INTEGRATED MSC DEGREE EXAMINATION, FEBRUARY 2024

First Semester

INTEGRATED MSC COMPUTER SCIENCE-ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING, INTEGRATED MSC COMPUTER SCIENCE-DATA SCIENCE

CORE - ICSC1CR4 - DATABASE MANAGEMENT SYSTEMS

2020 Admission Onwards

78DF2FC3

Time: 3 Hours   Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is DBMS?

2. Why database approach is better than file based approach?

3. Discuss the benefits of ER model.

4. What is the functionality of Authorization Manager in DBMS?

5. What is meant by distributed database?

6. Mention the characteristics of a table.

7. Mention different types of integrity constraints.

8. Define SQL.

9. Explain the use of CHECK constraint in SQL with an example.

10. Explain the use of ORDER BY clause in SQL with example.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain the components of database system.

12. Explain advantages and applications of hierarchical model.

13. Explain three-levels of DBMS architecture.

14. Discuss the components of Database Manager/Storage Manager in DBMS.

15. Differentiate super key and candidate key with examples.

16. Discuss Rename operation in relational algebra with examples.

17. Explain CREATE and DROP queries with suitable examples.

18. Discuss the use of NOT EXISTS in SQL queries with suitable examples.

<div align="right">(6×2=12 weightage)</div>

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain Advantages and Disadvantages of DBMS.

20. Discuss DDL and DML commands in detail.

21. Explain major set operations with examples?

22. Discuss the Data definition language commands with syntax and examples.

<div align="right">(2×5=10 weightage)</div>