

B.E. Eighth Semester (Civil Engineering) (C.B.S.)
Elective - II : Advanced Engineering Geology

P. Pages : 2

Time : Three Hours



KNT/KW/16/7537

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.
 10. Diagrams and chemical equations should be given whenever necessary.
 11. Illustrate your answers whenever necessary with the help of neat sketches.
 12. Use of non programmable calculator is permitted.

1. Define RQD? Discuss its importance in Rock classification with some examples. **13**

OR

2. Define RMR? Explain various parameters use to classify the rock mass. **13**

3. a) Explain the principle of cable bolting. **13**

b) Explain various grouting methods with materials used in it.

OR

4. Explain the test required to calculate the water percolation of foundation. **13**

5. Write short notes on **any three**. **14**

a) Ground water trends & fluctuations.

b) Porosity, specific yield & storage capacity.

c) Pressure tunnel test.

d) Confined & unconfined aquifers.

OR

6. Describe the pumping test for confined aquifer under steady state condition. **14**

7. Describe the seismic method used for exploration of site for dam construction. **13**

OR

8. Describe various techniques of artificial recharging of ground water. 13
9. Explain how remote sensing technique is used in Land use/Land cover mapping of any state. 13

OR

10. Explain how remote sensing technique is used in watershed management. 13
11. Write short notes on: 14
- a) Stability of slopes.
 - b) Prediction & prevention of Landslides.

OR

12. Define Intensity & magnitude of Earthquakes. Explain the method of location of epicenter of earthquake. Add a note on seismic zones in India. 14
