2023
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 photogeology. Explain the main elements in interpreting aerial photograph. 2+12=14

2. Write notes on the following: 7×2=14
   (a) Electromagnetic energy
   (b) Along-track scanner

UNIT–II

3. Explain types of aerial photography. 14

4. Write notes on the following: 7×2=14
   (a) Stereoscopic viewing by stereoscopes
   (b) Perspective centre and principal point

UNIT–III

5. Explain some satellite exploration programs with its characteristics. 14

6. Write notes on the following: 7×2=14
   (a) METEOSAT
   (b) IRS

UNIT–IV

7. What is digital image processing? Explain radiometric correction and geometric correction. 2+12=14

8. Write notes on the following: 7×2=14
   (a) Geological interpretation of remotely sensed image on ground water potential
   (b) Colour compositing

UNIT–V

9. Explain DEM and various types of DEM. 14

10. Write notes on the following: 7×2=14
    (a) Space segment of GPS
    (b) Comparison of raster and vector data in GIS