Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (2011 Onwards) (Sem.–3)

ROCK MECHANICS & ENGINEERING

Subject Code : BTCE-302

Paper ID : [A1114]

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 have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) What is a River Meandering phenomenon?

b) Differentiate between Granite and Basalt.

c) What are YARDANGS?

d) What are the different earthquake waves?

e) Define Permeability.

f) What is Flat Jack Test used for?

g) What is a Gravity Dam?

h) What are the different causes of Landslides?

i) What is the difference between True and Apparent Dip?

j) Differentiate between Uniaxial and Triaxial compressive strength.

SECTION-B

2. Discuss features produced by Deposition of Wind.

3. Discuss different types of Rock Bolting.

4. With the help of diagrams explain differences in Normal and Reverse Fault.

5. Discuss different properties of various Earthquake Waves.

6. Write a short note on Compressive Strength.

SECTION-C

7. Label various parts of a Fold. Discuss in brief engineering considerations you will adopt in folded terrain.

8. Describe in detail geological work performed by the Rivers along with resulting features.

9. Describe in detail *in situ* Shear Tests.