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Total No. of Printed Pages: [01]

Total No. of Questions: [09]

BCA (Semester – 4th)
DATABASE MANAGEMENT SYSTEM
Subject Code: BCAP1419
Paper ID: [160119]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a. Define the term Super Key and Candidate Key
- b. Explain the term Database Architecture in brief.
- c. Differentiate between Generalization and Specialization.
- d. What do you mean by Extended ER diagrams?
- e. Explain the term Decomposition in brief.
- f. Define Functional Dependency
- g. Explain BCNF in brief.
- h. What are cursors in MySQL?
- i. Explain in brief about views in MySQL.
- j. What do you mean by subquery? Give suitable example.

Section – B

(5 marks each)

- Q2. Explain in brief about characteristics of DBMS.
- Q3. Write a detailed note on Tuple domain Calculus.
- Q4. Write a detailed note on Pitfalls in Relational-Database Design.
- Q5. Explain Sorting and Filtering User Data using MySQL
- Q6. Explain in detail about various types of Operators in MySQL

Section – C

(10 marks each)

- Q7. (a) Write Advantages of DBMS. (6)
- (b) Explain the role of DBA. (4)
- Q8. Explain Relational Data Model Concepts in Detail.
- Q9. Explain about First, Second, third and fourth normal forms with relevant examples.