

B. Sc. DEGREE END SEMESTER EXAMINATION – MARCH 2020**SEMESTER – 4: COMPUTER APPLICATIONS (CORE COURSE)****COURSE: 15U4CRCAP9: DATABASE MANAGEMENT SYSTEM**

(For Regular - 2018 Admission and Supplementary / Improvement 2017, 2016, 2015 Admissions)

Time: Three Hours

Max. Marks: 75

PART-AAnswer **all** questions. Each question carries **1** mark.

1. What is DBMS?
2. Define External Schema of Relation?
3. Define Data Integrity.
4. What you mean by ER model?
5. Define candidate Key and Primary key
6. What you mean by Aggregation?
7. Define functional dependency
8. What is Weak Entity?
9. Define Cardinality?
10. What is consistency of Transaction?

(1 x 10 = 10)

PART BAnswer **any eight** questions. Each question carries **2** marks.

11. What is specialization? Give an example.
12. Explain Union and Intersection of SQL
13. Explain the types of relationships?
14. Explain the types of operators of SQL
15. Explain the characteristics of relational data model.
16. Explain the role of DBA.
17. Explain DCL of SQL?
18. What is serializability?
19. Explain relational calculus.
20. How to join two table in DBMS with an example.

(2 x 8 = 16)

PART CAnswer **any five** questions. Each question carries **5** marks.

21. Explain the different levels of Abstraction of DBMS.
22. Discuss the Anomalies of a Data base?

- 23. Explain the ACID properties of Transaction.
- 24. Explain various relational algebra operations.
- 25. Explain the types of indexing
- 26. Explain the threats of security in DBMS
- 27. Explain the dirty read problem of Transaction

(5 x 5 = 25)

PART D

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

- 28. How Data base differ from traditional file system. Explain.
- 29. Explain the Types of Normal form with an example
- 30. What is ER diagram. Draw and explain the student Management System.
- 31. Explain the Transaction management of DBMS.

(12 x 2 = 24)
