

Roll No.

Total No. of Questions : 13]

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J-3238[S-1094]

[2037]

B.Sc. (BI) (Semester -4th)

MANAGEMENT OF BIOLOGICAL DATABASES (B.Sc. (BI) - 403)

Time : 03 Hours

Maximum Marks : 75

Instruction to Candidates:

- 1) Section - A is **compulsory**.
- 2) Attempt any **Nine** questions from Section - B.

Section - A

Q1)

(15 x 2 = 30)

- a) Define Schema and Sub Schema.
- b) How many external views a database system can have and Why?
- c) What is DDL? Write any DDL statement.
- d) What is Data Dictionary and Meta Data?
- e) Define Entity and Attribute. Give examples.
- f) Give examples of Strong Entity and Weak Entity.
- g) Differentiate between Logical and Physical Data Independence.
- h) What is Mapping Constraint & Its Significance?
- i) Show how Cartesian product of two Relations is found. Give Example.
- j) Write SQL statement to delete a Table.
- k) What is Consistency in Database System?
- l) Which type of Data is stored in Geographic Databases?
- m) Differentiate between Canvas and Window.
- n) Write names of different types of Reports you can create in Developer 2000.
- o) Write steps for Generating and Running a Form in Developer 2000.

P.T.O.

Section - B

(9 x 5 = 45)

- Q2)** Write names of different types of attributes. How they are represented in ER Model?
- Q3)** Write disadvantages of using a Database System.
- Q4)** Explain three different views of a Database System.
- Q5)** Show with proper examples how relationship between strong entity and weak entity is represented in ER Model.
- Q6)** Write the various responsibilities of Database Administrator.
- Q7)** Explain different components of Relational Model.
- Q8)** Explain any four Relational Algebra operations with proper example.
- Q9)** Explain Basic concept of Hierarchical Data Model.
- Q10)** Explain different types of Functional Dependencies we use in Normalization.
- Q11)** Write the problems we might have to face due to Bad Database Design.
- Q12)** Explain how and why we use Layout Editor in Developer 2000.
- Q13)** Explain Steps for creating Master Detail Report in Developer 2000.

