RollNo. | | | | | | | | | | |

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)
B.E. (Full Time) - END SEMESTER EXAMINATIONS, NOV / DEC 2024
GEOINFORMATICS
III rd Semester
GI 23301 & SPATIAL DATABASE MANAGEMENT SYSTEM
(Regulation2023)

Time:3hrs **Max.Marks: 100**

CO1	Understand the concepts, classification, architecture of DBMS, SDBMS
CO2	Provide the information on field based, object based, ER, Relational and UML models
CO3	Enable the SQL , extended SQL for handling spatial and non-spatial queries
CO4	Show the methods of storing, indexing, database recovery and data security concepts
CO5	Give the design and development environment of spatial data

BL – Bloom's Taxonomy Levels
(L1-Remembering, L2-Understanding, L3-Applying, L4-Analysing, L5-Evaluating, L6-Creating)

PART- A(10x2=20Marks)
(Answer all Questions)

Q.No.	Questions	Marks	CO	BL
1	Contrast Data Vs Information.	2	1	L2
2	Distinguish GIS Vs SDBMS.	2	1	L2
3	Specify the characteristics of Normal Forms.	2	2	L2
4	Mention the significance of Pictogram.	2	2	L2
5	Write the limitation of Views.	2	3	L2
6	Specify the two requirements of Trigger mechanism.	2	3	L2
7	List the three types of Database security.	2	4	L2
8	What do you mean by Database recovery?	2	4	L2
9	What is Spatial Database?	2	5	L2
10	Specify the use significance of Spatial Geometry.	2	5	L2

PART- B(5x 13=65Marks)
(Restrict to a maximum of 2 subdivisions)

Q.No.	Questions	Marks	CO	BL
11 (a)	Classify the different types of Database Management systems.	13	1	L4
	OR			
11 (b)	Explain the responsibilities of Database Administrators, Designers, End users and Software Engineers.	13	1	L4
12 (a)	Using a suitable example Explain the ER model with Pictograms.	13	2	L4
	OR			
12 (b)	Explain the Object-oriented Data modelling using a suitable example	13	2	L4
13 (a)	Explain the DDL and DML using a suitable example.	13	3	L4
	OR			
13 (b)	Explain the operations specified in the OGIS standard for extending SQL	13	3	L4
14 (a)	Explain the Geometry of Disk using a suitable fig.	13	4	L4
	OR			
14 (b)	Explain the algorithm for Z – curve and Hilbert curve using a suitable example.	13	4	L4
15 (a)	Explain the features of any one commercial and opensource Database.	13	5	L4
	OR			
15 (b)	Explain the features of any one commercial and opensource Spatial Database.	13	5	L4

PART- C(1x 15=15Marks)
(Q.No.16 is compulsory)

Q.No.	Questions	Marks	CO	BL
16.	Using a suitable example Evaluate the models of Spatial information available to model the Temperature and Parcel features and suggest the suitable one.	15	5	L5