

Total No. of Questions : 8]

SEAT No. :

PD4219

[Total No. of Pages : 2

[6403]-13

T.E. (Civil)

**REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEM
(2019 Pattern) (Semester - VI) (301014)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Figures to the right indicate full marks.
- 3) Assume Suitable data, if necessary.
- 4) Use of electronic pocket calculator is allowed in the examination.
- 5) Neat diagrams must be drawn wherever necessary.

- Q1)** a) What are the three segments of GPS? Describe them briefly. [6]
b) Compare different GNSS Systems throughout the world. [6]
c) Write a note on types of GPS tracking. [5]

OR

- Q2)** a) Write Advantages of GPS. [6]
b) Define IRNSS and illustrate its structure. [6]
c) Write a short note on following: [5]
i) GLONASS system
ii) Galileo system

- Q3)** a) Explain in detail spectral signature curve with neat sketch. [6]
b) Define Triangular Irregular Network Model (TIN) and its applications. [6]
c) Explain in detail the concept of post processing and pre Processing. [6]

OR

- Q4)** a) Write down the importance of image enhancement in image processing. [6]
b) Write a note on digital image and analog image. [6]
c) Differentiate between supervised and unsupervised image classification. [6]

P.T.O.

- Q5)** a) Write a note on fundamentals of Cartography and map creation in GIS. [6]
b) Discuss the difference between drafting software's and GIS. [6]
c) Define Geographic Information System (GIS). What are the various sources from which data can be derived to be used for GIS? [5]

OR

- Q6)** a) Write in detail about various components of GIS. [6]
b) Discuss the spatial and non-spatial data with example. [6]
c) Illustrate the advantages of data storage in GIS. [5]

- Q7)** a) Discuss differences between raster and vector data formats. [6]
b) Illustrate the different projection systems and explain any one in detail. [6]
c) What is Georeferencing of GIS data? And explain its importance in the field of GIS. [6]

OR

- Q8)** a) Enumerate different Attribute Data models and explain any one of them. [6]
b) Explain the application of GIS in Urban Planning. [6]
c) Write down the procedure for conversion of raster data to vector data. [6]

