MASTER IN COMPUTER APPLICATIONS [SEMESTER-I] TIME: 3 Hrs. MM:70DATABASE MANAGEMENT SYSTEMS [CCMCA-104] SECTION A [20 Marks] ALL QUESTIONS ARE COMPULSORY: $10 \times 2 = 20$ 1. What do you mean by One to many relationships? (a) One class may have many teachers (b) One teacher can have many classes (c) Many classes may have many teachers (d) Many teachers may have many classes 2. Which of the following refers to the 'data about data'? (a) Directory (b) Sub Data (c) Data warehouse (d) Meta Data 3. Which of the following refers to the level of data abstraction that describes exactly how the data actually stored? (a) Conceptual Level (b) Physical Level (c) File Level (d) Ingical Level 4. Which of the following refers to the number of tuples in a relation? Entity (a) Column (b) Cardinality (c) (d) None 5. Which of the following is a DML command? Create (a) Alter (b) (c) Delete All of the above (d) 6. Which of the following is top-down approach in which the entity's higher level can be divided into two lower sub-entities? Aggregation (a) Generalization (b) Specialization (c) All of the above (d) 7. In a relational database every tuples divided into the fields are known as (a) Oueries **Domains** (b) Relations (c) (d) All the above

- 8. Which of the following command is used to save any transaction permanently into the database?
 - (a) Commit
 - (b) Rollback
 - (c) Savepoint
 - (d) None of the above
- 9. Which of the following refers collection of the information stored in a database at a specific time?
 - (a) Independence
 - (b) Instance of the database
 - (c) schema
 - (d) Data domain
- 10. The term 'DFD' stands for
 - (a) Data file Diagram
 - (b) Data flow document
 - (c) Data flow diagram
 - (d) Data field Document

SECTION B [20 Marks]

ANSWER ANY 4 QUESTIONS

 $5 \times 4 = 20$

- 11. What do you understand by Functional Dependency? Explain Armstrong Axioms for functional dependency.
- 12. Mention the differences between Procedural and Non Procedural Languages.
- 13. What are the advantages of DBMS.
- 14. How many types of Keys are there in RDBMS explain any four.
- 15. Explain the terms Multivalued dependency and Join dependency using an example.
- 16. Explain all the Role and Responsibilities of a Database administrator(DBA).

SECTION C [30 Marks]

ANSWER ANY 2 QUESTIONS

 $15 \times 2 = 20$

- 17. Explain 1st to 5th Normal form with suitable example.
- 18. Explain all Codd's Rule for ER model.
- 19. Write short notes on (a) Stored Procedures (b) Triggers
- 20. Explain ER diagrams with all the symbols used in it. Explain any case study as an example.
