Test Series: October 2021

MOCK TEST PAPER I FINAL (OLD) COURSE GROUP – II PAPER-6: INFORMATION SYSTEMS CONTROL AND AUDIT

Time Allowed: 3 Hours

Maximum Marks: 100 Marks

Part I: MULTIPLE CHOICE QUESTIONS

Total Marks: 30 Marks

Question No(s). 1 to 7 are based on the case scenario given below:

FJY Ltd. is a construction company dealing in the construction of various buildings, housing facilities, roads and runways' construction, buildings construction, ports, tunnels, factories and industries and other types of construction projects. The company maintains an audit trail to record all the activities of its systems. However, due to an accelerated rate of change in the technology, the risks associated with it has grown rapidly. Moreover, the information provided by existing system of the company is not helpful to make successful decision.

Therefore, the company now intends to shift to improved technology for which the company Requested for Proposals (RFPs) from various capable vendors so as to choose the suitable vendor(s) who could provide them the requisite system to fulfill the requirements that are cited below:

- Automation of information systems using autonomous machines on the construction site,
- Drones to survey working areas,
- Robotics in concrete works,
- Internet of Things (IoT) sensors to collect and process the data, and
- Procure backup facility in case of any disaster.

Following proper selection procedure, the company chose three vendors for acquiring and maintaining different desirable system components for its proposed working environment.

- 1. The company FJY Ltd. Requested for Proposals (RFPs) to contact capable suppliers and vendors to replace its current technology with the better options available. Which type of the strategy has been adopted by the company to manage the risk associated with its existing technology?
 - (a) Tolerate the risk
 - (b) Terminate the risk
 - (c) Share the risk
 - (d) Treat the risk
- 2. It has been observed that the information provided by the existing system of FJY Ltd. is not helpful to the managers successful decision-making. What do you think which attribute of information has been compromised in this case?
 - (a) Frequency
 - (b) Rate
 - (c) Reliability
 - (d) Transparency
- 3. The functioning of various Application controls that are suggested to be implemented in the proposed Information Systems of FJY Ltd. is as follows:
 - (i) Comprises the components that define, add, access, modify, and delete data in the system.

- (ii) Comprises the components that transmit data among subsystems and systems.
- (iii) Comprises the components that establish the interface between the user and the system.
- (iv) Comprises the components that retrieve and present data to users of the system.

Application controls that are mentioned above can be categorized as below:

- (A) Boundary
- (B) Database
- (C) Communication
- (D) Output

Match the Application Controls with their suitable functioning and identify the correct match.

- (a) (i) (A), (ii) (C), (iii) (B), (iv) (D)
- (b) (i) (D), (ii) (C), (iii) (B), (iv) (A)
- (c) (i) (C), (ii) (B), (iii) (D), (iv) (A)
- (d) (i) (B), (ii) (C), (iii) (A), (iv) (D)
- 4. The company FJY Ltd. enters into an agreement with two more organizations PQR and GHJ to provide backup facilities to each other in case anyone of them suffers with a disaster. Which of the following arrangement has been adopted by all these companies?
 - (a) Cold Site
 - (b) Reciprocal Agreement
 - (c) Hot Site
 - (d) Warm Site
- 5. The company FJY Ltd. considered following points for acquisition of both hardware and software except one. Identify it.
 - (a) Evaluation of users' feedback
 - (b) Geographical location of the vendor
 - (c) Financial stability of the vendor
 - (d) Users' interface design of the vendor
- 6. Referring to the case above, which of the following activity does not fall under the purview of Audit Trail?
 - (a) Detecting unauthorized access
 - (b) Evaluating audit planning and assessment
 - (c) Facilitating the reconstruction of events
 - (d) Promoting personal accountability
- 7. One of the vendors submitted the RFP to FJY Ltd. mentioning the scope of work as a Cloud Computing Service provider to provide the business services for creating, managing, and tracking its electronic records and ERP and handling unpredictable number of users and the load on its e-mail-services. Identify the service model of Cloud Computing which the vendor would provide to FJY Ltd. on the basis of scope of work mentioned in RFP.
 - (a) Software as a Service (SaaS)
 - (b) Infrastructure as a Service (laaS)
 - (c) Platform as a Service (PaaS)
 - (d) Communication as a Service (CaaS)

- 8. Below mentioned are the Sections and their titles covered under Information Technology Act, 2000.
 - (i) [Section 43] Penalty and Compensation for damage to computer, computer system, etc.
 - (ii) [Section 65] Tampering with Computer Source Documents
 - (iii) [Section 44] Residuary Penalty
 - (iv) [Section 45] Penalty for failure to furnish information return, etc.
 - (v) [Section 66] Computer Related Offences

Identify the incorrect titles.

- (a) (i), (ii), (iii)
- (b) (iii), (iv)
- (c) (iv), (v)
- (d) (ii), (v)

Question No(s). 9 to 22 carries 1 mark each.

- 9. Following are statements regarding components of Internal Controls as per COSO.
 - (i) All the components of Internal Controls are independent of each other.
 - (ii) The control activities in Internal Controls are developed to manage and mitigate the risks.
 - (iii) A control environment must include an assessment of the risks associated with each business process.

 $(8 \times 2 = 16 \text{ Marks})$

- (iv) The internal control process must be monitored quarterly to monitor the modifications made as warranted by changing conditions.
- (v) For each business process, an organization needs to develop and maintain a control environment. Identify the set of incorrect statements.
- (a) (i), (ii), (iii)
- (b) (i), (iv)
- (c) (i), (iv), (v)
- (d) (ii), (iv)
- 10. Which of the following statement is true about Executive Decision-making environment?
 - (a) Executives work in a decision space that is often characterized by lack of precedent.
 - (b) Executives rely heavily in formal source for key information than on their own intuition.
 - (c) Executive decisions are made by observing minutest tends of the business.
 - (d) Decisions made by executives are clear and structured.
- 11. The three attributes of Information System Security Policy are given below:
 - (i) Confidentiality
 - (ii) Integrity
 - (iii) Availability
 - The explanation of these attributes is provided below:
 - (A) Prevention of the unauthorized withholding of information.
 - (B) Prevention of the unauthorized modification of information.
 - (C) Prevention of the unauthorized disclosure of information.

Match the attribute with correct explanation and choose the correct statement:

- (a) (i) (A), (ii) (B), (iii) (C)
- (b) (i) (B), (ii) (A), (iii) (C)
- (c) (i) (C), (ii) (B), (iii) (A)
- (d) (i) (C), (ii) (A), (iii) (B)
- 12. In case of development of Business Continuity Plan (BCP), the objectives of performing BCP Tests are to ensure the following except one:
 - (a) The success or failure of the business continuity training program is monitored.
 - (b) The recovery procedures are complete and workable.
 - (c) Determine the maintenance regime to ensure the plan remains up-to-date.
 - (d) The competence of personnel in their performance of recovery procedures can be evaluated.
- 13. Identify the incorrect statement regarding CASE Tools.
 - (a) The four parts of the Decision Table are Condition stub, Action stub, Condition entries and Action entries.
 - (b) Structured English is the use of Binary language consisting of 0's and 1's with the syntax of structured programming.
 - (c) Data Flow Diagram has four basic elements called as Data Sources and Destinations, Data Flows, Transformation processes, and Data Stores.
 - (d) Flowchart is a type of chart that represents an algorithm of processes showing the steps as boxes of various kinds.
- 14. An auditor may face extreme difficulty in gathering sufficient and appropriate audit evidence in the absence of audit trail. Which of the following issue does not affect the performance of evidence collection and understanding the reliability of controls?
 - (a) Lack of availability of printed output.
 - (b) Absence of input documents.
 - (c) Non-existence of Audit Trail.
 - (d) Maintenance of privacy.
- 15. Which section of Information Technology Act, 2000 deals with the punishment in case an offender publishes or transmits any material depicting children in a sexually explicit Act in electronic form?
 - (a) Section 67A
 - (b) Section 67B
 - (c) Section 67C
 - (d) Section 67D
- 16. Below mentioned are some exemplifications of threats of BYOD (Bring Your own Device).
 - (i) Lack of device visibility
 - (ii) Weak BYOD Policy
 - (iii) Loss of devices
 - (iv) Application viruses and malware

The risks that occur under BYOD are as follows:

(A) Application Risks

- (B) Network Risks
- (C) Device Risks
- (D) Implementation Risks

Match the exemplifications with related risks and choose the correct set:

- (a) (i) (A), (ii) (B), (iii) (C), (iv) (D)
- (b) (i) (D), (ii) (C), (iii) (A), (iv) (B)
- (c) (i) (D), (ii) (A), (iii) (B), (iv) (C)
- (d) (i) (B), (ii) (D), (iii) (C), (iv) (A)
- 17. Which of the following is not an enabler of Information Systems Strategic Plan?
 - (a) Timely feasibility studies and reality checks
 - (b) Definition of how IT supports the business objectives.
 - (c) Enterprise business strategy.
 - (d) Information Systems Requirements Plan.
- 18. Which attribute does not hold true for Explicit Knowledge?
 - (a) Formalized
 - (b) Articulated
 - (c) Written
 - (d) Experimental
- 19. Below mentioned are some examples that need to be categorized under Preventive, Detective and Corrective controls.
 - (i) Authorization of Transactions
 - (ii) Cash Counts
 - (iii) Backup Procedure
 - (iv) Vaccination against Disease
 - (v) Duplicate checking of calculations
 - (vi) Intrusion Detection Systems
 - (vii) Passwords
 - The controls into which they can be categorized are as follows:
 - (A) Preventive
 - (B) Detective
 - (C) Corrective

Choose the correct match:

- (a) (i) -(A), (ii) -(B), (iii) -(C), (iv) -(C), (v) -(A), (vi) -(B), (vii) -(B)
- (b) (i) -(A), (ii) -(B), (iii) -(C), (iv) -(A), (v) -(B), (vi) -(B), (vii) -(A)
- (c) (i) -(A), (ii) -(B), (iii) -(C), (iv) -(A), (v) -(B), (vi) -(C), (vii) -(A)
- (d) (i) -(A), (ii) -(C), (iii) -(C), (iv) -(C), (v) -(B), (vi) -(A), (vii) -(A)

- 20. Below mentioned statements belong to Backup options that may be used by an enterprise.
 - (i) It is most expensive to maintain.
 - (ii) It is an intermediate level of backup.
 - (iii) It has all cold-site facilities in addition to the hardware that might be difficult to obtain or install.
 - (iv) Its most appropriate in case the fast recovery is critical for an organization.
 - (v) Its most appropriate in case an organization can tolerate some downtime.

The backup options are listed below:

- (A) Cold Site
- (B) Hot Site
- (C) Warm Site

Choose the correct match:

- (a) (i) (A), (ii) (B), (iii) (C), (iv) (A), (v) (B)
- (b) (i) (A), (ii) (B), (iii) (C), (iv) (A), (v) (B)
- (c) (i) (B), (ii) (C), (iii) (C), (iv) (B), (v) (A)
- (d) (i) (A), (ii) (B), (iii) (C), (iv) (A), (v) (B)
- 21. During SDLC, the preliminary investigation phase involves Identification of problem, Identification of objectives, Delineation of scope and Feasibility Study. Which of the following factor does not fall under the purview of this phase?
 - (a) Determine whether the vendor product offers a solution to the problem or not.
 - (b) Determine whether the solution is as per the business strategy or not.
 - (c) Determine whether the existing system can rectify the situation without a major modification or not.
 - (d) Determine whether the users have been involved in the planning and development of the project or not.
- 22. In the year 2018, the company MOL Ltd. dealing with data processing services, had only 10 Personal Computers (PCs) in its office. Considering its expansion plan, the company approached Amazon Web Services in the year 2019 to create a virtual network on pay-per-use basis. Which Cloud Computing Service Model was used by MOL Ltd. in this case?
 - (a) Software as a Service (SaaS)
 - (b) Platform as a Service (PaaS)
 - (c) Infrastructure as a Service (laaS)
 - (d) Network as a Service (NaaS)

Part II: DESCRIPTIVE QUESTIONS

Total Marks: 70 Marks

 $(14 \times 1 = 14 \text{ Marks})$

Question No. 1 is compulsory.

Attempt any four questions out of remaining five questions.

1. (a) Risk management allows organizations to attempt to prepare for the unexpected by minimizing risks and extra costs before they happen. Discuss various key management practices that may be adopted by an organization for risk management. (6 Marks)

- (b) Environmental exposures are primarily related to elements of nature like earthquake, volcano, fire, flood etc. Discuss some controls that may be adopted for controlling the damage that may be caused to an organization through environmental exposure - fire. (5 Marks)
- (c) Discuss the skill set that is generally required by an Information Systems Auditor. (3 Marks)
- (a) Risks that affect a system and are taken into consideration at the time of assessment can be 2. classified into various categories. Discuss them. (6 Marks)
 - (b) Data backup is defined as the practice of copying data from a primary location to a secondary location, to protect it in case of a disaster, accident, or malicious action. This objective can be achieved through various mechanisms out of which Differential Backup is one of them. Explain the concept while discussing its advantages and disadvantages also. (5 Marks)
 - (c) In spite of the controls at place in an organization, there could be a possibility that they might fail. When the disaster strikes, it still must be possible to recover operations and mitigate losses using the last Resort Controls named Disaster Recovery Plan and Insurance. Discuss these in detail.

(3 Marks)

- 3. Many Decision Support Systems (DSS) are developed in-house using either a general type of (a) decision support program or a spreadsheet program to solve specific problems. Elaborate some illustrations of these systems. (6 Marks)
 - (b) Different audit organizations follow different ways to conduct audit. However, their working is majorly categorized into six steps. Discuss these steps that are involved in the process of Information Systems Audit. (5 Marks)
 - (c) Discuss the major objectives of National Cyber Security Policy, 2013 published by Government of India. (3 Marks)
- 4. (a) As Bring Your Own Device (BYOD) is a business policy adopted by many organizations that allows its employees to use their preferred computing devices for business purposes, there are major security concerns associated with it. Discuss major risks associated with BYOD. (6 Marks)
 - (b) Write a short note on Information Technology General Controls (ITGC). (5 Marks)
 - (c) Majorly organizations maintain a documented description of actions that are to be followed before, during and after a disruption. Identify the document and elaborate it further. (3 Marks)
- (a) Discuss [Section 7] of Information Technology Act, 2000. 5. (6 Marks)
 - Auditors using the System Control Audit Review File (SCARF) technique to collect information (b) which gets written onto a special audit file called the SCARF Master file. What type of the information is collected using this technique? (5 Marks)
 - (c) Discuss the role of following positions that are involved in System Development Life Cycle (SDLC).
 - (i) Database Administrator (DBA)
 - Information Systems (IS) Auditor (ii)
 - (iii) Project Leader
- (a) During Systems Requirements Analysis phase of System Development Life Cycle (SDLC), the 6. detailed analysis of the present system involves collecting, organizing, and evaluating facts about the system and the environment in which it operates. Discuss the areas that should be studied in depth during this step. (6 Marks)
 - (b) The key principles of COBIT 5 when taken together enable an enterprise to build an effective governance and management framework in its working environment. Discuss these principles in detail. (5 Marks)
 - (c) Cloud Computing is an emerging technology widely used nowadays because of its important characteristics. Discuss them. (3 Marks) 7

(3 Marks)