

Questions from Past Years

Management Information and Control Systems

CA Final [Old Scheme]

1. *Explain the concept of decomposition with the help of an example.*
2. *Define the term system stress and system change.*
3. *System analysts develop various categories of information systems to meet a variety of business needs. Discuss any three such systems briefly.*
4. *Differentiate between open and closed systems.*
5. *Write short notes on the following:*
 (a) *Closed and open systems*

1. *What is Transaction Processing Cycle? Discuss briefly four common cycles of a business activity.*

1. *State and explain any five characteristics of a good Management Information System.*
2. *Explain the concept of MIS in terms of its three elements.*
3. *Discuss the potential impact of computers and MIS on different levels of management.*
4. *Discuss the three approaches of MIS development.*
5. *Discuss the various factors on which the information requirements of executives depend.*
6. *Explain three broad categories of the planning information requirements of executives.*
7. *Discuss various constraints that come in the way of operating an effective M.I.S. How these constraints could be avoided?*
8. *Differentiate among Strategic, Tactical and Operational categories of Information required for different levels of Managerial decision-making.*
9. *Discuss the effect of applying computer technology to Management Information System.*
10. *Describe briefly three levels of Management.*

11. *Mention at least two pieces of information-one internal and one external-required at every one of the levels of Management.*
12. *Describe the main pre-requisites of a Management Information System, which makes it an effective tool.*
13. *Discuss the limitations of the Management Information system.*
14. *What do you mean by Information? Describe the important characteristics of information, which makes it useful to the organization.*
15. *State the factors to be considered for designing an effective Management Information System.*
16. *Describe the main prerequisites of a MIS which makes it an effective tool. Explain the major constraints in operating it XYZ company engaged in manufacturing and installing power plant equipments has installed a new MIS and you have been requested to evaluate its effectiveness. On what parameters would you evaluate the MIS system?*

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SYSTEMS APPROACH AND DECISION MAKING

1. *Discuss various benefits which are attained by implementing a computerized model for making decision.*
2. *Explain the role played by Financial Information System in making financial decisions.*
3. *Define personnel information system. List its various basic sub-systems and explain them in detail.*
4. *What are the production information requirements of a GM (Production and Operations Management) with regard to production planning and control?*
5. *What are the variables that the top management should consider during negotiations with the labour unions?*
6. *Write short notes on the following:*
 - (a) *Materials Requirement Planning (MRP)*
 - (b) *Strategic and Tactical Decisions.*
7. *A Company is planning to introduce a new range of products. The top management is advised to get developed a marketing information system which can enhance the decisional capacities in various marketing activities. You being in-charge of this project suggest what information sub-systems are required to be developed.*
8. *How system approach can be used for solving problems?*
9. *"Information is necessary to executive for performing the function of planning". Substantiate the above statement with regard to information requirements of a marketing system.*

10. Enumerate various information which is required for sales support and sales analysis.
11. Write short notes on Programmed decisions
12. What is Financial decision making? Which Financial decisions are made with the help of Financial information system?

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DECISION SUPPORT AND EXECUTIVE INFORMATION SYSTEMS

1. In what ways does an Executive Information System differ from the Traditional Information System?
2. Successful executives take decisions relying more on intuition than on any quantitative analytical decision technique. Mention five characteristics of the types of information that are responsible for this phenomenon in executive decision-making
3. Write short notes on the following:
 - (a) Decision Support System
 - (b) Executive Information System (EIS)
 - (c) Expert systems
4. "A decision support system supports the human decision-making process rather than providing a means to replace it". Justify the above statement by stating the characteristics of decision support system.
5. What is an Executive Information system? Discuss its various purposes.
6. Describe various software tools used in Decision support system.
7. "Decision support systems are widely used as part of an Organisation's Accounting Information system". Give examples to support this statement.
8. Discuss any five benefits which are attained by implementing a computerised model for making decision.
9. Briefly explain the principles to guide the design of measures and indicators to be included in EIS.
10. Briefly discuss four basic components of Decision Support System.

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ENABLING TECHNOLOGIES

1. Explain the major categories of risks involved in transition from the mainframe computers to client servers?
2. What is client/server? Describe the various characteristics that reflect the features of a client/server system.

3. *Describe the various components of Client-Server Architecture*
4. *What is client-server technology? Enumerate any six of its benefits.*
5. *Define a 2-tier and a 3-tier architecture.*
6. *Write short note on client-server model.*
7. *Write short note on Server-centric model.*
8. *Briefly explain the risks associated with client / server model.*
9. *What control techniques can be utilized for increasing security in a client-server model?*

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SYSTEM DEVELOPMENT PROCESS

1. *State and explain any five approaches to System Development.*
2. *Discuss in detail, how the analysis of present system is made by the system analyst.*
3. *A Company is offering a wide range of products and services to its customers. It relies heavily on its existing information system to provide up to date information. The company wishes to enhance its existing system. You being an information system auditor, suggest how the investigation of the present information system should be conducted so that it can be further improved upon.*
4. *What do you understand by "Requirement analysis"? What is the significance of analysing the present system and how is it carried out? Explain briefly.*
5. *What are the facts finding techniques used by a system analyst?*
6. *Answer the following*
 - (a) *Explain prototyping approaches to systems development.*
 - (b) *What are the advantages of prototyping approaches?*
7. *If you are the Project Manager of a Software Company with the responsibility for developing a break-through product, combining state of the art hardware and software, will you opt for prototyping as a process model for a product meant for the intensely competitive entertainment market?*
8. *Describe briefly four categories of the major tools that are used for system development.*
9. *Bring out the reasons as to why the organizations fail to achieve their Systems Development Objectives?*
10. *Write short notes on the following:*
 - (a) *Data Dictionary*
 - (b) *System Development Life Cycle*
11. *Describe any five functional areas of a system which needs to be analysed by system analyst for detailed investigation of the present system.*

12. *What are the various tangible and intangible benefits that can result from the development of a computerised system?*
13. *Write short note on top down approach of system development.*
14. *What are the project management items associated with an I.T. project system failures? Give the elements to be included in the adopted framework to avoid such failures.*
15. *Various software packages serve as aids in analysis of program logic. Explain briefly.*
16. *What is prototyping approaches to systems development? Describe its advantages and disadvantages also.*
17. *Write short notes on the following:*
 - (a) *End user development approach in system development*
 - (b) *Program documentation*
18. *State main objectives of system development tools. Briefly describe the major categories of documentation tools that are used for system development with any one simple illustrative example for each.*

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SYSTEMS DESIGN

1. *Discuss with examples, the commonly used coding schemes for data processing.*
2. *Explain in detail, the guidelines that should be observed for “form design”.*
3. *What are the major factors to be considered in designing User inputs? Explain.*
4. *What are the six important factors which should be considered while designing the user outputs?*
5. *What are the factors considered to design the ideal layout of a printed output?*
6. *Discuss the desired characteristics of a good coding system.*
7. *What is system manual? What information is included in it?*
8. *State the standards that should be followed while designing graphical output.*

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SYSTEM'S ACQUISITION, SOFTWARE DEVELOPMENT AND TESTING

1. *What factors should be considered while selecting a computer system ?*
2. *Discuss various testing procedures to be adopted by the programmer in order to make the program error-free.*

3. *Explain briefly the stages through which the program has to pass during its development.*
4. *What is an application software?*
5. *Discuss the factors upon which “Make or Buy” decision of an application software depends.*
6. *Before purchasing the packaged software, on what features the software will be assessed?*
7. *Describe any five program design tools.*
8. *List the various sources of acquiring the software. Discuss four most compelling advantages of using a pre-written application package*
9. *Write short-notes on the following:*
 - (a) *Bench Marking Problem for Vendor’s Proposals.*
 - (b) *System Testing*
 - (c) *Point-Scoring Analysis in Vendor Evaluation.*
10. *What is Vendor evaluation? Define the process for the same.*
11. *Briefly discuss about various factors which should be considered for evaluating the vendor proposal for supply of computer system.*
12. *Write short note on sources of packaged software.*
13. *Describe various steps that should be taken for successful installation of the equipment during the implementation phase.*
14. *What factors should be considered while selecting a computer system?*
15. *Discuss in brief salient features of consideration while selecting a computer system. Also suggest contents in a point scoring table for evaluation of a ready to use software.*
16. *State and briefly explain the various stages of developing an in-house program.*

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SYSTEMS IMPLEMENTATION AND MAINTENANCE

1. *Explain different conversion strategies used for conversion from manual to computerised system. Enumerate the advantages and disadvantages of each strategy.*
2. *Discuss briefly, various activities that are involved for successful conversion of an existing manual system to a computerized information system.*
3. *Why is personnel training important for the successful implementation of information system? What type of training should be imparted to (i) systems operator and (ii) users?*
4. *“The final step of the system implementation is its evaluation.” What functions are being served by the system evaluation? Discuss development,*

operation and information evaluations.

5. *Write a short note on System maintenance.*
6. *Describe various strategies for change over from manual system to computerised system.*
7. *Define and differentiate between 'Scheduled maintenance' and 'Rescue maintenance' along with their respective benefits.*

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DESIGN OF COMPUTERISED COMMERCIAL APPLICATIONS

1. *Briefly explain Share Accounting System.*
2. *Explain inputs, processes and outputs of any three subsystems of an Accounting Information System.*
3. *For an online real time sales order processing system, draw a system flow chart and explain the following:*
 - (i) *Transactions*
 - (ii) *Files*
 - (iii) *Processing*
 - (iv) *Output reports and documents*
4. *Draw a system flow chart for a Production Scheduling system.*
5. *What systems interfaces are involved in Production Planning?*
6. *Draw a payroll flow chart explaining the processes involved.*
7. *For a material inventory control system, draw the system flowchart and explain the following:*
 - (i) *System interfaces*
 - (ii) *Files and inputs*
 - (iii) *Reports.*
8. *What do you understand by ON-LINE, REAL-TIME SYSTEMS ?*
9. *What do you mean by Production scheduling? Draw the information flow diagram for design of computerized production scheduling system. Also explain:*
 - (i) *System interface*
 - (ii) *File inputs and*
 - (iii) *Reports required for the above system.*
10. *Describe the sequence of events which occur immediately for each transaction when controlled by the sales order entry computer programs in an OLRT system.*
11. *What is work-in-process control system? Describe briefly the system interfaces, files and inputs, and reports involved in this system.*

12. *What is Payroll accounting? Describe in brief the inputs and master file, output and system flow diagram required for it.*

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ENTERPRISE RESOURCE PLANNING : REDESIGNING BUSINESS

1. *What is an ERP system? Bring out the major challenges involved in its implementation.*
2. *Explain the process of evaluation of various ERP packages.*
3. *Write down the general guidelines which are to be followed before starting the implementation of an ERP package.*
4. *Write a detailed note on the expectations, fears and the ground realities that a corporate management faces during the post-implementation phase of ERP.*
5. *Write short notes on the following:*
 - (a) *Benefits of Enterprise Resource Planning*
 - (b) *Business Process Reengineering (BPR).*
6. *What are the characteristics and features of an ERP? List any five ERP Vendors and briefly describe the ERP packages offered by them.*
7. *Write short notes on Business Engineering.*
8. *Write short note on Enterprise Controlling.*
9. *How will you establish and implement Critical Success Factors (CSFs) and Key Performance Indicators (KPIs) in an organization for achieving the benefits of implementation of ERP?*
10. *What is Enterprise Resource Planning? Briefly describe its benefits.*
11. *Discuss the functions and facilities provided by Treasury Cash Management module of an ERP package.*

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CONTROLS IN EDP SET-UP : GENERAL CONTROLS

1. *Explain the various general components of Disaster Recovery Plan.*
2. *What are the two major categories of exposures in the Communication subsystems including Internet and Intranet? What control mechanisms could be used to deal with them?*
3. *What are the different types of securities required for the computer system? Explain briefly the different components of physical security of a computer installation.*

4. *Discuss the activities dealing with system development controls in EDP setup.*
5. *Write short notes on the following:*
 - (a) *Security risks associated with Personal Computers*
 - (b) *Personal Computer Controls*
 - (c) *Firewalls*
6. *Your client has recently switched over from manual accounting to computerised accounting. When you receive computerized accounts for the first quarter, you find the following types of error:*
 - (a) *Incomplete or unauthorized data input*
 - (b) *Errors in the files or database during updating*
 - (c) *Improper distribution or disclosure of output.*
7. *You, as an information system auditor, suggest the suitable test of controls for audit of computer processing so that the above-mentioned errors can be prevented.*
8. *Describe various access control methods used for safety of the database.*
9. *Discuss various ways in which audit trail can be used to support security objectives?*
10. *Describe the various security components available in a Secure Operating system.*
11. *Write short note on source program library control.*
12. *Why Computerised Information systems are more vulnerable to many more kinds of threats than manual systems? Name some of the key areas where large amounts of data stored in electronic form are most vulnerable.*
13. *Differentiate between General and Application controls. Also mention the broad categories into which the first can be subdivided.*
14. *What are the subversive threats? How do the intruders manipulate the messages being transmitted?*
15. *What are five control objectives of an Operating system?*
16. *State and explain the four backup and recovery features necessary in a DBMS*
17. *Briefly discuss any five database control features.*
18. *Discuss, how a controlled source program library environment can help to deter unauthorized changes to program. Write short note on Encryption techniques*

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CONTROLS IN EDP SET-UP : APPLICATION CONTROLS

1. *Briefly explain the various field checks used to ensure data integrity.*
2. *What type of errors can corrupt a data code?*
3. *Write a short note on Transaction Logs*

4. *Explain the importance of source documents and associated control techniques.*
5. *What is the significance of input validation control? Describe briefly three different levels of input validation controls used in computerized information system.*
6. *Discuss some common types of field interrogation as a validation control procedure in an EDP set up.*
7. *Write short notes on Audit trail controls in Computer Based Information System (CBIS)*

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DETECTION OF COMPUTER FRAUDS

1. *What measures can be adopted to detect Computer Frauds?*
2. *Why should businesses take Computer Frauds seriously?*
3. *What are the computer frauds committed through input?*
4. *Substantiate with reasons to the view that there is a steep rise in the Internet Computer fraud. Why many institutions are unable to contain it?*
5. *Why is Computer fraud a serious threat to any business organisation? What kind of controls can be incorporated in the system to make frauds difficult to perpetrate?*
6. *Define the following computer Fraud and Abuse technique:*
 - (a) *Hacking*
 - (b) *Logic time bomb*
 - (c) *Piggy backing*
 - (d) *Spamming*
 - (e) *Data diddling.*
7. *Briefly explain five categories of Computer frauds based on the data processing model.*
8. *Briefly explain various kinds of controls that can be incorporated in the system to make frauds difficult to perpetrate.*
9. *Define the following computer fraud and abuse technique:*
 - (a) *War dialing*
 - (b) *Scavenging*
 - (c) *Cracking*
 - (d) *Internet terrorism*
 - (e) *Masquerading.*
10. *Recently you have received a report from your bank client that money from one account has been unauthorisedly transferred to another account by stealing the*

login information of a client through Internet. How will you stop the recurrence of such events?

11. *Persian Paints is a small but highly regarded paint manufacturing company. The company has a network in place linking many of its business operations. Though the firm believes that its security is adequate, the recent addition of a Web site has become an open invitation to hackers. Management requested a risk assessment. The risk assessment identified a number of potential exposures. These exposures, their associated probabilities and average losses are summarized in the following table:*

Persian Paints Risk Assessment

<i>Exposure</i>	<i>Probability of Occurrence (%)</i>	<i>Annual Average Loss (Rs.)</i>
1. <i>Virus attack</i>	60	75,000
2. <i>Data Loss</i>	12	70,000
3. <i>Embezzlement</i>	3	30,000
4. <i>User Errors</i>	95	25,000
5. <i>Threats from Hackers</i>	95	90,000
6. <i>Improper use by Employees</i>	5	5,000
7. <i>Power Failure</i>	15	3,00,000

Using the above risk assessment data, calculate the expected annual loss for each exposure. Which control points have the greatest vulnerability and Least vulnerability? Prepare a written report that summarises your findings and recommendations.

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***CYBER LAWS AND INFORMATION
TECHNOLOGY ACT 2000***

- 1. Explain briefly the scope of the Information Technology Act, 2000 along with the relevant definitions that are used.*
- 2. What are the powers of the Central Government to make rules, as given in Section 87, Chapter XIII of Information Technology Act, 2000?*
- 3. What is a Digital Signature? How is it used? What are the duties of certifying authorities in regard to its usage?*
- 4. Write short notes on the following:*
 - (a) Digital Signature Certificate*

(b) Encryption.

5. *State the objectives and scope of IT Act, 2000. "No Company, big or small, can ignore the opportunity opened by the Internet." What are the various methods by which Internet can be accessed? What are the considerations for choosing the right alternative?*
6. *Describe the composition and powers of Cyber regulatory appellate tribunal.*
7. *Please read carefully the following three scenarios and answer the questions given below:*
Scenario 1: Nobody told you that your Internet use in the office was being monitored. Now you have been warned you will be fired if you use the Internet for recreational surfing again. What are your rights?
Scenario 2: Your employees are abusing their Internet privileges, but you don't have an Internet usage policy. What do you do?
Scenario 3: Employee Mr. X downloads adult material to his PC at work, and employee Miss Y sees it. Miss Y then proceeds to sue the company for sexual harassment. As the employer, are you liable?
8. *Describe some of the powers of controller under section 89 to make regulations consistent with Information Technology Act, 2000.*
9. *Discuss briefly the powers of Central Government under Section 87 to make rules in respect of Information Technology Act, 2000.*
10. *Discuss the main provisions provided in Information Technology Act, 2000 to facilitate E-governance.*

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AUDIT OF INFORMATION SYSTEMS

1. *Discuss the various issues that are of primary concerns for an auditor involved in information system audit. What is the sole purpose of an Information System (IS) Audit?*
2. *What is the role of an IS Auditor?*
3. *While performing an IS Audit, the Auditor should make sure that various objectives are met. Briefly describe them.*
4. *Describe the major techniques of Concurrent Audit of Information systems. Bring out the relevance of such Audit.*
5. *Briefly discuss the framework on which the auditor should work for the audit of Computer Security.*
6. *"In On-line systems, conventional audit trail is difficult and almost impossible." Why? Explain the kind of audit techniques used in such system.*
7. *Write short note on disc Imaging and Analysis Technique.*

8. *Discuss various factors that render manual audit method ineffective in IS audit.*
9. *Briefly describe the various objectives to be met while performing an IS audit.*
10. *A XYZ Company receives orders from customers either by telephone, facsimile or electronic data interchange. A clerk then transcribes the order into one of the company's order form to be keyed into the order entry system.*
11. *You being the information system auditor of the company, suggest various internal control procedures to be adopted to prevent inaccurate or unauthorized source data entry?*
12. *How do MIS auditing enhance the control process?*
13. *Write short note on Integrated Test Facility.*
14. *Write short notes on the following:*
 - (a) *Snapshot technique.*
 - (b) *Review areas of an IS Auditor.*
15. *Briefly describe the techniques used to preserve audit trails in a Computer Based Information system.*

18

INFORMATION SECURITY

1. *What are the core principles of Information Security?*
2. *Explain the role played by an information security administrator.*
3. *Explain in brief information security and its importance.*
4. *Give an example of an Information Security Policy Statement.*
5. *Mention any five security management steps an Internet user should take to protect from Cyber crime and computer security threats.*
6. *What do you mean by Information Security policy? Explain the salient features of the Information Security Policy.*
7. *Write short note on Restorative Information Protection.*
8. *Write short notes on Holistic protection*
9. *Briefly outline the contents of Information Security policy. Briefly explain the best approach to implement information security policy?*

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USE OF SIMPLE CASE TOOLS, ANALYSIS OF FINANCIAL STATEMENTS USING DIGITAL TECHNOLOGY

1. *Explain the term CASE tools. Describe briefly various CASE tools.*

2. *What are CASE Tools? Describe in-depth the categories of CASE tools with examples.*
3. *Explain the significance of ratio analysis generally carried out for financial analysis.*
4. *Explain briefly the Profitability ratio.*
5. *Write a short note on Meta- CASE Workbenches.*
6. *What are called Work benches? Describe the various tools used in programming work bench.*
7. *Describe briefly five components of a CASE work bench.*
8. *What are the five different levels of integration of CASE tools?*
9. *Explain with the help of a diagram the various tools which are included in a testing workbench.*
10. *Write short notes on the following:*
11. *Process Integration.*
12. *Briefly explain the components of an analysis and design work bench.*