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(FOR THE CANDIDATES ADMITTED

22UDA309

DURING THE ACADEMIC YEAR 20 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMEBER-2023

B.SC COMPUTER SCIENCE WITH DATA ANALYTICS

MAXIMUM MARKS: 50

SEMESTER-III

TIME : 3 HOURS

PART - III

22UDA309-RELATIONAL DATABASE MANAGEMENT SYSTEM

PART - III

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. What is DBMS?
a) DBMS is a collection of queries b) DBMS is a high-level language
c) DBMS is a programming language d) DBMS stores, modifies and retrieves data
2. Which of the following is used to denote the selection operation in relational algebra?
a) Pi b) Sigma c) Lambda d) Omega
3. By normalizing relations or sets of relations, one minimizes _____.
a) Data b) Fields c) Redundancy d) Database
4. The _____ aggregation operation adds up all the values of the attribute
a) add b) avg c) max d) sum
5. Programmers cannot control the _____ cursors and the information in it.
a) implicit b) explicit c) both a and b d) Not mentioned

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Define ISA relationship.
7. What is QBE?
8. Write few lines about functional dependency.
9. Write any two DML Commands.
10. Define elements in PL/SQL.

(CONT..2)

SECTION – B**(5 X 3 = 15 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K3)**

11. a) Write short notes on database management system objectives and advantages.
(OR)
b) Determine ER Diagrams for tables.
12. a) Describe CODD's rule.
(OR)
b) Interpret relational algebra operations.
13. a) Summarize 1NF and 2NF.
(OR)
b) Examine 3NF and BCNF.
14. a) Analyze DDL Commands.
(OR)
b) Explain Join and set operations
15. a) Outline Exceptional handling in PL/SQL.
(OR)
b) Write short notes on control structures in PL/SQL.

SECTION – C**(5 X 5 = 25 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K4 (Or) K5)**

16. a) Analyze the architecture of database systems architecture.
(OR)
b) Examine the relationship degree and classification.
17. a) Illustrate relational data model.
(OR)
b) Give an overview of relational calculus.
18. a) Express your views about relational database design objectives and tools.
(OR)
b) Elaborate the transaction processing and database security.
19. a) Explain the aggregation functions in detail.
(OR)
b) Write about DML modification and truncation.
20. a) Compare and contrast cursors and procedures.
(OR)
b) Demonstrate functions and packages.