

2021
M.Sc.
Third Semester
CORE – 09
GEOLOGY
Course Code: MGLC 3.11
(Engineering Geology & Hydrogeology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Explain soil classification according to ISSCS classification. 14
2. Explain the following: 7×2=14
 - (i) Engineering properties of soil
 - (ii) Rock quality designation

UNIT-II

3. Explain reservoir induced seismicity with the help of a case study. 14
4. Explain the following: 7×2=14
 - (i) Classification and causes of landslide
 - (ii) Environmental Impact Assessment (EIA)

UNIT-III

5. Briefly describe the various hydrological formations to be as aquifers. 14
6. Explain the following: 7×2=14
 - (i) Porosity
 - (ii) Hydraulic conductivity

UNIT-IV

7. Explain a typical well configuration for pumping test in non-leaky confined aquifer. 14

8. Explain geological methods used for ground water exploration. 14

UNIT-V

9. Briefly describe conjunctive management and conjunctive uses of water. 14

10. With a neat sketch, explain and identify different groundwater provinces of India. 14

