U.G. 5th Semester Examination-2024 GEOGRAPHY

[HONOURS]

Course Code: GEO-H-CC-T-12 (Remote Sensing and GIS) [New Syllabus under CBCS]

Full Marks: 40

Time: $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

UNIT-I

(Remote Sensing)

1. Answer any three questions from the following:

 $2 \times 3 = 6$

- i) Why is EMR significant in Remote Sensing?
- ii) What is active sensor?
- iii) What is radiometric resolution?
- iv) Define Photogrammetry.
- v) What is the difference between image and photo in Remote Sensing?

2. Answer any one question from the following:

 $4 \times 1 = 4$

- i) Distinguish between airborne and spaceborne platforms.
- ii) Write a short note on image referencing scheme.
- 3. Answer any one question from the following:

 $10 \times 1 = 10$

- i) Explain different types of sensor resolutions and their applications with reference to LANDSAT missions.
- ii) Discuss the aerial photo interpretation keys with necessary illustrations.

UNIT-II

(Geographical Information Systems and Global Navigation Satellite System)

4. Answer any three questions from the following:

 $2 \times 3 = 6$

- i) What are non-spatial data in GIS?
- ii) What is overlay analysis in GIS?
- iii) What is spatial data in GIS?
- iv) What are the advantages of GIS software?
- v) What is Ground Control Point?

5. Answer any one question from the following:

 $4\times1=4$

- i) How is GIS significant in geographical study?
- ii) Write a short note on the principles of preparation of attribute table.
- 6. Answer any one question from the following:

 $10 \times 1 = 10$

i) Explain the characteristics of raster data and vector data with necessary illustrations.

5+5=10

ii) Bring out the principles of waypoint collection using GNSS and transferring the waypoints to GIS.

5+5=10