Reg. No										

AR23/24

GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR

(GIET UNIVERSITY)

B.C.A (Second Semester) Regular/Supplementary Examinations, May – 2025

BCA23202 –Database Management System

(BCA)

Time: 3hrs | Maximum: 60 Marks

(The figures in the right hand margin indicate marks)

PART – A **(2 x 5 = 10 Marks)**

Q.1. Answer ***ALL*** questions	CO #	Blooms Level
a. Difference between TRUNCATE and DELETE	CO1	K1
b. List the advantages of DBMS	CO1	K1
c. What is Database Recovery?	CO4	K1
d. Write short notes on Data Model.	CO1	K1
e. Write a Syntax for i) SELECT ii) UPDATE iii)INSERT	CO2	K2

PART – B **(10 x5=50 Marks)**

Answer ***ALL*** questions	Marks	CO #	Blooms Level
2. a. Explain about Data abstraction with its levels	5	CO1	K1
b. What are aggregate functions? and list the aggregate functions supported by SQL?	5	CO1	K1
(OR)			
c. What is ER Modelling? Draw an ER Diagram for University Registration System	5	CO2	K1
d. Explain 1NF,2NF,3NF and BCNF suitable examples	5	CO2	K3
3.a. Explain about Relational Algebra Fundamental Operators and Syntax.	5	CO2	K2
b. Explain Extended E-R Features in DBMS with Examples	5	CO2	K3
(OR)			
c. Define Functional Dependency? Explain Types of Functional Dependencies with Example?	5	CO3	K3
d. What is Time Stamp? Explain Two methods of generating Time Stamp?	5	CO4	K2
4.a. Explain briefly DDL Statements with Syntax and Examples	5	CO3	K2
b. What is Join Operation? Explain different Types of Joins with Syntax and Example.	5	CO2	K2
(OR)			
c. What are the different components of DBMS?	5	CO1	K1
d. What is a Database Management System and how is it different from a File System?	5	CO1	K1
5.a. Explain about three tier database architecture with suitable diagram.	5	CO1	K1
b. What is a Schema? Discuss its types	5	CO1	K1
(OR)			
c. Briefly explain different types of keys in Relational data model	5	CO3	K2
d. What is DBMS? Explain client/server architecture with a suitable diagram.	5	CO1	K1
6.a. Explain RAID in brief.	5	CO4	K1
b. Define transaction. Explain ACID properties.	5	CO3	K2
(OR)			
c. Explain Hashing in brief.	5	CO5	K4
d. Explain the Indexing in brief.	5	CO5	K4

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