



QP CODE: 25050533



25050533

Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION, DECEMBER 2025

First Semester

M Sc GEOLOGY

Core Courses - GL010101 - GEOMORPHOLOGY AND GEOMATICS

2019 Admission Onwards

6380D5B5

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Differentiate endogenic and exogenic processes.
2. Differentiate uniform and non-uniform flow?
3. What is drainage composition?
4. Define radiometric resolution of an image.
5. Discuss revisit time of satellites.
6. Define aperture in a radar system.
7. Define fiducial marks in aerial photographs.
8. Define vertical exaggeration.
9. Define Spatial data.
10. What is DMS and DD format of coordinate values

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Most of the deserts lie in belts centred on latitudes 30° N and S. Explain.
12. Discuss Hypsometric analysis.
13. Discuss Horton's law of stream numbers.
14. Discuss the lateritization cycles in the geomorphic evolution of Kerala.
15. Describe the characteristics of Electromagnetic radiations used for various remote sensing systems.





16. Discuss the image distortions occur during aerial photography sessions.
17. Describe the hardware components of GIS.
18. Discuss IRNSS navigation and global positioning system.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Analyze the concepts of dynamic adjustment as defined by Gilbert.
20. Discuss the application of geomorphology in hydrogeology.
21. Discuss spectral library of hyperspectral remote sensing.
22. Discuss the application of remote sensing in geomorphologic mapping.

(2×5=10 weightage)

