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

M.Code : 56073

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

Q1. Answer briefly :

a) Differentiate between HORST & GRABEN.

b) What are the typical characteristics of "S" Waves?

c) Draw a sketch of Normal FOLD showing various parts.

d) What are the different causes of Landslides?

e) Between Sandstone and Shale which rock is having higher porosity and why?

f) What is Flat Jack Test used for.

g) What are the different types of bolts used for Rock Bolting?

h) What is Yardang?

i) What is a Disconformity?

j) What is Triaxial compressive strength?

SECTION-B

Q2. Discuss features produced by Deposition of Glaciers.

Q3. Discuss salient features of a GRAVITY Dam.

Q4. Explain how do you recognize FAULTS in the field.

Q5. Write a short note on Seismogram.

Q6. Write a short note on Compressive Strength.

SECTION-C

Q7. Classify JOINTS based on Geometry. Discuss engineering consideration of joints.

Q8. Discuss Depositional features produced by Rivers with precautions required for engineering projects in fluvial terrain.

Q9. Using PLATE Bearing Test describe in detail. How insitu deformity of rocks is measured?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.