



B.Sc/BCA DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2022

Second Semester

Core Course - CS2CRT04 - DATA BASE MANAGEMENT SYSTEMS

(Common for B.Sc Computer Applications Model III Triple Main, Bachelor of Computer Applications)

2017 ADMISSION ONWARDS

FB598FFB

Time: 3 Hours Max. Marks: 80

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Discuss database users.
- 2. What is Data Model? What are the different types of Data models?
- 3. What is the difference between procedural and nonprocedural DMLs?
- 4. What do you mean by the cardinality of a relationship?
- 5. What is the domain of an Attribute?
- 6. Write about LIKE operator with an example.
- 7. Explain the term UNIQUE.
- 8. Note out the aggregate functions.
- 9. What you mean by Transitive Dependency?
- 10. Explain Boyce-Codd Normal Form.
- 11. What is active state?
- 12. Which are the control measures used to protect the database?

 $(10 \times 2 = 20)$

Part B



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Answer any six questions.

Each question carries 5 marks.

- 13. Discuss the main characteristics of the database approach and how it differs from traditional file systems?
- 14. What is the difference between logical data independence and physical data independence?
- 15. Explain the terms Primary Key, Candidate Key, Super Key with examples.
- 16. Explain the structure of ER diagram with an example.
- 17. Explain different data types used in SQL.
- 18. Explain UPDATE command with syntax and example.
- 19. Explain the role of functional dependency in DBMS.
- 20. Explain Clustering Indexing.
- 21. Explain a transaction and its states.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Draw the system architecture of DBMS. Explain each component in detail.
- 23. Define constraints. Explain different constraints with example in detail.
- 24. Explain UNION, EXCEPT and INTERSECT commands with syntax and example.
- 25. Write down the informal design guidelines for relational schema.

 $(2 \times 15 = 30)$

