PA-1434

[5926]-50

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) Describe Global Navigation Satellite system in detail. **[6]**

b) Define IRNSS and illustrate its structure. **[6]**

c) Write Advantages of GPS. **[6]**

OR

Q2) a) Compare different GNSS system throughout the World. **[6]**

b) Define DGPS. Write sources of errors of DGPS. **[6]**

c) Explain the type of Remote Sensing platforms. **[6]**

Q3) a) List the image interpretation keys and explains any two in detail with the help of necessary diagram. **[6]**

b) Merits and Demerits of Visual and Digital Image Interpretation. **[6]**

c) State the application of Digital Elevation Model (DEM) **[5]**

OR

Q4) a) Define Triangular Irregular Network Model (TIN) and state its application. **[6]**

b) What is Digital Image Processing? What are the most common image processing functions. **[6]**

c) State the application of Digital Terrain Model (DTM). **[5]**

P.T.O.

Q5) a) Enlist the application of GIS and explain any one detailed application in Civil Engineering. **[6]**

b) Write in detail about various components of GIS. **[6]**

c) Illustrate Cloud Computing with types and applications. **[6]**

OR

Q6) a) Define Geographical Information System and state Spatial Data types. **[6]**

b) Write a note on fundamentals of Cartography and map creation in GIS. **[6]**

c) State and explain essential elements of GIS. **[6]**

Q7) a) Define Raster and Vector Data types. Explain with neat diagram. **[6]**

b) What is Georeferencing of GIS data? And explain its importance in the field of GIS? **[6]**

c) Define DBMS. State its function. **[5]**

OR

Q8) a) Explain the application of GIS in Hydrology. **[6]**

b) What are the various methods of Georeferencing of GIS data? Explain in brief. **[6]**

c) Write GIS data types and its representation. **[5]**

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