

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (Sem.-4th)

ROCK MECHANICS & ENGINEERING GEOLOGY

Subject Code : CE-210

Paper ID : [A0610]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. SECTION-B contains **FIVE** questions carrying **FIVE** marks each and students has to attempt any **FOUR** questions.
3. SECTION-C contains **THREE** questions carrying **TEN** marks each and students has to attempt any **TWO** questions.

SECTION-A

1. Write briefly :

- (a) Weathering of rocks
- (b) Abrasion by rivers
- (c) Glacial Moraines
- (d) Apparent and true dip
- (e) Reverse fault
- (f) Earthquake waves
- (g) Stress Strain curve of Igneous Rocks
- (h) Epicentre
- (i) Shear Tests on Rocks
- (j) ROD

SECTION-B

2. Explain with the help of neat sketches various faults.
3. Discuss the principal types of faults on the basis of their movement.
4. Explain what physical tests would you carry out on hand specimens. Give examples.
5. What are earthquakes? Explain in detail the causes of earthquakes.
6. What are different techniques for improvement of ground conditions for Tunnels?

SECTION-C

7. What are the joints? How are they classified? Draw neat sketches.
8. Give an account of physical properties, chemical composition, occurrence and uses of MICA group of minerals.
9. Discuss in detail the plate load test to determine the bearing capacity of soil mass.