**B. A./B. Sc.: [FINAL YEAR]**

**End Semester Examination (VI Semester: 2020-2021)**

**SEMESTER: [VI] COURSE: [B.Sc.]**

**Subject Name with Subject Code: [ENGINEERING GEOLOGY, CC-13] *Date of Examination: ##-##-2021***

***Time: 2 Hours. Total Marks: 60***

***Notes:***

1. Attempt **ALL** parts from **SECTION A** (Total 20 Marks). Each part is of 2 Marks.

2. Attempt any **THREE** parts from **SECTION B** (Total 15 Marks). Each part is of 5 Marks.

3. Attempt any **TWO** parts from **SECTION C** (Total of 25 Marks). Each part is of 12.5 Marks.

4. Attempt all Sections.

5. Marks are written against each Section.

6. Missing data if any may be suitably assumed and mentioned.

**MODEL QUESTIONS**

**SECTION-A [20 Marks]**

Attempt **ALL** parts. All parts carry **TWO** marks. **[2\*10 = 20]**

**Multiple Choice Questions**

**1.**

**2.**

**3.**

**4.**

**5.**

**6.**

**7.**

**8.**

**9.**

**10.**

**SECTION-B [15 Marks]**

Attempt any **THREE** parts. Each part carries **FIVE** marks. **[5\*3 = 15]**

1. Write a note on the UCS of rocks with the help of examples.

2. Write a note on rock quality designation (RQD).

3. Discuss the engineering classification of rocks.

4. What do you understand by grouting.

5. Why the geologist do site investigation for any engineering projects.

6. Explain the installation procedure of mechanical rock anchors.

7. Write down the type of dam and its importance.

8. Explain pier, its type and importance.

9. Explain type of bridge.

10. Explain fundamental parts of road.

**SECTION-C [25 Marks]**

Attempt TWO parts. Each part carries TWELVE AND HALF marks. [12.5\*2 = 25]

1. Give an account on the geological considerations taken into account for construction of tunnels.

2. How are rocks geologically classified? Explain with examples.

3. Write a note on effect of porosity and density on engineering property of rocks.

4. Describe with an example how strength tests are conducted on geological materials.

5. What is building material?

6. Explain construction of road.

7. Explain the role of geologist in engineering construction.

8. What is landslide? Explain its mechanism.

9. What do you understand by preliminary site investigation?

10. How the site characterization will help in construction of engineering projects?

11. What is rock bolting? How this will help in the stabilization of tunnel?

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