B. Sc. DEGREE END SEMESTER EXAMINATION MARCH 2018

SEMESTER – 4: COMPUTER APPLICATION (CORE COURSE)

COURSE: 15U4CRCAP9 – DATABASE MANAGEMENT SYSTEM

Common for Regular (2016 Admission) & Supplementary (2015 Admissions)

Time: Three Hours   Max. Marks: 75

PART A

Answer **all** questions. Each question carries **1** mark.

1. What is data model?

2. Explain DML Database system environment.

3. Explain key attributes of an entity type.

4. Explain database state.

5. Write notes on term "ALTER".

6. How is the LIKE operator used in queries?

7. What is meant by indexing structures for files?

8. What is meant by access protection?

9. Define commit point of a transaction.

10. Define the term rollback.   (1 x 10 = 10)

PART B

Answer **any eight** questions. Each question carries **2** marks.

11. Explain different types of database users.

12. Explain the concepts-entity, attribute and relationship.

13. Explain the concept of foreign key with example.

14. Explain aggregate function.

15. Explain how BETWEEN operator is used in queries.

16. Explain second normal form.

17. Write short notes on roles of DBA.

18. Explain different properties of transaction.

19. Explain binary lock.

20. Explain different types of security.   (2 x 8 = 16)

PART C

Answer *any five* questions. Each question carries *5* marks.

21. What are the advantages of using the DBMS approach?

22. Explain unary relational operations.

23. Explain basic SQL queries with syntax and examples.

24. Explain different types of threats.

25. Explain different control measures used to provide security?

26. Write notes on different types of locks in transaction.

27. Describe the characteristics of a data warehouse?   (5 x 5 = 25)

PART D

Answer *any two* questions. Each question carries *12* marks.

28. Explain about three schema architecture and data independence.

29. Explain different types of Normalization with examples.

30. Explain the use of ER Diagram with the help of a "banking" database diagram?

31. Explain multilevel and dynamic multilevel indexes.   (12 x 2 = 24)

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