

END SEMESTER EXAMINATION : NOVEMBER 2024**SEMESTER 1 : INTEGRATED M.Sc. PROGRAMME COMPUTER SCIENCE AND DATA SCIENCE****COURSE : 21UP1CRMCP03 : DATABASE MANAGEMENT SYSTEMS***(For Regular 2024 Admission and Improvement / Supplementary 2023/2022/2021 Admission)*

Time : Three Hours

Max.Weightage : 30

PART A**Answer any 8**

1. Define the term data mining.
2. The _____ command is used in SQL to commit the updations done on the database.
3. State the difference between tables and views.
4. Write a query to view the current date in SQL.
5. Centralized systems act as _____ that satisfy the data requests generated by client systems.
6. The _____ model is based on mathematical theory of sets.
7. A _____ is an association among several type of entities.
8. Identity the non-prime attribute(s) from the relation PLAYER (player_id, team, age, salary).
9. State the purpose of query optimizer.
10. Define the term normalization.

(1 x 8 = 8 Weight)**PART B****Answer any 6**

11. Illustrate the use of LIKE and BETWEEN operators in SQL.
12. Write short notes on DDL.
13. Discuss the properties of set operations in relational algebra.
14. Differentiate between logical and physical data independence.
15. Write a sample query to add a check constraint on the age attribute of the table VOTER.
16. With the syntax, explain the RENAME operator of relational algebra.
17. Explain how entity sets are mapped from ER model to relational model.
18. List and explain any four sectors where Database Management Systems have proved to be beneficial.

(2 x 6 = 12 Weight)**PART C****Answer any 2**

19. Explain in detail about Database System Structure.
20. Discuss briefly about cross join operation with an example.
21. Consider the following relational schema of a food store and write sample queries for the questions that follow:
CUSTOMER (cno, cname, cphone, cplace)
PRODUCT (pno, pname, pprice)
REORDER (pno, reorder_level)
(i). Retrieve the customer details of the store.
(ii). Reassign the reorder level of the product 'bread' as 15.
(iii). Display the product details in the ascending order of their names.
22. Discuss about the characteristics of database approach.

(5 x 2 = 10 Weight)