G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2024.
(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.Sc., INFORMATION TECHNOLOGY

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
IV	PART - III	CORE	U21IT404	RELATIONAL DATABASE MANAGEMENT SYSTEM

Date & Session: 09.11.2024 / AN   **Time : 3 hours**   **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer ALL Questions.
CO1	K1	1.	Which of the following is NOT a primary function of storage management in a database management system? a Data storage allocation b) Data retrieval optimization c) User authentication d) Backup and recovery management
CO1	K2	2.	Select the correct statement about mapping constraints in a database. a) Mapping constraints define the relationships between entities in a database schema. b) Mapping constraints only apply to primary keys and foreign keys. c) Mapping constraints are used to enforce data types in a database. d) Mapping constraints are irrelevant in normalization processes.
CO2	K1	3.	Which of the following operations is NOT a basic operation in relational algebra? a) Selection b) Projection c) Join d) Inheritance
CO2	K2	4.	Select the primary purpose of normalization in a database table is. a) To increase redundancy in data b) To minimize data integrity issues c) To simplify the database structure d) To optimize query performance
CO3	K1	5.	Which command(s) is(are) used to change a table's storage characteristics? a) Alter Table b) Update c) Insert d) Truncate
CO3	K2	6.	Select the following statements about Data Manipulation Language is true. a) DML commands can only read data. b) DML commands can create new tables. c) DML commands are used to manipulate existing data in a database. d) DML commands define the schema of a database.
CO4	K1	7.	Which RDBMS object is used to store data in a structured format? a) Table b) View c) Trigger d) Sequence
CO4	K2	8.	Select the command would you use to remove a privilege from a user in an RDBMS. a) Delete b) Revoke c) Drop d) Remove
CO5	K1	9.	Which type of trigger executes before the triggering event occurs? a) AFTER trigger b) INSTEAD OF trigger c) POST trigger d) BEFORE trigger

Course Outcome	Bloom's K-level	Q. No.	
CO5	K2	10.	Trace out the correct statement about packages in RDBMS A) Packages cannot contain variables. B) Packages allow for encapsulation of business logic. C) Packages are limited to only one procedure. D) Packages cannot be reused across multiple applications.

Course Outcome	Bloom's K-level	Q. No.	**SECTION – B (5 X 5 = 25 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	11a.	Build an E-R diagram for college management systems. **(OR)**
CO1	K3	11b.	Develop and manipulate a database table using DDL, DML commands.
CO2	K3	12a.	How do you apply integrity constraints for a database table? **(OR)**
CO2	K3	12b.	Identify the uses of domain relational calculus in relational algebra.
CO3	K4	13a.	Compare outer join with inner join. **(OR)**
CO3	K4	13b.	Analyse commit, auto commit and rollback.
CO4	K4	14a.	Infer how to create roles for users in a database? **(OR)**
CO4	K4	14b.	Examine the uses of Abstract datatypes in RDBMS.
CO5	K5	15a.	Assess the uses of functions with examples. **(OR)**
CO5	K5	15b.	How do you choose the optimal level of trigger in PL/SQL?

Course Outcome	Bloom's K-level	Q. No.	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	16a.	Illustrate the architecture of database with neat diagram. **(OR)**
CO1	K3	16b.	Examine the various data model in database systems.
CO2	K4	17a.	Examine the normalization techniques in RDBMS. **(OR)**
CO2	K4	17b.	Categorize the relational algebra operations in RDBMS.
CO3	K4	18a.	Analyse the clusters and sequences in database. **(OR)**
CO3	K4	18b.	Illustrate the following operations 1. Union, 2. Intersection 3. Minus
CO4	K5	19a.	Interpret the structure of object in database. **(OR)**
CO4	K5	19b.	Assess the usage of password management for user privileges?
CO5	K5	20a.	How do you recommend the exception handling in PL/SQL? **(OR)**
CO5	K5	20b.	How does cursor influence from standard SQL operations.