

(6 Pages)

Reg. No. :

**Code No. : 20604 E Sub. Code : SMCS 43/
SMSE 43**

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Computer Science/Software Engineering — Core

RELATIONAL DATABASE MANAGEMENT SYSTEM

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. A _____ is a collection of interrelated data and a set of programs to access those data.
 - (a) Database Management System
 - (b) Query Processor
 - (c) Interpreter
 - (d) Program

2. A _____ is an association among several entities.
- (a) Relationship (b) Entity
(c) Attributes (d) Set
3. A relational database consists of a collection of _____, each of which is assigned a unique name.
- (a) Table (b) Attribute
(c) Entity (d) Relationship
4. The _____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.
- (a) Attributes (b) Set
(c) Join (d) Pair
5. _____ *functions* are functions that take a collection (a set or multiset) of values as input and return a single value.
- (a) Nested (b) Aggregate
(c) Views (d) Integrity

6. A subquery that uses a correlation name from an outer query is called a _____.
- (a) Having Clause
 - (b) From Clause
 - (c) Correlated SubQuery
 - (d) Duplicate Tuples
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. In the _____ normal form, a composite attribute is converted to individual attributes.
- (a) First (b) Second
 - (c) Third (d) Fourth
9. A stored procedure in SQL is a _____
- (a) Block of functions
 - (b) Group of Transact-SQL statements compiled into a single execution plan
 - (c) Group of distinct SQL statements
 - (d) None of the mentioned

10. _____ section contains variables, constants, cursor or exceptions that are going to be used by procedure or function are declared.
- (a) Declarative
 - (b) Executable
 - (c) Exception Handling
 - (d) Group

SECTION B — (5 × 5 = 25 marks)

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

11. (a) Explain about System Applications.
- Or
- (b) Explain about the Components of Storage Manager.
12. (a) Explain about keys.
- Or
- (b) Write the Union Operations.
13. (a) Explain about Null Values.
- Or
- (b) How to create a Views?

14. (a) What is Attributes? What are the types of Attributes?

Or

(b) What is Normalization?

15. (a) How to create a Table?

Or

(b) Write a syntax for Delete a Table.

SECTION C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain about the view of Data.

Or

(b) Explain about Transaction Management.

17. (a) Explain about the Structure of Relational Databases.

Or

(b) Explain about the Overview of the SQL Query Language.

18. (a) Explain Aggregate Functions.

Or

(b) Explain about SQL Data Types.

19. (a) Explain about First Normal Form.

Or

(b) Explain about Enhanced Entity Relationship Model.

20. (a) How to modify a table?

Or

(b) Explain about the Stored Procedure or function's block of code in PL/SQL.
