SUGGESTED SOLUTION

CA FINAL NOVEMBER 2016 EXAM

ISCA

Test Code - F N J 6 0 4 6

BRANCH - (MUMBAI) (Date : 07.08.2016)

Answer-1 (a) :

The preliminary review of audit environment enables the auditor to gain understanding of the business, technology and control environment and also gain clarity on the objectives of the audit and scope of audit.

(1 Mark)

Knowledge of the Business: In this phase the auditor gains knowledge on the following factors

1. General economic factors and industry conditions affecting the entity's business **(0.5 Mark)**
2. Nature of Business, its products & services, **(0.5 Mark)**
3. General exposure to business **(0.5 Mark)**
4. Its clientele, vendors and most importantly, strategic business partners/associates to whom critical processes have been outsourced **(0.5 Mark)**
5. Level of competence of the Top management and IT Management, and **(0.5 Mark)**
6. Finally, Set up and organization of IT department **(0.5 Mark)**

Answer-1 (b) :

This maintains the chronology of events from the time data and instructions are captured and entered into an application system until the time they are deemed valid and passed onto other subsystems within the application system. **(1.5 Marks)**

Accounting Audit Trail

1. The identity of the person(organization) who was the source of the data; **(0.5 Mark)**
2. The identity of the person(organization) who entered the data into the system **(0.5 Mark)**
3. The time and date when the data was captured; **(0.5 Mark)**
4. The identifier of the physical device used to enter the data into the system; **(0.5 Mark)**
5. The account or record to be updated by the transaction; **(0.5 Mark)**
6. The standing data to be updated by the transaction **(0.5 Mark)**
7. The details of the transaction; and **(0.5 Mark)**
8. The number of the physical or logical batch to which the transaction belongs. **(0.5 Mark)**

Operations Audit Trail

1. Time to key in a source document or an instrument at a terminal; **(0.5 Mark)**
2. Number of read errors made by an optical scanning device **(0.5 Mark)**
3. Number of keying errors identified during verification; **(0.5 Mark)**
4. Frequency with which an instruction in a command language is used; and **(0.5 Mark)**
5. Time taken to invoke an instruction using a light pen versus a mouse **(0.5 Mark)**

Answer-2 (a) :

Section 6 provides for use of electronic records in government and its agencies even though the original law requiring these documents did not provide for electronic forms. It allows use of electronic form for:

(1 Mark)

1. filing any form, application or other documents; **(0.5 Mark)**
2. creation, retention or preservation of records, issue or grant of any license or permit; **(0.5 Mark)**
3. receipt or payment of money in Government offices. **(0.5 Mark)**

The appropriate Government has the power to prescribe the manner and format of the electronic records.

(0.5 Mark)

Answer-2 (b) :

(1) The provisions of IT Act, for the time being in force, shall apply to, or in relation to, electronic cheques and the truncated cheques subject to such modifications and amendments as may be necessary for carrying out the purposes of the Negotiable Instruments Act, 1881 (26 of 1881) by the Central Government, in consultation with the Reserve Bank of India, by notification in the Official Gazette.

(2 Marks)

(2) Every notification made by the Central Government under subsection (1) shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both houses agree in making any modification in the notification or both houses agree

that the notification should not be made, the notification shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that notification. **(2 Marks)**

Answer-3 (a) :

There are various requirements relating to legal, privacy and data security laws that need to be studied in Cloud system. One of the major troubles with laws is that they vary from place to place, and users have no assurance of where the data is located physically. There is a need to understand various types of laws and regulations that impose security and privacy duties on the organization and potentially impact Cloud computing initiatives such as demanding privacy, data location and security controls, records management, and E-discovery requirements. An approach to monitor and compliance that helps to prepare Cloud Service Provider (CSP) and users to address emerging requirements and the evolution of Cloud models. **(2 Marks)**

To achieve efficiency, risk management, and compliance; CSPs need to implement an internal control monitoring function coupled with external audit process. To increase the comfort of Cloud activities, Cloud user define control requirements, internal control monitoring processes, examine applicable external audit reports, and accomplish their responsibilities as CSP users. It is the responsibility of the cloud suppliers that they are protecting the data and supplying to the customer in a very secure and legal way. **(2 Marks)**

Answer-3 (b) :

Characteristics of SaaS are as follows:
1. **One to Many:** SaaS services are delivered as one-to-many models where a single instance of the application can be shared by multiple customers **(1 Mark)**
2. **Web Access:** SaaS services allow the end users to access the application from any location of the device is connected to the Internet **(0.5 Mark)**
3. **Centralized Management:** Since SaaS services are hosted and managed from the central location, the SaaS providers perform the automatic updates to ensure that each customer is accessing the most recent version of the application without any user-side updates **(1 Mark)**
4. **Multi-device Support:** SaaS services can be accessed from any end user devices such as desktops, laptops, tablets, smartphones, and thin clients. **(1 Mark)**
5. **Better Scalability:** Most of the SaaS services leverage PaaS and IaaS for its development and deployment and ensure a better scalability than traditional software **(1 Mark)**
6. **High Availability:** SaaS services ensure 99.99% availability of user data as proper backup and recovery mechanisms are implemented **(0.5 Mark)**
7. **API Integration:** SaaS services have the capability of integrating with other software or service through standard APIs. **(1 Mark)**

Answer-4 (a) :

Grid computing requires use of software that can divide and carve out pieces of a program as one large system image to several thousand computers. Large system images and associated hardware to operate & maintain them can contribute to large capital & operating expenses.

Concerns related to grid are that if one piece of the software on a node fails other pieces on other nodes may also fail. This is alleviated if that component has a failover component on another node. However problems can still arise if components rely on other pieces of software to accomplish one or more grid computing tasks.

Cloud computing has evolved from grid computing and provides on-demand resource provisioning.

(1 Mark)

The pertinent similarities and differences are as follows:
• **Scalability:** Cloud computing and grid computing both are scalable. Scalability is accomplished through load balancing of application instances running separately on a variety of operating systems and connected through web services. CPU availability, network bandwidth and system capacity goes up and down depending upon number of users, instances, amount of data being transferred, etc

(1 Mark)

- **Multi-tasking:** Both computing types involve multi tenancy and multitasking. Many customers can perform different tasks by accessing single or multiple application instances. Sharing resources among a large pool of users assists in reducing infrastructure costs and peak load capacity.

(1 Mark)

- **Storage:** Storage computing in the grid is well suited for data-intensive storage but is not economical for storing objects as small as 1 byte. In a data grid, the amounts of distributed data must be large for maximum benefit. While in cloud computing, we can store an object as low as 1 byte and as large as 5 GB or even several TB.

(1 Mark)

- **Focus:** A computational grid focuses on computationally intensive operations, while cloud computing offers two types of instances: standard and high-CPU.   **(1 Mark)**

Answer-4 (b) :

Major categories of Social Networks are given below:
- **Social contact networks:** Formed to keep in touch with friends and family. These have become most popular today. Eg: Facebook & Twitter
- **Study Circles:** These are dedicated for students having areas for study topics, placement related queries, advanced research, etc. Eg: College tonight
- **Networks for Socialist groups:** Specifically designed for core field workers like doctors, scientists, engineers, etc. Eg: LinkedIn
- **Network for Fine Arts:** These are dedicated for people linked with music, painting and related arts.

(3 Marks)

- **Police and Military Networks:** These networks, though not in public domain, operate much like social networks on a private domain due to confidentiality of information.
- **Sporting Networks:** Dedicated to people of Sporting fraternity and have information related to this field
- **Mixed networks:** These are networks which have subscription of people from all above groups and are heterogeneous networks serving multiple types of social collaboration.
- **Networks for inventors:** These are networks for people who have invented concept of social networks. Eg: Technical forums and Mashups
- **Shopping and utility networks:** These are networks which analyse social behaviours and send related information to respective marts and stores.   **(3 Marks)**

Answer-5 (a) :

Information Systems Audit: It is the process of collecting and evaluating evidence to determine whether an information system safeguards assets, maintains data integrity and achieves organizational goals effectively and efficiently.   **(2 Marks)**

IS Audit has broadly two objectives:
- attesting objectives (those of the external auditor) that focus on asset safeguarding and data integrity
- management objectives (those of the internal auditor) that include effectiveness and efficiency both
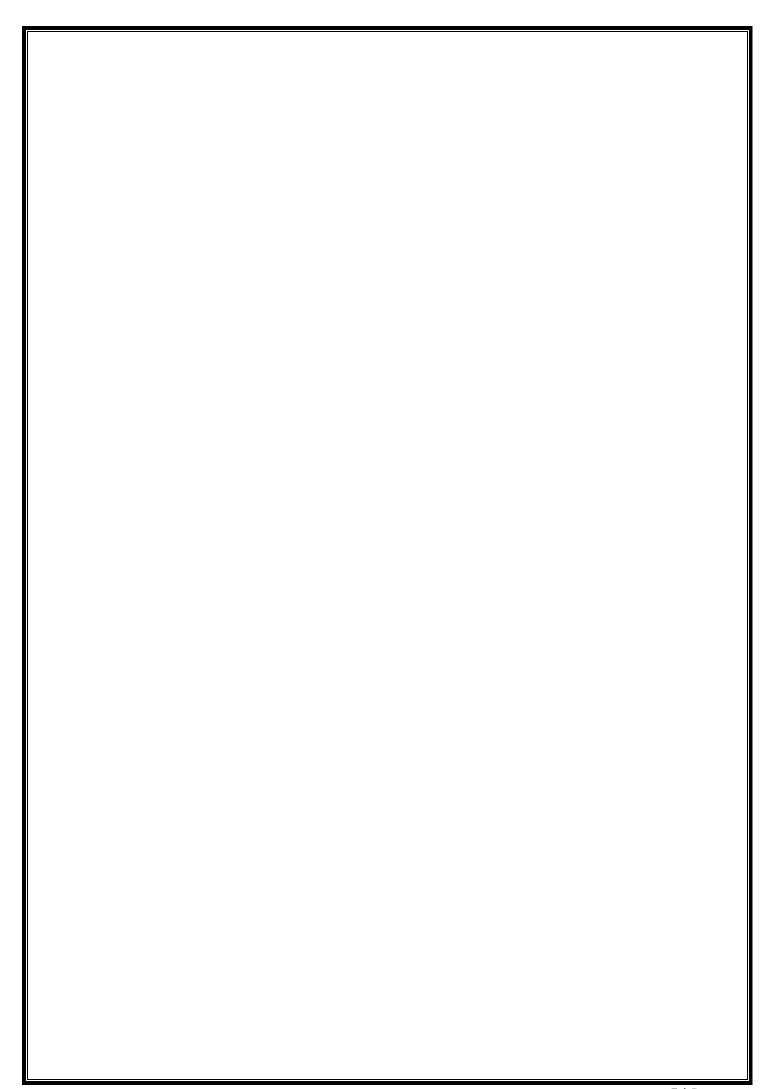
(2 Marks)

These are detailed as below:

Asset Safeguarding Objectives: The information system assets (hardware, software, data information etc.) must be protected by a system of internal controls from unauthorised access.

Data Integrity Objectives: It is a fundamental attribute of IS Auditing. The importance to maintain integrity of data of an organisation requires all the time. It is also important from the business perspective of the decision maker, competition and the market environment.

System Effectiveness Objectives: Effectiveness of a system is evaluated by auditing the characteristics and objective of the system to meet business and user requirements.

System Efficiency Objectives: To optimize the use of various information system resources (machine time, peripherals, system software and labour) along with the impact on its computing environment.   **(2 Marks)**

Answer-5 (b) :

1. The Systems Audit Reports and Compliance Status should be placed before the Governing Board of the Stock Exchanges/Depositories and the system audit report along with comments of Stock Exchanges / Depositories should be communicated to SEBI. **(2 Marks)**

2. The Audit report should have explicit coverage of each Major Area mentioned in the TOR, indicating any Nonconformity (NCs) or Observations (or lack of it). For each section, auditors should also provide qualitative input about ways to improve the process, based upon the best practices observed.

(2 Marks)