Ex/MLDL-08/2024

MASTER OF LIBRARY AND INFORMATION SCIENCE

(DIGITAL LIBRARY) EXAMINATION, 2024

(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 and data communication. List out various components of the basic data communication model and explain them with a suitable diagram. 4+6

OR

B) What are the functions of network switching? Discuss four important switching techniques? Why should the Internet be a packet Switched Network rather than circuit Switched OR Message Switched? 2+6+2

2. A) What is a OSI Protocol, and how does it work? Describe the concepts of IP address and explain public and private IP addresses with suitable examples for each of them. 5+5

OR

B) What is the importance of LAN in the library? What are the characteristics of CAN? Explain about the different types of connecting devices in LAN? 2+2+6

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:

i) Create a table named 'book' with three fields named book_id, title and publisher with proper attributes.

ii) Add another field named author after title.

iii) Change the name of field author to contribute.

iv) Make the book_id field as Primary Key.

v) Insert a record with suitable data. 2+2+2+2+2

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 phone with suitable attributes and emp_id as Primary Key.

i) delete the 'name' field

ii) Add two fields first_name and last_name after emp_id

iii) Delete records whose first_name are 'Sadhan'.

iv) Replace 'Dash' by 'Das' for the field 'last_name'

v) Delete the table 'employee' 2+2+2+2+2

5. Write Short Notes (***any two***): 5×2

i) Data types used in MySQL

ii) 'joining' of tables in RDBMS

iii) Network security

iv) Mobile networking

v) Library network