Section-D

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

Q.23 a) Explain classification of DBMS in detail (CO1)

b) Explain data independence and its types in detail

Q.24 What is normalization? What is its significance? Explain normalization of database with functional dependency in detail. (CO2)

Q25 Explain two-phase locking technique in detail. (CO5)

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223853

5th Sem.

Branch : 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 Which of the following is a feature of the database? (CO1)

a) No-backup for the data stored

b) User interface provided

c) Lack of Authentication

d) Store data in multiple locations

Q.2 _____ is a set of one or more attributes taken collectively to uniquely identify a record. (CO2)

a) Primary Key b) Foreign Key

c) Super Key d) Candidate Key

Q.3 For designing a normal RDBMS which of the following normal form is considered adequate? (CO2)

a) 4NF b) 3NF

c) 2NF d) 5NF

Q.4 Which of the following statements contains an error? (CO4)

a) Select * from emp where empid = 1003;

b) Select empid from emp where empid = 10006;

c) Select empid from emp;

d) Select empid where empid = 10009 and last name = 'Sharma'

Q.5 _____ is a special type of integrity constraint that relates two relations and maintains consistency across the relations. (CO3)

a) Entity Integrity constraints

b) Referential Integrity Constraint

c) Domain Integrity Constraints

d) Domain Constraints

Q.6 IF a transaction does not modify the database until it has committed it is said to use a _____modification technique.

a) Immediate

b) Deferred

c) More than one of the mentioned

d) None of the mentioned

Section-B

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

Q.7 What is instance of database? (CO1)

Q.8 Define foreign key. (CO2)

Q.9 What are composite and multivalued attributes? (CO2)

Q.10 Define entity integrity constraint. (CO3)

Q.11 Write SQL command to delete a table from databae. (CO4)

Q.12 What is ACID property of transaction? (CO5)

Section-C

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

Q.13 Briefly explain architecture of DBMS. (CO1)

Q.14 What are the role and responsibilities of DBA? (CO1)

Q.15 What is denormalization? Why it is used? (CO2)

Q.16 Explain various DBMS languages? (CO2)

Q.17 Explain difference between traditional file system and DBMS. (CO3)

Q.18 What are the steps of vonvert E-R model into database? (CO2)

Q.19 What is a constraint? What are different types of constraints in DBMS? (CO3)

Q.20 Explain various DDL commands in SQL with suitable example. (CO4)

Q.21 Explain the use of Commit and Rollback commands in database. (CO4)

Q.22 What are parallel and distributed database. (CO5)