

## Information Systems Control and Audit - Ch 6

| NO. | QUESTIONS                             | MNEMONICS                                                                        | ANSWERS                                                                                                                                                                                            |
|-----|---------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Need for Audit of Information Systems | COST - 4                                                                         | Organizational <u>costs</u> of data loss<br><u>Cost</u> of computer abuse<br>High <u>costs</u> of computer error<br><u>Costs</u> of incorrect decision making                                      |
|     |                                       |                                                                                  | Maintenance of privacy<br>Value of hardware, software personnel<br>Controlled evolution of computer use                                                                                            |
| 2   | Objectives of IS Audit                | DAS                                                                              | <u>Data Integrity</u> Objectives<br><u>Asset Safeguarding</u> Objectives<br><u>System Effectiveness</u> Objectives<br><u>System Efficiency</u> Objectives                                          |
| 3   | Effect of Computers on Internal Audit |                                                                                  | (i) Changes to Evidence Collection<br>(ii) Changes to Evidence Evaluation                                                                                                                          |
| 4   | Changes to Evidence Collection        | AND ALL                                                                          | Absence of input documents<br>Non-availability of audit trail<br>Data retention and storage                                                                                                        |
|     |                                       |                                                                                  | Audit evidence<br>Lack of availability of output<br>Legal issues                                                                                                                                   |
| 5   | Changes to Evidence Evaluation        | SAS                                                                              | System generated transactions<br>Automated transaction processing<br>Systemic Error                                                                                                                |
| 6   | Functions of IS Auditor               | IS Auditors review risks relating to IT systems and processes; some of them are: | Inadequate information <u>security controls</u><br>Inefficient use of <u>resources, or poor governance</u><br>Ineffective <u>IT strategies, policies and practices</u><br>IT-related <u>frauds</u> |
| 7   | Categories ( TYPES ) of IS Audits : 5 | MIS                                                                              | Management of IT and Enterprise Architecture<br>Information Processing Facilities<br>Intranets, Extranets & Telecommunications<br>Systems and Application<br>Systems Development                   |
| 8   | Steps in IS Audit                     |                                                                                  | Scoping and pre-audit survey<br>Planning and preparation<br>Fieldwork<br>Analysis<br>Reporting<br>Closure                                                                                          |
| 9   | Audit Standards and Best Practices    |                                                                                  | IS auditing standards<br>IS auditing guidelines<br>IS auditing procedures<br>COBIT<br>ISO 27001<br>Internal Audit Standards<br>Standards on Internal Audit                                         |

## Information Systems Control and Audit - Ch 6

|    |                      |               |                                                                                                                                                        |
|----|----------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | Types of Audit Tools | SISCA<br>(UB) | Snapshots<br>Integrated Test Facility (ITF)<br>System Control Audit Review File (SCARF)<br>Continuous and Intermittent Simulation (CIS)<br>Audit Hooks |
|----|----------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                    |                                                                        |                                                                                                                                                                                                                                                                                                     |
|----|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 | Types of Info - SCARF                                                                              | SAP                                                                    | Snapshots and Extended Records<br>System Exception<br>Statistical Sample<br>Application System Errors<br>Policy and Procedural Variances<br>Performance Measurement ( of an application system )<br>Profiling Data ( Profiles of system users )                                                     |
| 12 | Advantages of continuous audit techniques ( CAT )                                                  | SIT                                                                    | Surprise test capability<br>Information to system staff on meeting of objectives<br>Timely, Comprehensive and Detailed Auditing<br>Training for new users                                                                                                                                           |
| 13 | Limitations of continuous audit techniques ( CAT )                                                 |                                                                        | Auditors are involved in the development work<br>Auditors need the knowledge and experience<br>Auditors should be able to obtain resources required<br>Audit trail is less visible<br>Application system that is relatively stable                                                                  |
| 14 | Audit Trail Objectives                                                                             | DRP                                                                    | Detecting unauthorized access to the system<br>Reconstruction of events<br>Promoting personal accountability                                                                                                                                                                                        |
| 15 | Application Controls and their Audit Trail<br><br><br><br><br><br><br><br><br><br>Audit Trails : 2 | IPO BCD                                                                | Input Controls<br>Processing Controls<br>Output Controls<br>Boundary Controls<br>Communication Controls<br>Database Controls<br><br>A/c ing<br>Operational                                                                                                                                          |
| 16 | Managerial Controls and their Audit Trails                                                         | STOPS DQ                                                               | System Development<br>Top Management and IS<br>Operations<br>Programming<br>Security<br>Data Resource<br>Quality Assurance                                                                                                                                                                          |
| 17 | Understanding of the technology env. ( How to unders. Tech. Env. )                                 |                                                                        | Studying IT policies, standards, guidelines & procedures<br>Studying network diagrams<br>Analysis of business processes<br>Assessing the extent of dependence on IT<br>Knowledge of various technologies<br>Understanding technology architecture<br>Understanding extended enterprise architecture |
| 18 | KEY STEPS : Risk-based approach to make an audit plan                                              |                                                                        | Inventory (Make list of) the IS in use<br>Determine which of the systems impact CBO<br>Assess what risks affect these systems<br>Decide the audit priority, resources, schedule and frequency                                                                                                       |
| 19 | Application Security Audit - 3 Layers                                                              | Operational Layer<br><br><br>Tactical Layer<br><br><br>Strategic Layer | User Accounts & Access Rights<br>Password Control<br>Segregation of duties<br><br>Timely updates to user profiles<br>Audit Logging & Monitoring<br>IT Risk Mgt<br>Interface Security                                                                                                                |



