

**Tribhuvan University  
Institute of Science and Technology**

**2068**

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 development methodology used in developing information system in detail with example.
2. Explain with example of the linkage between data flow diagram, decision tables and entity relationship diagram.
3. Construct a decision tree and a decision table that represents a salesperson's commission. The rules are as follows.
  - a. If fewer than 400 units are sold, than the salesperson's commission is 2% of total sales.
  - b. If between 400 and 499 units are sold, than the salesperson's commission is 3% Of total sales.
  - c. If 500 or more units are sold , and the salesperson has been with the company more than one year , than the salesperson's commission is 5% of total sales.
  - d. If 500 or more units are sold, and the salesperson has been employed by the firm for one year or less, than his/her commissions 4% of total sales.

**Group B**

**Short Answer Questions:**

**Attempt any eight: (8x5=40)**

4. What do you mean by JAD?
5. Why are good interpersonal communications skills essential for system analysts?
6. What are the roles of CASE in data modeling?
7. Explain the steps in feasibility analysts.
8. Explain the payback period with example.
9. Explain file organization with example.
10. What are the process for designing forms and reports?
11. Differentiate between system documentation and user documentation.
12. Explain the types of maintenance.
13. Explain the Unified Modeling Language(UML) with example.