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Roll No. .....

5th Sem. / Artificial Intelligence & Machine Learning

Subject : Relational Database Management System

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 What is a relation in RDBMS ? (Co1)

a) Key b) Table

c) Row d) Data Types

Q.2 Which of the following is not a type of database ? (CO1)

a) Hierarchical b) Network

c) Distributed d) Decentralized

Q.3 BCNF stands for (CO2)

a) Basic communicate normal form

b) Binary code Normal from

c) Boyce-Codd Normal form

d) All of the above

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain 3-tier Architecture of DBMS with neat and clean Diagram . (CO1)

Q.24 What is a normal form ? Explain various types of normal form with suitable example. (CO2)

Q.25 What is meant by concurrency control ? Explain various techniques of concurrency control on detail .(CO5)

Q.4 ____ is the decomposition of a more complex data structure into relations. (CO2)

a) Normalization b) Fragmentation

c) Segmentation d) None of the above

Q.5 Which command is used to remove a relation from a database ? (CO3)

a) Drop table b) Delete

c) Purge d) Remove

Q.6 In order to maintain transactional integrity and database consistency what technology does a DBMS use ? (CO5)

a) Triggers b) Pointers

c) Locks d) Cursors

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define database Schema . (CO1)

Q.8 What is Logical data independence ? (CO1)

Q.9 What is Domain Constraint? (CO2)

Q.10 Define Functional dependency. (CO3)

Q.11 Write SQL command to create a table from another table . (CO4)

Q.12 What is a distributed database? (CO5)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain characteristics of DBMS in brief. (CO1)

Q.14 What is the difference between logical and physical data independence ? (CO2)

Q.15 Explain various workers behind the scene in DBMS? (CO1)

Q.16 What are data models ? What are its types ? (CO2)

Q.17 Discuss different symbols used in E-R model with example. (CO2)

Q.18 What is normalization? Why it is useful ? (CO3)

Q.19 Explain Grant and Revoke command with suitable example. (CO3)

Q.20 Discuss various challenges of MySQL . (CO4)

Q.21 Explain ACID properties of transaction in brief . (CO5)

Q.22 What is two-phase locking technique ? What is its use ? (CO5)