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



UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2025.

(For those admitted in June 2023 and later)

PROGRAMME AND BRANCH: B.Sc., COMPUTER SCIENCE

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
V	PART - III	CORE - 6	U23CS506	DATABASE MANAGEMENT SYSTEM

Date & Session: 06.11.2025/FN

Time: 3 hours

Maximum: 75 Marks

Course Outcome	Bloom's K-level	Q. No.	SECTION - A (10 X 1 = 10 Marks) Answer <u>ALL</u> Questions.
CO1	K1	1.	What is DBMS? a) collection of queries b) high level language c) programming language d) store, returns and modified data
CO1	K2	2.	Select an example for entity. a) A student name b) a student c) A student address d) a record
CO2	K1	3.	What is a tuple in a relation? a) a column b) a row c) a table d) a field
CO2	K2	4.	Show that in a functional dependency $x \rightarrow y$. What does x represent? a) The key b) The dependent c) The determinant d) The relation
CO3	K1	5.	What is an index? a) Type of dataset b) Type of Data Base c) Type of Record d) Type of Data Structure
CO3	K2	6.	Select the primary goal of concurrency control in DBMS? a) To ensure Data Consistency b) improve query performance c) reduce storage space d) increase number of users
CO4	K1	7.	Which is not a type of file organization? a) Heap b) Sequential c) Hashing d) Indexing
CO4	K2	8.	Select the role of the query optimizer in a DBMS? a) To execute query b) To translate SQL c) Manage the DataBase schema d) store data on disk
CO5	K1	9.	What does OLAP stand for? a) Online Transaction Processing b) Online Analytical Processing c) Object Oriented Language Processing d) Open Source Logical Application
CO5	K2	10.	Outline the non - component of Data Base Security a) Access control b) Encryption c) Authentication d) Data Redundancy
Course Outcome	Bloom's K-level	Q. No.	SECTION - B (5 X 5 = 25 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)
CO1	K3	11a.	Identify where DBMS can be used.
CO1	K3	11b.	Construct an ER Diagram.

(OR)

CO2	K3	12a.	Illustrate 3NF with an example. (OR)
CO2	K3	12b.	Determine Multivalued Dependency.
CO3	K4	13a.	Categories the Aggregate Function by giving example. (OR)
CO3	K4	13b.	Analyze the reason for using nesting of queries.
CO4	K4	14a.	How will you plan file organization in DBMS. (OR)
CO4	K4	14b.	How will you connect query execution plan in DBMS.
CO5	K5	15a.	Justify how Distributed Data Base is used. (OR)
CO5	K5	15b.	Influence the purpose of Big Data.

Course Outcome	Bloom's K-level	Q. No.	SECTION - C (5 X 8 = 40 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)
CO1	K3	16a.	Develop an architecture for DBMS. (OR)
CO1	K3	16b.	Prepare an ER Model with an example.
CO2	K4	17a.	Analyze the functional dependency in a relation. (OR)
CO2	K4	17b.	Illustrate the Relational Model.
CO3	K4	18a.	Organize the concurrency control. (OR)
CO3	K4	18b.	Illustrate the technique of handling Deadlock.
CO4	K5	19a.	Justify how Hashing techniques work in DBMS. (OR)
CO4	K5	19b.	Prove Query Optimization with example.
CO5	K5	20a.	Interpret OLAP and OLTP. (OR)
CO5	K5	20b.	Evaluate the role based access control.