

Total No. of Questions : 8]

SEAT No. :

P261

[Total No. of Pages : 2

[6003]-339

T.E. (Civil)

**REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEM
(2019 Pattern) (Semester - II) (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) Give a brief account of Origin of Global positioning system. [6]
b) Write a note on applications of GNSS in surveying. [6]
c) Describe Global Navigation satellite system in detail. [6]

OR

- Q2)** a) Describe sources of error in GPS. [6]
b) Define DGPS. Write sources of errors of DGPS. [6]
c) Write a note on types of GPS tracking. [6]

- Q3)** a) What is image acquisition in Digital image processing? [6]
b) Differentiate between Visual and Digital image interpretation. [6]
c) Define Triangular Irregular Network Model (TIN) and its applications. [5]

OR

- Q4)** a) What is Digital Image Processing? What are the most common image processing functions. [6]
b) What is image registration? [6]
c) State the application of DEM. [5]

P.T.O.

- Q5)** a) Write in detail about various components of GIS. [6]
b) Illustrate Cloud computing with types and applications. [6]
c) Write a note on essential elements of GIS hardware. [6]

OR

- Q6)** 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) Illustrate the advantages of data storage in GIS. [6]

- Q7)** a) Define Raster and Vector Data types. Explain with neat diagram. [6]
b) Discuss applications of GIS in civil engineering. [6]
c) Write a note on application in land measurement work. [5]

OR

- Q8)** a) Enumerate different Attribute Data models and explain any one of them. [6]
b) Write a note on essential elements of GIS hardware. [6]
c) Discuss the applications in irrigation planning. [5]

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