

**Tribhuvan University
Institute of Science and Technology**

2067

Bachelor Level/ First Year/ First Semester/ Science
Computer Science and Information Technology (CSc. 252)
(System Analysis And Design)

Full Marks: 60
Pass Marks: 24

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Long Answer Questions:

Attempt any two: (2x10=20)

1. Explain the steps in the maintenance process and contrast them with the phase of the systems development life cycle.
2. Draw a DFD diagram of the following up to level 2.
Front office of Hotel is responsible for all room reservations, room allocations and final settlement of bills. Any company or person can reserve rooms for their future stay. They have to indicate from what date to what day they need the room. They also have to indicate how many rooms are required. Sometimes the reservations could be cancelled or the dates or number of rooms changed. For reservation, cancellation or modification of rooms, customer receives an acknowledgement from the hotel.
3. Explain the steps of creating a decision table. How can you reduce the size and Complexity of a decision table? Explain with example.

Group B

Short Answer Questions:

Attempt any eight: (8x5=40)

4. Differentiate between transaction processing system (TPS) and management information system (MIS).
5. What are the management skills needed by system analysts?
6. What are the three relationship types of E-R diagrams? How are these relationships paired to build an E-R diagram?
7. Describe the commonly used methods for performing economic cost-benefit analysis.
8. What is the normalization of a relation? Explain with example.
9. Explain the six types of files used in information systems.
10. What is the role of software application testing?
11. Explain the factors that influence the cost of maintenance.
12. What managerial issues can be better understood by measuring maintenance effectiveness? Explain.
13. Differentiate between state diagrams and sequence diagrams in object oriented analysis and design.

