#### 2019

## B.Sc. (Honours)

# 5th Semester Examination

# **GEOGRAPHY**

#### Paper - C12T

# [Remote Sensing and GIS]

Full Marks: 40 Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## Group - A

Answer any five questions from the following.

 $5 \times 2 = 10$ 

- 1. Define electro-magnetic spectrum?
- 2. What is standard False Colour Composites?
- 3. What is Swath?
- 4. Write two characters of active sensor.

[ Turn Over ]

- 5. What do you mean by spatial and non-spatial data?
- 6. What is DBMS?
- 7. Mention the errors associated with GPS.
- 8. How is overlay analysis used in Geography?

#### Group - B

Answer any four questions.  $4 \times 5 = 20$ 

- 9. Write down the principles of image interpretation.
- Distinguish between Sun-Synchronous and Geo-Stationary Satellites.
- 11. Briefly describe the spectral signatures of vegetation and water.
- 12. Describe the process of triangulation or trilatteration in determining 3D position on earth surface using GP.S.
- 13. Explain the inter-relationship between wave length, frequency and energy.
- 14. Explain the inter-relationship between black body and real body emittance through Kirchoff's Law.

### Group - C

Answer any one question.

 $1 \times 10 = 10$ 

- 15. "The atmosphere acts as a constraint as well as assists to the remote sensing operations." Justify the statement.
- 16. Give a brief account of digital classification of satellite images. Highlight the advantages and disadvantages of digital image classification over visual techniques.