

Management Information Systems Aug 1996

Part - A

- 1 a) Explain the concept of MIS and discuss how it is related to Data-Processing?
b) Describe the structure of an MIS based on the hierarchy of management planning and control activities.
- 2 a) Explain the concept of a communications network and describe the configuration and operation of a LAN.
b) Explain indexed file organization and discuss its advantages and disadvantages. Describe how this concept can be extended to support efficient multiattribute search.
c) Discuss the need for and implementation of controls for transaction processing.
- 3 a) Describe the behavioural model of the organizational decision making and discuss its relevance for information system design.
b) A decision problem involves 3 alternative strategies S1, S2 and S3. There are four states of nature called A, B, C, D with respective probabilities of occurrence as 0.10, 0.25, 0.35, 0.30. The payoff matrix is given below

	A	B	C	D
S1	0	15	30	10
S2	25	10	10	20
S3	45	10	25	-10

Make the decision and indicate the payoff using the decision rules maximization of expected values and minimization of expected regret.

- 4 a) Describe the different methods of information presentation, their advantages and limitations.
b) Explain how sensitivity analysis can aid in identifying the value of management information.
c) Describe the Newell-Simon model of Human problem solving.

Part - B

- 5 a) Explain the system concepts of subsystem and decoupling and discuss their design of information systems.
b) Describe the four types of computational support needed for the planning process.
- 6 a) Describe the information process model of organization structure.
b) Discuss the implications of organizational structure and management theory for MIS.
- 7 a) Describe the types of information system support that can be provided for each of the three phases of decision making in a decision support system.
b) Discuss the advantages of a planning support system and describe the models and facilities used in planning support system.
- 8 Write the explanatory notes on the following. (6+8+6)
 - i) Control processes in an organization.
 - ii) Software support facilities for knowledge work.
 - iii) Organizational risk from user-developed system.

Management Information System Feb 97

Part – A

- 1 a) What is Management Information System? Explain the structure of MIS based on organizational functions. 10.
b) Write short notes on:
 - i) Formal versus Informal Systems. 5
 - ii) Total and integrated Systems. 5
- 2 a) Explain the use of the following in a communication system. 10.

- i) Modern
- ii) Front-end processor.
- iii) Multiplexer
- b) What is a transaction processing cycle? Briefly explain the activities involved. 10.
- 3 a) List the phases in decision making process. Describe each of the above phases. 10.
- b) Bring out the difference between:
 - i) Programmed and non-programmed decisions.
 - ii) Economic model and Administrative model of decision maker.
 - iii) Uncertainty avoidance and defensive avoidance. 4.
- 4 a) What is the meaning of the following terms as used in information theory. (2 x 5 = 10).
 - i) Information
 - ii) Redundancy
 - iii) Message Summarization
 - iv) Message Delay
 - v) Message Filtering.
- b) What are the elements of learning process? How do information systems aid in learning process?

Part – B

- 5 a) What is a system? Explain. Distinguish between 10.
 - i) Open and closed systems.
 - ii) Static and deterministic systems.
 - iii) Physical and abstract systems.
- b) What is planning? What are the sources of planning data? Elaborate. 10.
- 6 Write short notes on:
 - i) Organization by product of service. 5.
 - ii) Growth cycle for an organization. 5.
 - iii) Leadership styles. 5.
 - iv) Human motivation. 5.
- 7 a) What is a decision support system? What are the characteristics of a DSS? 10.
- b) What is a model generator? What are its major components? Write short notes on modelbase management. 10.
- 8 a) What is knowledge work? Briefly explain the knowledge work activities. 10.
- b) What is the difference between an intelligent work station and the following: 10.
 - i) A visual display terminal with modem.
 - ii) A Personal Computer.
 - iii) A word processor.

Management Information Systems Aug 1997

Part - A

- 1 a) Briefly describe management information system as a pyramid structure. 6.
- b) Describe the operating elements of an information systems. 8.
- c) Differentiate between structured and unstructured decisions in an organisation with examples. 6.
- 2 a) Briefly explain with an example the usefulness of a statistical package. 6.
- b) Discuss the advantage of distributed computing. 4.
- c) Describe the transaction processing cycle. 10.
- 3 a) Explain briefly the phases involved in the decision making process. 6.
- b) Discuss different models of the decision maker. 6.
- c) Explain how decisions are made in the case of decisional conflict using coping patterns. 8.
- 4 a) What is value of information in decision making? How can sensitivity analysis aid in identifying the value of more information? 8.

- b) Describe the Newell-Simon model of the human as an information processor. What are its implications for information system design? 12.

Part - B

- 5 a) Explain a basic system model suitable for a simple information processing system. 10.
b) Explain different levels of planning in an organisation. 10.
6 a) Assume that you are starting a 30-person firm to develop and market software. Explain the choices you would make and the reasons for them for the following. 20.
i) Hierarchy of authority
ii) Specialization.
iii) Formalization.
iv) Degree of centralization
v) Leadership style.
7 a) Describe the different approaches to development of decision support systems 12.
b) Briefly describe information system support needed for Simon model or decision making phases. 8.
8 a) Explain the activities of the knowledge work. 10.
b) How are physical and functional integration related in a workstation environment? 4.
c) Explain with an example, problems with a user-developed system.
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Management Information Systems Mar/Apr 1999

Part - A

- 1 a) What are the major academics areas significant to the MIS Concept? Explain 8.
b) How long can operations and management activity continue without information? 6.
c) Discuss the advantages and disadvantages of extending the formal, public system at the expense of the formal private system and the informal public system. 6.
2 a) Explain the hardware configuration alternatives in distributed processing. 8.
b) Discuss the need and how information systems are safeguarded. 12.
3 a) Explain decision tree with an example. 8.
b) Define programmed and non-programmed decisions. 6.
c) Discuss decision making under psychological stress. 6.
4 a) Explain decision tree with an example. 6
b) Distinguish between error and bias due to which information varies in quality. 6.
c) Why do people use heuristics in information processing? Give an example of both good and bad heuristics. 8.

Part - B

- 5 a) What are the essential features of systems analysis? 6.
b) Differentiate between subsystem and suprasystem. 6.
c) What are the factors that influence the reliability of planning data? Explain briefly. 8.
6 a) Describe the basic model of organizational structure. What are the principles underlying this mode. 12.
b) Describe the Leavitt model of organizational subsystems. 8.
7 a) Define the three phases of the decision process and describe the decision support for each. 8.
b) What is a model generator? What are its major components? 8.
8 a) Discuss the hardware and software support facilities for knowledge work. 12.
b) What are the advantages of user-developed systems? Briefly explain. 8.

Management Information Systems Sept/Oct 1999

Part - A

- 1 a) List the different classes of users of MIS and briefly describe how do they use it. 8.
b) Personal computers allow individuals in an organisation to have private files and private systems. Discuss advantages and disadvantages of this trend. 6.
c) Why is online processing of transaction desirable? 6.
- 2 a) Explain the type of file organisation you select for a subscription system to be developed for a typical magazine publication firm. 6.
b) Explain briefly the methods for processing transactions. 9.
c) Briefly explain with examples the uses of modeling languages. 5.
- 3 a) Define normative and descriptive as they apply to decision making. Give examples. 8.
b) What is defensive avoidance? Give the symptoms of group think illustrated by an example of industry faced with serious foreign competition. 12.
- 4 a) Discuss the methods of exercising discretion over information transmission. 8.
b) Compare the access, read and write speeds estimated for the Newell-Simon model to the speeds of any modern computer system. 8.
c) What is problem space? Briefly explain. 4.

Part - B

- 5 a) Explain the concept of decoupling and its usefulness in the design of information system. 6.
b) Explain the usefulness of each of the historical data analysis techniques. 8.
c) Explain the law of requisite variety. 6.
- 6 a) Discuss the theories of human motivation, leadership style and job design. 12.
b) What are the organizational structure implications for information system design? 8.
- 7 a) What is the difference between a set of structured decision rules and a decision support system? 6.
b) What is an expert system? How does it differ from other decision support systems? 8.
c) What are the advantages of a planning support system? 6.
- 8 a) Define knowledge work. How is it classified? 4.
b) What are the risks in the elimination of the analyst as a developer? Explain. 12.
c) What is the significance of integration of facilities in the workstation environment? 4.

Management Information Techniques - March/April 2000

Part - A

- 1 a) What is Management Information System? Briefly describe MIS as pyramid? (1 + 5 = 6).
b) Explain relationship of MIS to Information Resource Management, Decision support systems and Data processing. (2 + 2 + 2 = 6).
c) Explain structure of an MIS based on organizational function. 8.
- 2 a) Explain the concepts of communication networks and describe configuration and operation of LAN.
b) Compare index file organization with Sequential file organization in terms of their support for basic operations. 6.
c) What is transaction processing cycle? Briefly explain activities involved. 8.
- 3 a) Explain briefly the phases involved in decision making processes. 4.
b) With suitable examples, illustrate 5 methods for documenting decision logic. 6.

- c) A decision problem involves 3 alternative strategies called α , β , γ there are 4 possible events or states of nature with respect to probability of occurrence as 0.10, 0.25, 0.35, 0.3.

The following is a payoff matrix.

	W	X	Y	Z
α	0	15	30	10
β	25	10	10	20
γ	45	10	25	-10

Make the decision and Indicate payoff using each of following decision rules. 10.

- i) Maximax.
- ii) Expected values with equal probabilities.
- iii) Maximin
- iv) Maximize regret (equal Probabilities)
- v) Minimize expected regret.

- 4 a) Explain 4 methods to exercise information control or distribution discretion. 6.
- b) Explain how sensitive analysis can aid in identifying value of more information. 5.
- c) Describe Newell-Simon model of problem solving. 9.

Part - B

- 5 a) What is a system? Explain the different ways of classifying the system. 2 + 4 = 6.
- b) With examples discuss concept of decomposition and simplification. 8.
- c) Examples different historical data analysis techniques. 6.
- 6 a) Explain basic model of organizational structure. 12.
- b) Explain organization of sociotechnical system. 8.
- 7 a) What is decision support system. What are the characteristics of a DSS. 6.
- b) Describe the support that information systems can provide for design phase of decision making process. 6.
- c) What is model generator? What are its major components. Write short notes on model-based management. 2 + 4 + 2 = 8
- 8 a) What is knowledge work? Briefly explain knowledge work activities. 2 + 10 = 12
- b) Write short note on: 8.
Organizational risks from user developed system.