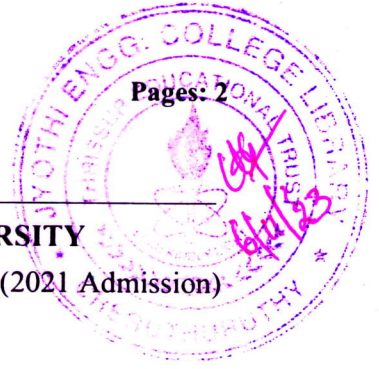Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fourth Semester B.Tech (Honours) Degree Examination June 2023 (2021 Admission)

Course Code: CET296

Course Name: GEOGRAPHICAL INFORMATION SYSTEMS

Max. Marks: 100   Duration: 3 Hours

PART A

(Answer all questions; each question carries 3 marks)   Marks

1	Define Remote sensing and list out its components	3
2	What is Data Quality Analysis	3
3	Differentiate Line-in polygon and Polygon-in polygon overlay	3
4	Discuss any two popular GIS software's.	3
5	Describe Cartography	3
6	Explain Georeferencing	3
7	Explain the data input mechanism in GIS platform	3
8	Define Network analysis in GIS software	3
9	List out three applications of WebGIS	3
10	Explain about GPS and its components.	3

PART B

(Answer one full question from each module, each question carries 14 marks)

Module -1

11	a)	Define GIS and briefly explain its components	7
	b)	Define Geometric transformation and its types with figure	7
12	a)	Explain Map Projection along with its classification	8
	b)	List out the applications of GIS software's	6

Module -2

13	a)	Differentiate between Vector data model and Raster data model.	8
	b)	Illustrate Vector to raster conversion in GIS	6
14	a)	Explain the map making elements in GIS	9
	b)	Explain Geodatabase management and the steps involved in geodatabase management.	5

Module -3

15 a) Explain the vector data analysis -Overlay in GIS with the help of figure.   10

   b) List out any four functions in Map Manipulation   4

16 a) Explain all about Network analysis   5

   b) Define Raster data analysis and explain any two operations with figure.   9

Module -4

17 a) Explain WebGIS and list out its applications   6

   b) Differentiate DEM and TIN   8

18 a) Explain the components of Data Quality   10

   b) Explain about Slope and aspect measure in GIS   4

Module -5

19 a) Explain remote sensing and its applications in GIS   9

   b) Explain Active sensors and Passive sensors in remote sensing   5

20 a) List out the applications of GPS   5

   b) Explain GPS data in GIS environment.   9

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