

**B.M.S COLLEGE FOR WOMEN AUTONOMOUS**  
**BENGALURU – 560004**

**END SEMESTER EXAMINATION – SEPTEMBER / OCTOBER 2022**

**B.C.A. - II Semester**  
**Database Management System**

**Course Code: BCA2DSC06**

**Duration: 2 ½ Hours**

**QP Code: 2034**

**Max marks: 60**

**Instruction: Answer all the sections.**

**SECTION-A**

**Answer any TEN questions. Each question carries TWO marks**

**(10x2=20)**

1. What is DBMS? Mention any two functions of DBMS.
2. Define Schema.
3. What do you mean by cardinality ratio?
4. Define Data Independence.
5. What is Heap file?
6. Define Primary Key and Foreign Key.
7. What is functional dependency?
8. Explain Commit and rollback Commands.
9. Write Syntax of UPDATE Command?
10. What are ACID Properties?
11. What is Trigger?
12. What is Transaction?

**SECTION-B**

**Answer any SIX questions. Each question carries FIVE Marks**

**(6x5=30)**

13. Explain roles and Responsibilities of DBA.
14. Explain three schema architecture with neat diagram.
15. What is data model? Explain different data models.
16. What is an entity? Explain E-R Notations used in database schema design.

17. Explain DDL Commands?
18. Explain any five aggregate functions with example.
19. Explain SELECTION and PROJECTION.
20. Consider the Below Relation

**STUDENT (Register Number, Name, Course, Gender)**

- a) Create above table.
- b) Insert five tuples.
- c) Add new attribute phone number to the relation.
- d) Count no. of girls in BCA Course.
- e) Display Register number, Name, Course, phone number.

### SECTION-C

**Answer ONE question, carries TEN Marks**

**(1x10=10)**

21. What is normalization? Explain 1NF, 2NF, 3NF with example.
22. What is an attribute? Explain Different types of attributes.
23. What is join? Explain different types of joins in SQL?

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