

MASTER OF ARTS EXAMINATION, 2025
DEPARTMENT OF LIBRARY & INFORMATION SCIENCE (DIGITAL LIBRARY)
1st Year, 2nd Semester (EVENING)
Subject Code : MLDL-08
INFORMATION TECHNOLOGY - II

Time : Two Hours

Full Marks : 50

Answer all questions.

1. A) Discuss the concept of computer network and data communication. How can you differentiate between data communication and data transmission? Identify and discuss with suitable diagrams the components of data communication from A to B and vice versa. 3+2+5

Or

- B) What is the difference between data communication and voice communication? What does switching mean in data communication? Explain about the different types of connecting devices in computer networks. 2+2+6

2. A) Discuss the term LAN, WAN, VPN, Internet, Intranet, and Extranet. Explain the functions and services of each layer of TCP/IP model. 6 + 4

Or

- B) Describe the concept of public, private, static, dynamic and mobile IP addresses. How can you identify the IP class of given an IP address like 202.54.54.226 7 + 3

3. A) Discuss the role of RDBMS in different areas of library services? Discuss different types of Entity Relationship in RDBMS with diagrams. 5 + 5

Or

- B) Write MySQL commands to execute the following tasks: 5 × 2=10
- i) Create a table named 'book' with three fields named id, title and author with proper attributes.
 - ii) Add another field named price
 - iii) Change the name of field author to contributor
 - iv) Make the id field as Primary Key
 - v) Insert a record with suitable data

4. A) Discuss Normalization in RDBMS. Discuss the difference between DDL, DML and DCL commands in MySQL. 5+5

Or

- B) Write SQL commands for a table named employee with fields emp_id, name and dept with suitable attributes and emp_id as Primary Key.

- i) Delete the name field.
- ii) Add two fields f_name and I_name after emp_id.
- iii) Delete records whose I_name are 'Das'.
- iv) Replace 'Sankar' by 'Shankar' for f_name.
- v) Delete the table 'employee'.

2+2+2+2+2

5. Write short notes on **any two** of the following:

2 × 5 = 10

- i) Data types used in MySQL
- ii) Different Normal forms in RDBMS
- iii) Network security
- iv) Mobile computing and ad-hoc networks
