Total No. of Questions: 16] [Total No. of Printed Pages: 3

SEMC-213

M.Sc. (IInd Semester) Examination, 2022 COMPUTER SCIENCE

Paper - FS-COMP-MSC-CS-CC-201

(Database Management System)

Time: 1½ Hours] [Maximum Marks: 40

Note: The question paper contains three Sections.

Section-A (Marks : $1 \times 10 = 10$)

Note: Answer all the *ten* questions (Answer limit **50** words). Each question carries **1** mark.

Section–B (Marks : $3 \times 5 = 15$)

Note: Answer any *five* questions by selecting at least *one* question from each Unit (Answer limit **200** words). Each question carries **3** marks.

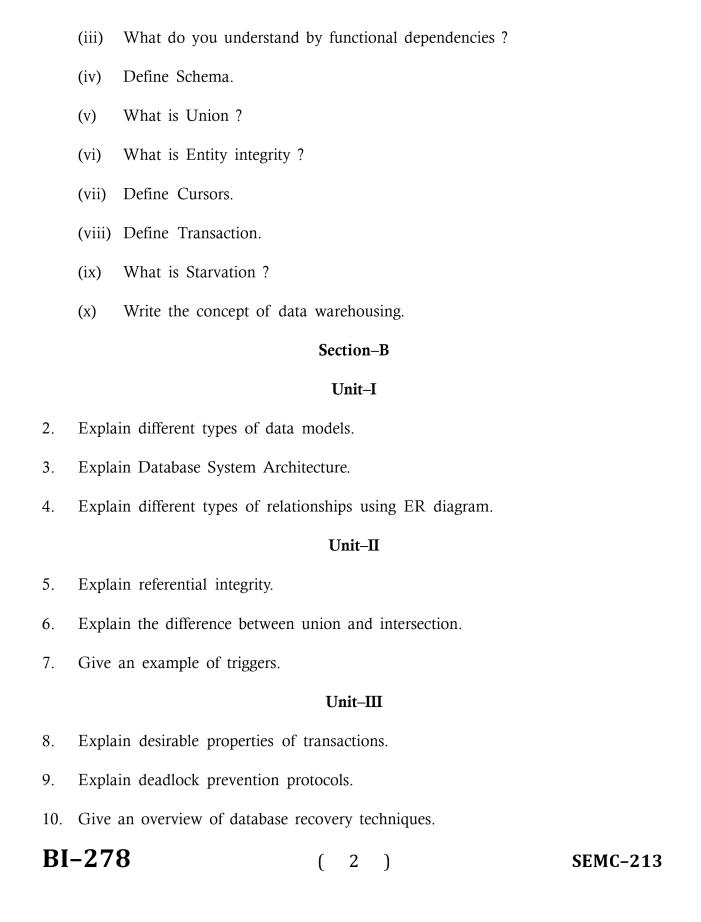
Section–C (Marks: $5 \times 3 = 15$)

Note: Answer any three questions by selecting one question from each Unit (Answer limit 500 words). Each question carries 5 marks.

Section-A

- 1. (i) Define Entities.
 - (ii) What is Primary key?

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Section-C

Unit-I

- 11. Suppose you are given a simple database for State Cricket League (SCL): The SCL has many teams, each team has a name, a city, a coach, a captain and a set of players, each player belongs to only one team, each player has a name, a position (such as opener or middle order), a skill set (such as batting or bowling), a team captain is also a player, a game is played between two teams and has a date and result. Construct an ER diagram for SCL database.
- 12. Explain Normalization using this data-student name, student class, address, date of birth, subject, fees paid, course, teacher name, teacher address.

Unit-II

13. Consider these two tables and answer the following queries:

Employee-eid, ename, mngrid, doj, city

Salary-eid, project, salary

- (i) Write an sql query to fetch the employee id and name of all employees working under manager id 101.
- (ii) Write an sql query to fetch the different projects available from salary table.
- (iii) Write an sql query to fetch the counting of employees working in project 'pl'.
- (iv) Write an sql query to get the name of employees working in city 'Delhi'.
- (v) Write an sql query to get the name of employees whose salary is more than 50,000.
- 14. Give an example of creating and calling stored procedures.

Unit-III

- 15. What is Serializability? Explain conflict-serializable schedules.
- 16. Explain two-phase locking technique in detail.

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