PB3755

SEAT No. :

[6262]-13

T.E. (Civil Engineering)
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) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Assume suitable data if necessary.*
5) *Use of electronic pocket calculator is allowed in the examination.*

Q1) a) What are the three segments of GPS? Describe them briefly. **[6]**

b) Write a short note on following: **[6]**

    i) GLONASS system

    ii) Galileo system.

c) Write a note on types of GPS tracking. **[5]**

OR

Q2) a) Describe sources of error in SBPS. **[6]**

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

c) What is augmentation and explain about satellite-based augmentation.**[5]**

Q3) a) Explain in detail spectral signature curve with neat sketch. **[6]**

b) Differentiate between supervised and unsupervised image classification. **[6]**

c) Write down the need of digital image processing. **[6]**

OR

P.T.O.

Q4) a) Write a note on digital image and analog image. **[6]**

b) Define Triangular Irregular Network Model (TIN) and its applications.**[6]**

c) Discuss the steps in image processing system. **[6]**

Q5) a) Illustrate the advantages of data storage in GIS. **[6]**

b) Discuss the difference between drafting software's and GIS. **[6]**

c) What are the functionalities of GIS? **[5]**

OR

Q6) a) Write in detail about various components of GIS. **[6]**

b) Define Geographic Information System (GIS). What are the various sources from which data can be derived to be used for GIS? **[6]**

c) Discuss the concept of data transformation in GIS. **[5]**

Q7) a) Discuss differences between raster and vector data formats. What type of data is raster format best suited for? **[6]**

b) Explain the application of GIS in Demarcation of Dam Catchment. **[6]**

c) Illustrate the different projection systems and explain any one in detail.**[6]**

OR

Q8) a) Enumerate different Attribute Data models and explain any one of them. **[6]**

b) Explain in detail how to use remote sensing data in GIS. **[6]**

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

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