

2022
M.Sc.
Fourth Semester
Core – 12
GEOLOGY
Course Code: MGLC 4.21
(Remote Sensing & GIS)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Define sensors and scanners. Explain different techniques used for imaging. 4+10=14
2. Write notes on the following: 7×2=14
 - (a) Electromagnetic spectrum
 - (b) Spectral response curves

UNIT-II

3. Define stereoscopic vision. Explain the conditions of stereoscopy. 4+10=14
4. Write notes on the following: 7×2=14
 - (a) Drift and crop in aerial photography
 - (b) Photo mosaic of aerial photographs

UNIT-III

5. Define satellite remote sensing. Explain its characteristics. 2+12=14
6. Write notes on the following: 7×2=14
 - (a) LANDSAT
 - (b) SPOT

UNIT-IV

7. Define image enhancement. Explain the different techniques used for image enhancement. $2+12=14$
8. Give geological interpretation of remotely sensed data for: $7 \times 2 = 14$
- (a) Structure
 - (b) Lithology

UNIT-V

9. Define map projection. Explain the types of map projections. $4+10=14$
10. Write notes on the following: $7 \times 2 = 14$
- (a) Geographic coordinate system
 - (b) Application of GPS in various fields
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