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Reg. No. : .....

**Code No. : 30606 E      Sub. Code : SMCS 43/  
SMSE 43**

B.Sc. (CBCS) DEGREE EXAMINATION,  
NOVEMBER 2020.

Fourth Semester

Computer Science/Software Engineer – Core

**RELATIONAL DATABASE MANAGEMENT SYSTEM**

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

**PART A — (10 × 1 = 10 marks)**

Answer ALL questions.

Choose the correct answer :

1. Which is collection of interrelated data and set of program to access them?
  - (a) Programming Language
  - (b) Database
  - (c) Database Management System
  - (d) Data Structure

2. Which of the user write program in host language and embed the DML statements into it?
  - (a) Sophisticated user
  - (b) Specialized user
  - (c) Naive user
  - (d) Application Programmer
  
3. Schema Definition is written by \_\_\_\_\_.
  - (a) Database Administrator
  - (b) Storage Manager
  - (c) Database Manager
  - (d) Application Developer
  
4. Which command is used to remove a relation from an SQL database?
  - (a) Delete                      (b) Drop
  - (c) Remove                      (d) Kill
  
5. Identify a fundamental operation in relational algebra?
  - (a) Set intersection
  - (b) Natural join
  - (c) Project
  - (d) Assignment

6. What values does the count (\*) function ignore?
- (a) Repetitive values
  - (b) Characters
  - (c) Integers
  - (d) Null values
7. An \_\_\_\_\_ is a set of entities of the same type that share the same properties, or attributes.
- (a) Entity set                      (b) Attribute set
  - (c) Relation set                  (d) Entity model
8. Which normal form a composite attribute is converted to individual attributes?
- (a) Second                          (b) First
  - (c) Third                            (d) Fourth
9. The oracle environment of database is called as \_\_\_\_\_.
- (a) Database Schema
  - (b) Data Structure
  - (c) Database instances
  - (d) All of the mentioned
10. How many types of literals are available in PL/SQL?
- (a) 6                                  (b) 4
  - (c) 3                                  (d) 5

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) List and explain any five applications of DBMS.

Or

- (b) Write short note on information retrieval.

12. (a) Explain the following :

(i) Super key

(ii) Candidate key.

Or

- (b) Give short note on CREATE command in SQL.

13. (a) Explain UNION set operation with example.

Or

- (b) Write short note on integrity constraints.

14. (a) Explain briefly generalization in Enhanced Entity-Relationship model.

Or

- (b) What is the use of data normalization? Explain.

15. (a) What are the advantages of oracle?

Or

(b) Discuss briefly creating sequence with example.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss purpose of database systems.

Or

(b) Explain database architecture with neat diagram.

17. (a) Explain schema diagram with example.

Or

(b) Explain the following SQL command.

(i) Insert

(ii) Select.

18. (a) Discuss INTERSECTION set operation with example.

Or

(b) Describe nested sub queries with example.

19. (a) Explain the following with suitable example.  
(i) Entity  
(ii) Attributes.

Or

- (b) Discuss third normal form with example.  
20. (a) How to modify a table in oracle? Explain.

Or

- (b) Explain functions in PL/SQL.
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