



Symbol of Excellence

H.K. Hi-TechCollege of Commerce & Science
M.Sc(CS) 3rd Semester, MS – 11 (RDBMS)
(Old Question Paper)

Attempt any five questions:

- Q.1 (a) Explain three Schema Architecture of DBMS. What is its goal? How can it be used to explain data independence?
(b) Explain the advantages of using a DBMS and the capacity that good DBMS should possess.
- Q.2 (a) What is Integrity? Describe various integrity rules. How do they affect on insert, delete and update operations?
(b) Describe the following: Select, Project, Join, Division.
- Q.3 What is Normalization? Why is it performed? Explain process of normalization with example. Describe what is most strongest normal form any why?
- Q.4 (a) Describe the Basic Algorithms for executing query operations in query processing.
(b) What is recovery? Explain the various recovery techniques.
- Q.5 What do you understand by concurrency? Describe in detail various concurrency control techniques.
- Q.6 Explain the following:
(a) Shadow Paging (b) Time Stamp Ordering
(c) Database Languages (d) Multi valued functional dependencies.
- Q.7 (a) Explain Client Server Architecture. Discuss advantages and disadvantages of distributed database.
(b) Explain Data fragmentation, Replication and allocation techniques for distributed database.
- Q.8 (a) Explain the following Keys:
Primary Key, Secondary, Candidate, Foreign, Alternate Key.
(b) Design E-R model for your organization and describe it properly.



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- Q.1 (a) What do you mean by RDBMS? How does it differ from DBMS? Discuss its characteristics also.
(b) Explain data independence in detail.
- Q.2 (a) Explain various relational model constrains with example.
(b) What do you mean by Relational Algebra? Discuss its various operators. Why are some operators known as set operators?
- Q.3 What is Normalization? Why is it required? What are various techniques for normalization in a relational database model?
- Q.4 What do you mean by Concurrency? How concurrency control is done in distributed DBMS? Give one scheme for controlling concurrency based upon time stamp.
- Q.5 (a) Explain relational, hierarchical and network model with example.
(b) Briefly discuss path dependency in Hierarchical Data Model.
- Q.6 (a) Discuss the deferred update technique of recovery. What are the advantages and disadvantages of this technique? Why is it called No Undo/Redo method?
(b) Briefly discuss SQL.
- Q.7 (a) What is query processing? How is Heuristic used in query optimization?
(b) Explain how a DBMS processes and optimize query?
- Q.8 Explain the following Keys:
(a) Replication (b) Allocation (c) Data Fragmentation (d) Client Server Architecture



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Attempt any five questions:

- Q.1 (a) Describe the three schema architecture. Why is mapping required between different schema levels?
(b) What is DBMS? What should be its characteristics?
- Q.2 (a) What is Integrity? Explain entity integrity and referential integrity. Why is each considered important?
(b) What is relational algebra? Discuss how it differs from relational calculus?
- Q.3 What is ER diagram? Discuss the conventions for displaying an ER schema as an ER diagram. Draw and explain ER diagram of a company.
- Q.4 (a) What is normalization of data? Why is it required? What are various techniques for normalization of a relational model?
(b) Consider the universal relation $R = \{ \{A, B\} \rightarrow \{C\}, \{A\} \rightarrow \{D, E\}, \{B\} \rightarrow \{F\}, \{E\} \rightarrow \{G, H\}, \{D\} \rightarrow \{I, J\} \}$.
- Q.5 (a) What is query processing? How is Heuristic used in query optimization?
(b) Discuss the cost components for a cost function that one used to estimate query execution cost. Which cost components are used most often as a basis for cost function?
- Q.6 (a) Discuss the problem of deadlock, livelock and starvation and also discuss the approaches to deal with these problems.
(b) Discuss multi version technique for concurrency control.
- Q.7 (a) Describe the shadow paging recovery technique. Under what circumstances does it not require a log?
(b) Discuss the deferred update technique of recovery. What is main advantage of this technique? Why is it called the NO-UNDO/REDO method?
- Q.8 (a) What additional functions does a DDBMS have over centralized DBMS? How is vertical positioning of a relation specified? How can a relation be put back together from a complete vertical positioning?
(b) Explain how a DBMS processes and optimizes a query.



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- Q.1 (a) Discuss the main characteristics of database approach and how it differs from traditional file system.
(b) What is data independence? Explain differences between two types of data independence.
- Q.2 (a) Discuss the entity integrity and referential integrity constraints. Why is each considered important?
(b) Discuss the various update operations on relations and the type of integrity constraints that must be checked for each update operation.
- Q.3 Consider the following schema:
Suppliers (Sid, Sname, Address)
Parts (Pid, Pname, Color)
Catalog (Sid, Pid, Cost)
Write the following queries in Relational Algebra:
(i) Find the Sids of suppliers who supply some red or green parts.
(ii) Find the Sids of suppliers who supply some real part and some green part.
(iii) Find Pids of parts that are supplied by at least two different suppliers.
(iv) Find Pids of the most expensive parts supplied by supplier named Wasim.
- Q.4 (a) Prove that a relation schema is in BCNF and at least one of its keys consists of a single attribute, it is also in 4NF.
(b) Define normalization. What is need of normalization of data? Explain 3NF and BCNF by suitable example.
- Q.5 How distributed DBMS is different from centralized DBMS? How data is stored in distributed DMBS?
- Q.6 (a) What is meant by the term heuristic optimization? Discuss the main heuristics that are applied during query optimization.
(b) Discuss the reasons for converting SQL queries into relational algebra queries before optimization is done.
- Q.7 (a) Discuss the time stamp ordering protocol for concurrency control. How does strict time stamp ordering protocol differ from basic time stamp ordering?
(b) Discuss the deferred update technique of recovery. What are the advantages and disadvantages of this technique? Why is it called NOUNDO/REDO method?
- Q.8 Explain Write short notes on the following
(a) Multiversion concurrency control techniques. (b) Shadow Paging (c) Client-server Architecture.



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(Old Question Paper)

Attempt any five questions:

- Q.1 (a) Discuss the main categories of data models.
 (b) Explain different levels of architecture of database System.
- Q.2 (a) Discuss the problem of spurious tuples and how we may prevent it.
 (b) What is Multivalued Dependency? What type of constraints does it specify? When does it arise?
- Q.3 (a) What is the difference between Relational Algebra and Relational Calculus?
 (b) Write a note on views in SQL.
 (c) Describe the following: (i) Weak Entity Type (ii) Union Compatibility
 (iii) Cardinality Ratio for Binary Relationship.
- Q.4 Consider tables:
 Student (st-no, st-name, st-Add, st-ph)
 Course (co-no, co-name)
 Allocation (st-no, co-no, Semester, Batch)
 Using Relational Algebra, answer the following:
 (a) Give all students studying in second semester for the current year.
 (b) Give all courses allocated to the students living in University Campus in 2001.
 (c) All students studying in at least two courses.
 (d) Students not studying in MS-513.
- Q.5 (a) How do optimistic concurrency control techniques differ from other concurrency control techniques? Why are they also called validation or certification techniques? Discuss the typical phases of an optimistic concurrency control method.
 (b) Write the basic time stamp ordering protocol of concurrency control. How does it differ from strict time stamp ordering?
- Q.6 (a) Discuss the relative advantages of centralized and distributed databases.
 (b) What are the main software modules of a DBMS? Discuss the main functions of each of these modules in the context of client-server architecture.
- Q.7 (a) Given $R(A, B, C)$, $S(B, C, D)$ and $T(C, D, E)$ draw the query tree for each of the following queries and apply optimization procedures to it:
 (i) $\sigma_{B=b} (\pi_{ABC} (R \bowtie S) \cap \pi_{ABC} (R \bowtie T))$ (ii) $\pi_{ABC} (\sigma_{B=b} (\pi_{AB}R) \bowtie \pi_{AB}S) - \pi_{ABC} (\sigma_{D=d} (R \bowtie T))$
 (b) Consider the different access strategies (indexing and hashing). State how the availability of such access aids influences query processing.
- Q.8 (a) Discuss the deferred update technique of recovery. What are the advantages and disadvantages of this technique? Why is it called the NO-UNDO/REDO method?
 (b) Describe the shadow paging recovery technique. Under what circumstances does it not require a log?





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Attempt any five questions:

- Q.1 (a) Define the term Software Engineering. Explain the major differences between software engineering and traditional engineering.
(b) Describe Waterfall Model. What are its advantages and disadvantages?
- Q.2 Explain COCOMO model in detail.
- Q.3 (a) Compare RAD model with incremental model.
(b) Explain Spinal Model.
- Q.4 (a) Explain concept of Modularity.
(b) Explain Cohesion and Coupling.
- Q.5 What is Software Testing? Compare functional testing and structural testing. Why do we require these two types of testing? Illustrate important structural testing techniques.
- Q.6 (a) Define the term 'Software Reliability'. Explain JM and GO reliability models. What are the limitations of reliability models?
(b) Write short notes on the following: (i) ER Diagram (ii) DFD
- Q.7 (a) What are the various advantages and disadvantages of LOC over FP to measure size of software?
(b) Explain McCabe's Cyclomatic Complexity with the help of an example.
- Q.8 Write short notes on the following:
(a) Monitoring and Control (b) Scheduling Technique
(c) Software Characteristics (d) SQA Activities



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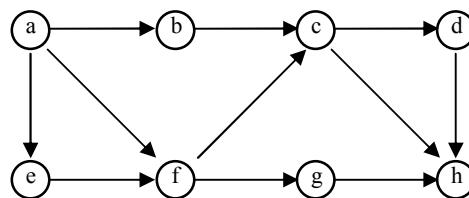
- Q.1 (a) Describe about different phases of software development.
(b) Explain relationship between people, process and product with example.
- Q.2 (a) Explain spiral model and its phases.
(b) Describe about software quality factors.
- Q.3 (a) Explain COCOMO model for projects of different complexities.
(b) Describe about PERT and CPM charts with examples.
- Q.4 (a) Describe about the concept of functional dependencies, with suitable examples.
(b) Explain system design tools and prototyping.
- Q.5 (a) Differentiate between verification, validation and testing.
(b) Explain code reading and writing practices. How are these helpful in code conversions?
- Q.6 (a) Explain test case designs. Give suitable test cases for OCR program.
(b) What do you mean by Test Plan? Explain different types of activities during testing.
- Q.7 (a) Differentiate between Error, Faults and Bugs of project with examples.
(b) Explain MUSA reliability model.
- Q.8 Write short notes on the following:
(a) Complexity Metric (b) Project Monitoring



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Attempt any five questions:

- Q.1 (a) Explain the role of SDLC models in software development process. Describe the linear sequential model. What are its limitations? Explain when it is preferable to use the linear sequential model.
 (b) Differentiate between the throwaway prototyping and the Evolutionary prototyping.
- Q.2 (a) Discuss the Basic and Intermediate COCOMO models.
 (b) Suppose we are faced with developing a system that we expect to have about 100,000 lines of code. Compute the efforts and the development time for each of three development modes i.e. organic, semidetached and embedded. (Use the Basic COCOMO model for explanation).
- Q.3 (a) Differentiate between Cohesion and coupling. (b) Explain the concept of modularity.
 (c) Explain the structured charts. (d) Explain the various types of Cohesion.
- Q.4 (a) Explain the importance of scheduling techniques. List out the various scheduling techniques Discuss in detail any two.
 (b) Differentiate between the Verification and Validation.
- Q.5 (a) Differentiate between the black box testing and while box testing.
 (b) Explain the basis path testing and Boundary Value Analysis.
 (c) Determine the cyclomatic complexity for the following control flow graph:



- Q.6 (a) Define error, fault and failure. What is difference between fault and failure? Doest testing observe faults or failures?
 (b) Discuss MUSA Reliability Model. (c) Describe Software Availability.
- Q.7 (a) Differentiate between Generic Software Products and Customized Software Products.
 (b) Write a short note on Lines of Code. (c) Explain McCabe's Cyclomatic Complexity.
 (d) Explain the principles of Software Engineering.
- Q.8 Write short notes on the following:
 (a) Function point analysis (b) Software quality factors
 (c) Structured programming (d) Activities during testing.





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Attempt any five questions:

- Q.1 (a) Explain and compare any two life-cycle models of software.
- Q.2 (a) Write a list of any 10 software quality attributes and also write the definition of each.
What do you mean by requirement document for a software project. How can you identify the imprecise and/or ambiguous requirements?
- Q.3 (a) Explain Cocomo in Software Engineering.
(b) Does the LOC measure make any sense when fourth generation languages are used? Explain.
- Q.4 (a) Performance is an important consideration during planning. Discuss how performance can be interpreted differently depending upon the software application area.
(b) Explain Putnam Model.
- Q.5 (a) Software requirements analysis is unquestionably the most communication intensive step in the software engineering process. Why does the communication path frequently break down?
(b) Explain design principles and design objectives.
- Q.6 (a) Distinguish between information flow and information structure.
(b) When should a modular design be implemented as monolithic software? How can this be accomplished? Is performance the only justification for the implementation of monolithic software?
- Q.7 (a) How can project scheduling affect integration testing?
(b) Who should perform the validation test the software developer or user? Justify your answer.
(c) Discuss in brief three test case design methods to apply during unit testing.
- Q.8 (a) Explain any two Reliability models.
(b) Write the limitations of Reliability models.



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Attempt any five questions:

- Q.1 What do you understand by Software Development Process? Explain in brief any two models for software development.
- Q.2 (a) How is function points metric used to predict the size of the project and project productivity?
(b) Explain Cost Constructive Model.
- Q.3 What do you understand by Software Quality Assurance Plan? Explain a few software quality control activities.
- Q.4 (a) Explain in brief various design methodologies.
(b) Explain Coupling and Cohesion.
- Q.5 (a) Explain Structured Programming with suitable examples.
(b) Distinguish between Unit testing and Integration testing.
- Q.6 (a) Explain different approaches to defect testing.
(b) Explain the term 'Software Maintenance'.
- Q.7 (a) Explain 'Software Reliability'.
(b) Explain the process of measuring reliability and availability.
- Q.8 Write notes on any two of the following:
(a) Software Documentation (b) Programming Practices (c) Configuration Management.



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M.Sc(CS) 3rd Semester, MS – 13 (Computer Graphics)

(Old Question Paper)

Attempt any five questions:

- Q.1 Compare the following:
- (a) Parallel and Perspective Projections (b) Raster-Scan CRT and Random-Scan CRT
(c) Window and Viewport (d) Clipping and Shielding
- Q.2 (a) Explain Bresenham's line algorithms. Why is this algorithm more efficient than other line drawing algorithms.
(b) Draw a line using Bresenham's line algorithm having coordinates (0, 0) and (-8, -4).
- Q.3 Reflect the triangle ΔABC about the line $3x - 4y + 8 = 0$. The position vector of the coordinate ABC is given as A = (4, 1), B = (5, 2), C = (4, 3).
- Q.4 Explain the Sutherland-Cohen line clipping algorithm. Is this applicable to any type of window? Justify your answer.
- Q.5 (a) Write the formats of GKS viewport command.
(b) What are the four basic primitive supported by GKS?
(c) Explain the use of SET segment Transformation.
(d) How does the GKS software allow multiuser environment on single application?
- Q.6 Perform a perspective projection onto the $z = 0$ plane of the unit cube, where centre of projection is at $x_c = -10$ and $y_c = -10$.
- Q.7 Explain the following:
(a) Z-Buffers algorithm (b) Painter's algorithm
- Q.8 Write short notes on the following:
(a) Multimedia Software Tools (b) Audio and Image File Formats



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M.Sc(CS) 3rd Semester, MS – 13 (Computer Graphics)

(Old Question Paper)

Attempt any five questions:

- Q.1 (a) Explain the term 'Computer Graphics'. What are the advantages and disadvantages of Interactive Computer Graphics?
(b) What do you understand by Interactive Techniques? Explain the following interactive techniques:
(i) Inking (ii) Painting
- Q.2 (a) What steps are required to plot a line whose slope is between 0° to 45° using Bresenham's method.
(b) Explain major side effects of scan conversion.
- Q.3 (a) Discuss the shadow mask technique for generating colours in circuits.
(b) What is the difference between positioning and pointing devices? Explain any two positioning and pointing devices respectively.
- Q.4 (a) Define the following terms:
(i) Frame Buffer (ii) Resolution (iii) Precision (iv) Dragging (v) Window
(b) Write Painter's algorithms for Hidden Surface Elimination.
- Q.5 List the relative advantages and disadvantages of the major display technologies for Video monitors, Vector refresh systems, Raster refresh systems, DVST systems and Plasma panels.
- Q.6 (a) What is Multimedia? Explain its various components briefly. Also list various advantages of multimedia.
(b) Discuss the various applications of multimedia in education and business.
- Q.7 Write short notes on the following:
(a) Rubber-Band Methods (b) GKS (c) Fractal Curves and Surfaces (d) Zooming
- Q.8 Differentiate the following:
(a) Random Scan and Raster Scan (b) Interactive and Passive Graphics
(c) Clipping and Shielding (d) Parallel and Perspective Projection



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Attempt any five questions:

- Q.1 (a) Draw a diagram of CRT and explain its functioning.
 (b) Describe advantages and disadvantages of an LCD.
- Q.2 (a) Describe the transformations used in magnification and reduction with respect to origin. Find new coordinates of a triangle A(0, 0), B(1, 1), C(5, 2) after it has been:
 (i) Magnified to twice its size. (ii) Reduced to half its size.
 (b) What steps are required to plot a line whose slope is between 0° and 45° using Bresenham's method?
- Q.3 (a) Describe windows, viewpoint, aspect ratio. How window to viewport mapping can be done?
 (b) Describe Cohen-Sutherland algorithm for clipping a line.
- Q.4 (a) Differentiate between geometric transformation and coordinate transformation with respect to 3D graphics.
 (b) Describe: (i) One Principal vanishing point perspective
 (ii) Two principal vanishing point perspective (iii) Three principal vanishing point perspective.
- Q.5 (a) Explain z-buffer algorithm. How does the algorithm determine which surface are hidden?
 (b) (i) Find matrix that represents rotation of an object by 30° about origin.
 (ii) What are new coordinates of point P(2, -4) after rotation.
- Q.6 (a) Magnify triangle with vertices A(0, 0), B(1, 1), C(5, 2) to twice its size while keeping C(5, 2) fixed.
 (b) Describe advantages of computer graphics.
- Q.7 (a) Describe hardware and software requirements for multimedia. Describe the various multimedia authoring tools.
 (b) Describe the functioning of joysticks and light pens.
- Q.8 Write short notes on the following:
 (a) Graphics Kernel System (GKS) (b) Bezier Curve (c) DVST



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Attempt any five questions:

- Q.1 (a) Explain the shadow mask technique used in Colour CRT.
 (b) What are the difference between random scan and raster scan methods? Why have raster scan based devices become popular in computer graphics?
- Q.2 (a) Scan convert a line between (3, 5) and (8, 12) using integer DDA algorithm. Show the results at each step.
 (b) Using Midpoint algorithm, find out the coordinates of the outline of an ellipse whose centre is at (0, 0) and semi major axis and semi minor axis as 5 and 4 units, respectively.
- Q.3 (a) Prove that 2-D rotations and scaling commute if $S_x = S_y$ or if $\theta = n\pi$ for integer n, and that otherwise they do not.
 (b) Prove that two successive rotations in 2D about origin are additive, i.e.:

$$R(\theta_1) R(\theta_2) = R(\theta_1 + \theta_2)$$

 (c) Find the composite matrix for rotation about an arbitrary point in 2D.
- Q.4 (a) Find the normalization transformation which uses a circle of radius five units and centre (1, 1) as a window and a circle of radius ½ and centre (½, ½) as a viewport.
 (b) Explain Cohen-Sutherland line clipping algorithm.
- Q.5 Discuss the functional characteristics of the following input devices and mentioned their uses in best suitable circumstances: (a) Mouse (b) Joystick (c) Keyboard (d) Tablet
- Q.6 (a) Explain the following terms used in interactive picture construction techniques:
 (i) Grids (ii) Rubber band methods (iii) Gravity field
 (iv) Dragging (v) Inking and Painting
 (b) What steps would be required to generate a simple bar chart using GKS?
 (c) How could a line chart be generated using GKS?
- Q.7 Derive a composite matrix for general perspective projection from 3D to 2D.
- Q.8 (a) Discuss the painter's method for the removal of hidden lines.
 (b) Discuss the properties of Bezier-Bernstein curve approximation.
 (c) What is Multimedia? What are its various forms? What are the various difficulties in representing these forms?



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M.Sc(CS) 3rd Semester, MS – 14 (Management Information Systems)

(Old Question Paper)

Attempt any five questions:

- Q.1 "Management Information System is vital for modern day management." Do you agree with this statement? Elaborate your viewpoint with the help of suitable examples.
- Q.2 Differentiate MIS from the following: (a) Transaction processing system
(b) Decision Support System (c) Executive Information System (d) Expert System
- Q.3 Clarify the concept of efficiency and effectiveness in the context of Information Systems. How and why are they determined?
- Q.4 Discuss the stages of Decision-making Process. How does MIS help in these stages?
- Q.5 How will you develop MIS for an organization? Discuss the stages involved citing suitable examples.
- Q.6 With the help of suitable examples, discuss the utility of MIS in the following areas of an organization:
(a) Finance (b) Marketing
- Q.7 What factors force us to modify MIS? How is modification done?
- Q.8 Write short notes on the following:
(a) Prototyping (b) CASE Tools (c) Flow Chart (d) Decision Table



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M.Sc(CS) 3rd Semester, MS – 14 (Management Information Systems)

(Old Question Paper)

Attempt any five questions:

- Q.1 Clarify the concept of Management Information System highlighting its advantages and limitations.
- Q.2 Discuss the utility of MIS in the areas of Production and Marketing.
- Q.3 Differentiate between Effectiveness and Efficiency. What criteria will you use to measure effectiveness and efficiency of an MIS?
- Q.4 If you are asked to develop an MIS for an organization, how will you do that? Discuss the steps involved citing suitable examples.
- Q.5 Explain the following:
(a) Advantages of Computer based MIS over manual MIS (b) Latest trends in MIS
- Q.6 Write short notes on the following: (a) Feasibility Studies (b) CASE Tools
- Q.7 (a) What is the need of Modification of MIS? How is it done?
(b) Explain the concept of balance in the context of MIS.
- Q.8 Write short notes on any four of the following:
(a) Prototyping (b) Decision Table (c) Flow Chart
(d) Object Oriented Programming (e) Networking (f) Application Software



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(Old Question Paper)

Attempt any five questions:

- Q.1 Discuss the concept, nature and need of management information system (MIS).
- Q.2 What are the hallmarks of an effect MIS? How use of computers has revolutionized performance of MIS?
- Q.3 What is the difference between data and information? What are the major sources of obtaining data?
- Q.4 Suppose a company wants to forecast its sales for 2007-08 and accordingly plan its production schedule, what kind of data it may need for this decision-making and how MIS can help in this process.
- Q.5 Discuss in detail any software pertaining to accounting. Highlight the advantages of using a software in contrast to manual accounting.
- Q.6 Define and distinguish between efficiency and effectiveness. Why these two need to be balanced?
- Q.7 Write a detailed note on process of MIS development. Also describe the considerations that need to be kept in mind while developing MIS.
- Q.8 (a) How can efficiency of MIS be measured? (b) Why may MIS modification be required?



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Attempt any five questions:

- Q.1 (a) Discuss the essential pre-requisites for an MIS.
(b) Why organization need MIS?
- Q.2 (a) Differentiate between Decision Support System and Transaction Processing System.
(b) Discuss the stages of Decision Making Process.
- Q.3 Discuss the role and functioning of Information Systems in the area of accounting and Production.
- Q.4 Differentiate between waterfall and spiral models of system development. Which model in your opinion, is better and why?
- Q.5 (a) Differentiate between technical and economic feasibility.
(b) Discuss the use of prototyping in system development.
- Q.6 What do you understand by effectiveness and efficiency of an MIS? What parameters or criteria are used in determining and judging both of these.
- Q.7 Write short notes on the following: (a) CASE Tools (b) Modification of MIS
- Q.8 Explain any four of the following:
(a) Decision Tree (b) Data Dictionary (c) Object-Oriented Programming
(d) Black-box testing techniques (e) Relational Data-base



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Attempt any five questions:

- Q.1 Why is it important for MIS managers to continually track the technology developments in IT area?
- Q.2 What is MIS? Why is MIS looked upon as a strategic need of management today?
- Q.3 Can attitudes be changed? What role can MIS play in this Endeavour?
- Q.4 Why does the decision maker resort to bounded rationality in a decision-making situation? Can a decision be called as right or wrong?
- Q.5 Why is a long range plan of MIS necessary? How is it linked with the business plan of the organization?
- Q.6 What problems does the system analyst face in ascertaining the information requirement at the various levels of management? How are these problems tackled?
- Q.7 Write a detailed note on effectiveness and efficiency criteria of a good MIS.
- Q.8 Write short notes on the following:
(a) Role of data processing in the MIS (b) Attributes of good information.



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Attempt any five questions:

- Q.1 What do you understand by Management Information System? Discuss its importance and essential characteristics with the help of suitable examples.
- Q.2 Discuss some of the management functions. How does an information system help a manager in discharging these functions?
- Q.3 Write short notes on the following: (a) Expert System (b) Decision Support System
(c) Transaction Processing System (d) Executive Information System.
- Q.4 Give a detailed account of the stages of System Development Life-cycle.
- Q.5 Discuss some of the bases and criteria used for judging the effectiveness and efficiency of an MIS.
- Q.6 Write short notes on the following: (a) Decision Making Process (b) Modification of MIS
- Q.7 Discuss some of the tools and techniques that may be used for conceptual and detailed design stages of system development.
- Q.8 Explain briefly the following: (a) Decision Table (b) Flow Chart
(c) Object Oriented Programming (d) Database Management System.