

GYANMANJARI INNOVATIVE UNIVERSITY
Gyanmanjari Diploma Engineering College

Diploma Engineering End Semester Examination (ESE)-Summer - 2026

Enrollment No.: _____

Date: 25/05/2026

Subject Code: DETCE14212

Semester: 4

Subject Name: Advance Database Management System

Total Marks: 100

Time: 10:30AM To 01:30PM

Instructions:

1. Question No. 1 is Compulsory.
2. Make Suitable Assumptions wherever necessary.
3. Figures to the right indicate full marks.

	Marks
Q.1 (a) Explain DeNormalization. DeNormalization જણાવો.	05
(b) Explain ACID property with details. ACID property વિગતવાર જણાવો	05
(c) Explain what is Distrinuted database ? With architecture. Distrinuted database એટલે શું? તેને architecture સાથે જણાવો.	10
Q.2 (a) What is concurrency in database. Database ની અંદર concurrency એટલે શું?	05
(b) What is database fragmentation? database fragmentation એટલે શું?	05
OR	
(b) Explain what is Data and Information. Data અને information એટલે શું તે જણાવો.	05
(c) What is Cursor explain it with its types. Cursor ને તેના પ્રકારો સાથે લખો.	10
OR	
(c) Explain lock based concurrency control technique in detail. lock based concurrency control technique ને વિગતવાર જણાવો.	10
Q.3 (a) Explain what is Metadata? DBMS માં Metadata એટલે શું તે જણાવો.	05
(b) Explain Functional dependencies. Functional dependencies જણાવો	05
(c) Explain database recovery models. database recovery models જણાવો.	10
OR	
(a) Explain Bulk logged recovery model in detail. Bulk logged recovery model વિગતવાર જણાવો.	05
(b) Explain and Draw symbols for following in E-R Diagram 1) Weak Entity set 2)Derived attribute. આપેલ E R -Diagram ની symbols દોરી અને સમજાવો. 1)Weak Entity set 2)Derived attribute	05
(c) Explain order by and group by clauses with example. order by and group by clauses ઉદાહરણ સાથે સમજાવો.	10

Q.4 (a) Explain and Draw symbols for following in E-R Diagram 1) Composite attribute 2) Multivalued attribute. આપેલ E R -Diagram ની symbols દોરી અને સમજાવો. 1) Composite attribute 2) Multivalued attribute. 05

(b) What is MAC? MAC એટલે શું? 05

(c) Create student student tables Apply primary keys and Not NULL constraints. Student table create કરો અને તેમાં primary keys and Not NULL constraints ઉમેરો. 10

OR

(a) Explain Simple recovery model in detail. Simple recovery mode જણાવો. 05

(b) Explain Full recovery model in detail. Full recovery model એટલે શું. 05

(c) Explain foreign key with query and example. foreign key with query અને ઉદાહરણ સાથે સમજાવો. 10

Q.5 (a) Explain user role and privileges. user role and privileges જણાવો. 05

(b) Explain database auditing. database auditing એટલે શું તે જણાવો. 05

(c) Explain database trigger with its types. database trigger ને તેના પ્રકારો સાથે સમજાવો. 10

OR

(a) What is DAC? DAC એટલે શું? 05

(b) What is RBAC? RBAC એટલે શું? 05

(c) Explain Parallel database architecture with its types. Parallel database architecture ને તેના પ્રકારો સાથે જણાવો. 10