

June 05, 2003

**INFORMATION TECHNOLOGY MANAGEMENT,
AUDIT AND CONTROL
Module 'F' Paper F-21**

**(MARKS 100)
(3 hours)**

- Q.1 What is the difference between peer-to-peer networks and client/server based networks. Which offers better security and why? Where would you use a peer-to-peer network and where would you use a server-based network. (10)
- Q.2 Why should duties be segregated in an IT department? In a small organization, where segregation is not possible, what would you recommend? What is a user authorization table? Who should be responsible for transaction authorization? Who should be responsible for maintaining user authorization tables? (10)
- Q.3 ABC Ltd. is a large manufacturing Company that produces a variety of paper and board related products. It has a large network of dealers suppliers, institutional customers and export clientele. The corporate objectives of the company include production of quality goods, timely supplies and excellent relationship with all of the stakeholders. It already has a large IT department which manages an integrated network covering all the functions/departments of the company. The application software was developed in a platform which is no longer supported and the hardware deployed is considered to be too slow. The company desires an ERP solution in a modern platform. The Management convinced that an IT is Strategic Plan needs to be formulated and you as the consultant have been asked to devise the plan.
- Required:**
- Devise an IT strategic plan for ABC Ltd. (15)
- Q.4 XYZ Company has decided to implement an "off the shelf" ERP system. The system selection has already been done and the organization has decided to implement the Financial, Sales, Purchasing, Inventory Management and Production modules. The next phase is to map out the organizations processes so that the ERP can be customized to suit the organizations requirements. A new version of the ERP selected is released every 2 years. The next release is due next year and will contain the Payroll functionality required by XYZ Company and as such will therefore implement the Payroll module next year after the upgrade. The implementation consultants are performing the project management function as well and the Project Manager reports to the Project Director at XYZ Company.

The level of IT literacy is very low in the company. The drive to implement an ERP was taken by the previous CEO who left 6 months ago. The new CEO has appointed a new Project Director who is accountable for the implementation of the ERP. The new Project Director is a non-technical person but with a business management background. The scope of the project was also changed, since the previous CEO was more focused on changing the business processes to align with the system. The new strategy as

The licensing contract is still under review by the legal department at the company. They have not yet finalized the purchase of the package. The Consultants however started mapping out the processes and will perform a gap analysis with the ERP system. With this analysis they will customize the package and then commence testing. Once the ERP has been tested they will implement the system. The Project Director in a presentation to the steering committee mentioned that since the present processes are not being changed, there would be no formal training sessions required which will reduce their implementation time.

The Project Director has been given the task of implementing this system within 4 months with a tight budget. The CEO is very focused on achieving targets of time and budget and views this as critical factor for success. The Project Director has somewhat different views though. He has not discussed this with the CEO since he fears a negative reaction, but he is of the view that unless business benefits from this implementation are not realized, being on time and within budget will not offer much to XYZ Company.

- (a) Present your views on the system selection approach. (05)
- (b) If you were the Project Director, how would you proceed from here? (05)
- (c) Identify at least 5 project risks (05)
- (d) Do you agree with the Project Directors' view on being on time and within budget? Discuss your views. (05)

Q.5 The management of TECH Company is in the process of establishing an IS function as it expects to take advantage of technology to facilitate its business activities. As an initial step the Company is contemplating outsourcing its data processing and IS functions, and subsequently it intends to establish this capability in-house.

Given the sensitive nature of the services provided by the Company the main focus of management is to ensure that all security features and controls are in place. To do this, it has also contracted a consultant to advise it in the establishment of an appropriate control environment with the following important controls:

- (a) External regulatory controls
- (b) Board audit committee governance
- (c) Management philosophy and operating style
- (d) Plans / structure of organization
- (e) Method to communicate the assignment of authority and responsibility
- (f) Management control methods
- (g) Human resources policies and practices
- (h) Financial policies and practices

Management has also decided that it will utilize computerized controls to ensure that the following objectives are achieved:

- (i) Effective, efficient and economical operations
- (ii) Reliable financial reporting
- (iii) Effective control of system design
- (iv) IT asset safeguarding
- (v) Compliance with applicable laws and regulations
- (vi) System Reliability
- (vii) Data Integrity

You are an IT Consultant who has been contracted to undertake this project.

Required:

You are required to layout in a report format your advice taking into account all of the above issues explaining in particular:

- (a) What is meant by outsourcing of the IS function? (05)
- (b) What are the disadvantages and risks associated with outsourcing arrangements? (05)
- (c) The role played by (a) to (h) above in ensuring an effective Control environment for IT (08)
- (d) The control objectives as stated at (i) to (vii) above. (07)

Q.6 Ameer & Company has identified the need to implement an integrated system. The organization has decided to develop a custom solution rather than purchasing an off the shelf system. The employees of the Company are not very proficient in the use of computers and don't know much about technology. However, they do use Word and Excel for their day-to-day work. There is a lot of manual work and record keeping at Ameer & Company and information is not available centrally. The IT department is not very well managed and the IS auditors have identified a number of control weaknesses in the overall management and governance of IT. There is no overall IT strategy and plan. The IS auditors have also highlighted issues in the area of change management and overall standards of documentation. Due to the auditors report, the IT Manager is not the most favourite person in the organization. But executive management have decided to give him the challenge of getting the right system implemented at Ameer & Company.

Ameer & Company has not developed a design of the software package as yet. They have also not determined the development platform. According to the IT Manager the company will first identify the platform for development and then conduct a requirements analysis so that the system design can be developed.

Executive management have decided to appoint you as CIO. The IT Manager now reports to you.

- (a) Outline and prioritise your planned initiatives for the IT department. (05)
- (b) With regards to the implementation of the integrated system, will you proceed with the current strategy? Discuss why. (05)
- (c) What will be your approach to implementing an integrated system? (05)
- (d) How would you as CIO measure and report the performance of the IT department? (05)

(THE END)