ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)
B.E. / (Full Time) - END SEMESTER EXAMINATIONS, APR/MAY 2024
GEOINFORMATICS
IV Semester
GI 5402 & CARTOGRAPHY AND GIS
(Regulation 2019)

Time: 3hrs   Max.Marks: 100

CO 1   To introduce the elements of Cartography viz maps, coordinate systems and projections
CO 2   To provide the components of map layout, designs and production of maps
CO 3   To give the fundamentals of GIS and Data Models
CO 4   To explain the raster, vector data input methods and the topology concepts
CO 5   To describe the GIS Data Quality, Standards and the GIS outputs

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

PART- A (10 x 2 = 20 Marks)
(Answer all Questions)

Q. No	Questions	Marks	CO	BL
1	Write the Datum and Projection for Topographic and Open series maps.	2	1	L1
2	Distinguish Statement Vs Bar scale.	2	1	L2
3	What do you mean by Subtractive color Theory?	2	2	L2
4	What is the use of Map lettering?	2	2	L2
5	Define GIS.	2	3	L1
6	Contrast Nominal Vs Ordinal levels of measurements.	2	3	L2
7	What is the significance of Repeatability parameter in Digitizer?	2	4	L2
8	Define Topology.	2	4	L1
9	Mention the role of Geospatial Data Infrastructure?	2	5	L2
10	Specify the use of Video in Multimedia Products?	2	5	L2

PART- B (5 x 13 = 65 Marks)

Q. No	Questions	Marks	CO	BL
11 (a) (id)	Explain the Similarity and Affine transformation.	13	1	L4
	OR			
11 (b) (i)	Explain the different types of Projection based on the Developable surface and Aspects.	13	1	L4
12 (a) (i)	When to Generalize and Explain the methods of Cartographic Generalization using a suitable figure.	13	2	L4
	OR			
12 (b) (i)	Using a suitable figure Explain the Map Layout and the Geographic contents of map.	13	2	L4
13 (a) (i)	Explain the Data and Technology components of GIS.	13	3	L4
	OR			
13 (b) (i)	Using a suitable Figure Explain the Arc-Node Topological Data model.	13	3	L4
14 (a) (i)	Apply the concept of Georeferencing in Raster and their approaches in Geoprocessing.	13	4	L3
	OR			
14 (b) (i)	Apply the concept of Scanning and Vectorization in the Graphical Data conversion using a suitable flowchart.	13	4	L3
15 (a) (i)	Explain the following 1) Completeness 2) Positional Accuracy 3) Lineage	13	5	L4
	OR			
15 (b) (i)	Explain the various techniques of Geovisualizaton.	13	5	L4

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

Q. No	Questions	Marks	CO	BL
16. (i)	A company has got a project for the creation of Terrain Data for Kodaikanal (Hilly) and Nagapatinam (Plain) areas, Evaluate the types of 3D models available and suggest the suitable model for the above two study areas	15	3	L5