

Total No. of Questions : 8]

SEAT No. :

PB3755

[6262]-13

[Total No. of Pages :2

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]

