter-connection of smart phones and the laptops with the company's system poses various risks. Identify any *eight* controls to mitigate such risks. (08)

- Q.5 Generalized Audit Software provides a means to gain access to and manipulate data maintained on computer storage media.

**Required:**

- (a) Briefly explain the following functional capabilities provided by the generalized audit software and in each case give two examples of how the auditor might use these functional capabilities:
  - Stratification and frequency analysis
  - Arithmetical
  - File reorganization
  - Statistical
 (10)
- (b) Discuss any **two** limitations of generalized audit software. (03)

- Q.6 Serious Solution Providers (SSP) offers various types of IT related services, e.g. data entry, data archiving, web hosting and email hosting. As SSP's IS auditor, you were satisfied with SSP's Business Continuity Plan (BCP) when it was developed in 2011. However, in June 2012, the officer responsible for the maintenance and updation of BCP had resigned and his replacement had not been able to update the BCP regularly.

**Required:**

Write a memo to SSP's management emphasizing on the following matters:

- (a) Circumstances that creates the need to update the BCP (05)
- (b) Responsibilities of the new appointee relating to the maintenance of BCP. (05)

- Q.7 Maya Textiles Limited is a growing textile company of the country. Currently, they are in the process of framing their long term strategies for the growth of the business. The company is concentrating on their manufacturing, logistics, marketing and material management strategies but there have been no plans for developing an IT strategy.

**Required:**

As the CFO of the company, write a memo to the company's CEO explaining the following:

- (a) Objective / purpose of IT strategic planning. (05)
- (b) Identify the problems which the company may face in the absence of an IT Strategy. (05)

- Q.8 You are employed in a firm of chartered accountants. This is your second year as the audit supervisor on the audit of Greet Bank Limited. The bank has made considerable progress during the year under review which includes introduction of online banking and increase in the number of branches.

This year you intend to adopt "through the computer" approach as against "around the computer" approach followed last year.

**Required:**

- (a) Justify the audit approach adopted last year and explain the reasons for the change in approach for the current year. (08)
- (b) Identify the difficulties which may arise while using "through the computer" approach. (02)

- Q.9 With the fast paced growth of Internet, e-commerce has provided new opportunities to businesses to expand their trade boundaries. It has also provided new tools to the governments to facilitate their citizens.

**Required:**

- (a) State five ways in which a business can benefit using e-commerce. (05)
- (b) List five benefits of e-commerce to consumers. (05)
- (c) Identify any four areas where government to citizen (G2C) e-commerce model may be implemented. Specify two key challenges that may be faced by a developing country while implementing G2C strategies. (04)

(THE END)