2024
B.A./B.Sc.
Sixth Semester
CORE – 13
GEOLOGY
Course Code: GLC 6.11
(Engineering Geology)

Total Mark: 70 *Pass Mark: 28*
Time: 3 hours

Answer five *questions, taking* one *from each unit.*

UNIT–I

1. (a) Write notes on rock strength, porosity, and permeability as engineering properties of rock. 7
   (b) Elaborate on how geology plays a vital role in the field of engineering. 7

2. Discuss on the types of rocks as building stone. Elaborate on the processes of site investigation for engineering. 7+7=14

UNIT–II

3. Elaborate on the various treatment methods for foundation. 14

4. Give the significance of rock aggregates as construction material. 14

UNIT–III

5. Explain the parameters of rock mass rating. Elaborate with suitable examples? 7+7=14

6. Write notes on the following: 7×2=14
   (a) Rock mass classification
   (b) Rock quality designation

UNIT–IV

7. Elaborate on the following: 7×2=14
   (a) Characteristics of a dam to be qualified as a large dam.
   (b) Classification of a reservoir base on the storage purpose and explain silting on dam.

8. Describe the effects of faults and folds at tunnelling site. Give any three types of tunnels with a neat, labelled diagram. 6+8=14

UNIT–V

9. What is a bridge? Explain the various types of bridges with neat, labelled diagram. 2+12=14

10. (a) Elaborate on the complicated regions on selection of site for highways/roadways. 7
    (b) Give the causes and preventive measures of landslides. 7

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