



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 4th Semester Examination, 2021

**CC10-COMPUTER SCIENCE (43)**

**DATABASE MANAGEMENT SYSTEM**

Full Marks: 40

**ASSIGNMENT**

*The figures in the margin indicate full marks.  
All symbols are of usual significance.*

**Answer any two questions from the following** 20×2 = 40

1. (a) Describe three tier architecture of DBMS with the help of diagram. 10  
(b) What are the different types of database languages? Give suitable example of each. 10
  
2. (a) Explain 1NF, 2NF and 3NF with suitable example. 10  
(b) What do you mean by attribute? What are the different types of attributes? 2+8
  
3. (a) What are different data models? Explain three levels of data abstraction. 3+7  
(b) Draw an ER diagram of a library management system. Also explain it. 10
  
4. Consider the relation: EMP (e\_no, e\_name, basic\_salary, job\_type, dept\_no, dept\_name) and do the following operations on it using SQL query: 4×5 = 20
  - (a) Create the relational table.
  - (b) Display information of employees who do not work in the department where employee 'D. BASAK' works.
  - (c) Display the name of employees whose basic salary is lower than the average basic salary.
  - (d) Find the employee detail excluding the employees whose employee no. is 5, 7, 9.
  - (e) Change the employee name from UDAYAN to MALAY.

—×—