

2024
M.Sc.
Fourth Semester
CORE – 11
GEOLOGY
Course Code: MGLC 4.11
(Environmental Geology & Climatology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Discuss the impact of urbanization on groundwater. 14
2. Discuss the water logging problems due to indiscrete construction practices. 14

UNIT-II

3. What do you understand by radioactive waste management? Discuss the geological method for locating a safe repository for the disposal of high level radioactive waste (HLRW). 14
4. What are the main factors contributing to an energy crisis? Explain how renewable energy resources serve as viable alternatives to traditional fossil fuels. 14

UNIT-III

5. Discuss the causes of earthquakes. Add a note on the classification of earthquakes based on the depth of focus. 14
6. What is seismic hazard? Discuss the influence of neotectonics in seismic hazards assessment. 14

UNIT-IV

7. Elaborate on the classification of clouds based on Howard's system. 14
8. (a) Discuss the zonal distribution of pressure. 7
(b) How does Earth's orientation with respect to the Sun affect insolation? 7

UNIT-V

9. Discuss in detail the origin of Indian monsoon. 14
10. What are weather fronts? Explain the polar-front theory of midlatitude cyclone formation. 14
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