MASTER OF LIBRARY AND INFORMATION SCIENCE (DIGITAL LIBRARY) EXAMINATION, 2023

(1st Year, 2nd Semester)

Information Technology - II

Course: MLDL-08

Time: Two Hours Full Marks: 50

Answer *all* the questions.

1. a) Explain the concept of computer network. List out various components and explain the basic data communication model with a suitable diagram. 4+6

OR

- b) What are the applications of computer network in the library? How mobile technologies will change the library services and why is the library considering wireless?

 3+5+2
- 2. a) Explain different types of connecting device in computer networks. What are the different types of packet-switching? 6+4

OR

b) What is TCP/IP Model? Explain the functions, protocols and services of each layer? 2+8

3. a) How RDBMS could be used in different areas of library services? What is normalization in RDBMS? Discuss different types of normalizations in RDBMS.

4+2+4

OR

- b) Write MySQL commands to execute the following tasks:
 - i) Create a table named 'student' with three fields named id, name and course with proper attributes.
 - ii) Add another field named surname after name.
 - iii) Change the name of field name to fname.
 - iv) Make the id field as Primary Key
 - v) Insert a record with suitable data 2+2+2+2+2
- a) Discuss Entity Relationship in RDBMS. Discuss the difference DDL, DML and DCL commands in MySQL.

OR

- b) Write SQL commands for a table named author with field id, name and phone with suitable attributes and id as Primary Key.
 - i) Replace name field with fname and lname
 - ii) Display records whose lname matches with 'Majumder'

- iii) Delete records whose fname are 'Anonymous'
- iv) Replace 'Dash' by 'Das' for the field 'lname'
- v) Delete the table 'author'

2+2+2+2

5. Write Short Notes (Any two):

 5×2

- i) Data types used in MySQL
- ii) 'joining' of tables in any RDBMS
- iii) Network security
- iv) Network addresses