(For candidates admitted from 2016–2021 Batch)

B.Sc./B.C.A DEGREE EXAMINATION, NOVEMBER 2023.

Part III — Computer Application/Information Technology – Major

DATABASE SYSTEMS

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20)$ 

Answer ALL questions.

- ... Mention the Two Levels of Data Independence.
- 2. What is the main purpose of File Manager?
- B. What does a row in a table represents?
- 4. Define Strong Entity Set.
- 5. What is an Embedded DML?
- 6. What are called Aggregate Functions?
- 7. Define Entity Set.

- 8. What is meant by Disjoint Constraints?
- 9. Define 1NF.
- 10. Define Decomposition.

PART B —  $(5 \times 5 = 25)$ 

Answer ALL questions, choosing either (a) or (b)

11. (a) Explain DML.

Or

- (b) Discuss in detail about Database Users
- 12. (a) Write a note on Keys in Relational Database.

Or

- (b) Describe in detail the Modification of the Database.
- 13. (a) Discuss in detail the SET operations in SQL.

Or

- (b) Explain about Creating View.
- 14. (a) Explain Queries on several relations.

Or

(b) Illustrate the design issues in E-R Model.

15. (a) Discuss the Decomposition using Functional Dependency.

Or

(b) Explain database design process.

PART C —  $(3 \times 10 = 30)$ 

Answer any THREE questions.

- 16. Explain View of Data.
- 17. Discuss in detail the fundamental operations performed in Relational Algebra.
- 18. Explain the Nested Sub Queries of SQL.
- 19. Discuss in detail the Domain Relational Calculus.
- 20. Explain Decomposition using Multivalued Dependencies.