21BSC4C4CSL



B.Sc. IV Semester Degree Examination, Sept./Oct. - 2024 COMPUTER SCIENCE

DSC 4: Database Management System (NEP)

Time: 2 Hours Maximum Marks: 60

SECTION - A

I. Answer the following questions. Each question carries one mark. 10x1=10

- 1. (a) Define Database Management System.
 - (b) What is Database Schema?
 - (c) What is weak Entity?
 - (d) Define Degree of a Relationship.
 - (e) Define Tuple.
 - (f) What is PL/SQL?
 - (g) What is Normalization?
 - (h) What is Functional Dependency?
 - (i) What are Transactions?
 - (j) Define Concurrency.

SECTION - B

- II. Answer any four of the following questions. Each question carries five marks.
 - 2. Discuss various types of database languages.

4x5=20

- **3.** Explain Cardinality ratio of a relationship.
- **4.** Explain the relational model constraints.
- **5.** What is Decomposition? Explain its types.
- **6.** Discuss the types of failures.
- **7.** Write a note on PL/SQL.



SECTION - C

- III. Answer any three of the following questions. Each question carries ten marks.
 3x10=30
 - 8. Explain the three schema architecture with a neat diagram.
 - 9. What is attribute? Explain different types of attributes with an example.
 - 10. Explain aggregate functions with an example.
 - 11. Explain 1NF, 2NF and 3NF with an example.
 - 12. Explain the desirable properties of transaction.

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