End Semester Examination, 2021
Semester - V
GEOGRAPHY (Honours)
PAPER - CC-12TH-Geospatial Technology (Theory)

Full Marks : 40

Time : 2 Hours

Group - A

Answer any <u>one</u> of the following :   **1x10=10**

1) Mention the components of GIS. Differentiate between raster and vector data structure with suitable illustrations. What do you mean by open source software ?   2+7+1=10

2) Discuss the application of Remote Sensing and G.I.S for forest monitoring with suitable examples and illustration.

Group - B

Answer any <u>four</u> of the following :   **4x5=20**

3) Write the working principle of Global positioning system.

4) Write a short note on Unsupervised classification method under digital image classification technique.

5) What are the sources of Geometric errors in digital images.

6) Explain ISODATA Classification methods with suitable illustration. 5

7) 20, 21, 15, 14, 10, 8, 27, 30, 19, 33, 26, 40, 37, 65, 41, 35, 45, 31, 7, 55, 52, 58, 64, 49 – Classify these DN Values into 3 classes using K-means Clustering method. 5

8) Write a note on radiometric correction that is made on a remotely sensed digital image. 5

Group - C

Answer any <u>five</u> Questions : **5x2=10**

9) Define multispectral image.

10) What are the segments of GPS ?

11) What are the Sources of errors in GPS ?

12) What is the difference between analog and digital image ? 2

13) What GPS can do for GIS ? 2

14) What is periodic line striping error ? 2

15) What do you mean by GCP ? 2

16) What do you understand by Clustering ? 2