2023

B.A./B.Sc.

Sixth Semester

CORE - 14

GEOLOGY

Course Code: GLC 6.21 (Remote Sensing & GIS)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT_I

1. Define aerial photographs. Discuss its different types. 2+12=14

2. Write notes on the following:

 $7 \times 2 = 14$

- (a) Scale and resolution
- (b) Vertical exaggeration and distortion

UNIT-II

3. Discuss in detail the concepts of remote sensing.

14

4. Write notes on the following:

 $7 \times 2 = 14$

- (a) Remote sensing scanners
- (b) Characteristics of satellite

UNIT-III

- 5. Discuss in detail about the digital image processing and its rectification processes. 8+6=14
- 6. Write notes on the following:

 $7 \times 2 = 14$

- (a) Colour compositing
- (b) Image enhancement

UNIT-IV

7. What is datum? Briefly explain the major types of datum features.

4+10=14

8. Write notes on the following:

 $7 \times 2 = 14$

- (a) DEM analysis
- (b) Differences between co-ordinate and projection system

UNIT-V

- 9. Explain in detail the application of GIS in earth system sciences. 14
- 10. Write notes on the following:

 $7 \times 2 = 14$

- (a) Concepts of GPS
- (b) Integrating GPS data with GIS