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B.Sc. V Semester Examination

CBS-Vs/11

234329

GEOLOGY

Elements of Applied Geology

Course No- UGETE-501

Time Allowed-2½ Hours

Maximum Marks-80

Note: Attempt all the questions from section A and B and only two Questions from section C.

Section-A

Short answer type questions(70-80 words): (5×3=15)

1. Give a brief account on significance of rock aggregates as good construction material.
2. Describe briefly the environmental implication in dam construction.
3. Define the terms:
  - a) Culvert
  - b) Abutment
  - c) Piers
4. Concept and significance of RSR.
5. What is plasticity and toughness index?

Section-B

Medium answer type questions (250-300 words): (5×7=35)

6. Describe with suitable diagram the soil Profile.
7. Describe in detail the geotechnical/geological consideration for reservoir sites.
8. Explain the problems caused by groundwater in tunnel construction. Add a note on its remedial measures. <https://www.jktopper.com>
9. Discuss in detail the mechanism and significance of RQD.
10. What is Q system? Describe the parameters of Q system classification.

### Section-C

Long answer type questions (500-600 words):

(2×15=30)

11. Describe in detail about the geological consideration for the construction of highways in hilly, marshy and desert areas.
12. What are landslides? Give a detail account on the causes & classification of landslides.
13. Describe in detail the various problems associated with reservoirs. Add a note on their remedial measures.
14. Explain the preparation of engineering geological maps. Add a note on its importance and usage in engineering projects