



QP CODE: 23127451

Reg No : ......

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2023

### **Third Semester**

B.Sc Mathematics Model II Computer Science

## VOCATIONAL COURSE - CA3VOT03 - COMPUTER SCIENCE - DATABASE MANAGEMENT SYSTEMS

2017 Admission Onwards 89B38408

Time: 3 Hours

Max. Marks: 80

### Part A

Answer any **ten** questions.

Each question carries **2** marks.

- 1. Define DBMS.
- 2. Define data model and list different types of data model in DBMS.
- 3. What do you mean by data independance?
- 4. What are database languages?
- 5. Define Normalization.
- 6. Write the syntax for creating a view.
- 7. Briefly explain SELECT operation in relational algebra.
- 8. Define system catalog.
- 9. Define object oriented language.
- 10. What are the steps using in query optimization?
- 11. Define heterogeneous database.
- 12. Write a note on Distributed System.

 $(10 \times 2 = 20)$ 

Part B

Answer any **six** questions.

Each question carries **5** marks.



- 13. What is data model? Explain the categories data models.
- 14. What is an attribute? Explain different attributes.
- 15. What are the different symbols used in ER diagram?
- 16. Explain constraints on generalization.
- 17. Explain DDL and DML commands with example.
- 18. Explain BETWEEN and LIKE operator in SQL.
- 19. Explain DDL and DML with examples.
- 20. Create table STUDENT(Regno, Name, Dept, Mark), Set Regno of STUDENT Table as Primary Key and insert five records.
- 21. Explain any five SQL queries with syntax and example.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any **two** questions.

Each question carries **15** marks.

- 22. Explain any five keys in detail.
- 23. Explain any five DML queries with syntax and example.
- 24. Explain organization of records in files.
- 25. Explain centralized architecture and client server architecture.

 $(2 \times 15 = 30)$