

20P447

(Pages: 1)

Name:

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2022

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P GEL4 E05a - ENGINEERING GEOLOGY

(Geology - Elective Course)

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

I. Short answer type questions. Answer any **four** questions. Each question carries 2 weightage.

1. Uniaxial and triaxial compressive strength.
2. Binding properties of aggregates.
3. Shearing strength of soil.
4. Design and significance of an arch dam.
5. Major causes of land subsidence.
6. Hydraulicking.
7. Comminution.

(4 × 2 = 8 Weightage)

II. Short essay questions. Answer any **four** questions. Each question carries 3 weightage.

8. Role of a geologist in civil engineering constructions.
9. Slope stability analysis.
10. Geological aspects of highway construction.
11. Describe geotechnical cases study of any civil engineering project in India.
12. Types of tunnels.
13. Mineral legislation in India.
14. Sea bed mining.

(4 × 3 = 12 Weightage)

III. Long essay. Answer any **two** questions. Each question carries 5 weightage.

15. Discuss about surface and sub surface mining methods. Describe different methods of coal mining.
16. Define building stone. What are the different engineering properties of rocks?
17. Describe major parts of the dam. Discuss in detail the geological investigation to be made in selection of site for a Dam. Also discuss the reservoir problems.
18. Briefly explain the effects of earthquakes. Also describe the Protective measures against earthquakes. Add a note on the seismic design of buildings.

(2 × 5 = 10 Weightage)
