

Mid-West University
Examinations Management Office
Birendranagar, Surkhet
End Semester (Alternative/Physical) Examinations -2078

Bachelor level/ B.Sc CSIT /4th Semester

Full Marks : 60

Time: 3hrs

Pass Marks : 30

Subject : Database Management System (COM442)

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt ALL questions

[6×10=60]

1. a) Define Database System. Explain the Relational database components. **[5]**
b) Define SQL. Explain the different type of SQL command. **[5]**
2. a) What is E-R model? Draw E-R diagram of library Management System.also differentiate between strong entity and week entity. **[5]**
b) Explain the necessary steps to replace the manual system by computerize database system in your campus library. **[5]**
3. What is Data Normalization? Explain the different type of Normal Form with suitable example. **[10]**

OR

Describe advantages DBMS over traditional file processing system.

4. Illustrate relational calculus and relational algebra with example. **[10]**
5. What is Data Dictionary? What is Client-Server Architecture? Explain Three Level Architecture of DBMS. **[10]**

OR

Describe the ACID properly. Write about anomalies occur in DBMS.

6. a) Explain the different type of lock protocols. **[5]**
b) Illustrate the unary, binary and ternary relationship in DBMS. **[5]**

THE END