

PAPER ID-

Roll No. to be filled in your Answer Book

Roll No.

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**B.Tech.**  
**Civil Engineering, Sem-IV**  
**Engineering Geology (TCE-404)**

**Time- 3 Hours**

**Max marks: 50**

**NOTE:**

- i. All questions are compulsory.
- ii. Draw diagrams wherever necessary.
- iii. All questions carry equal marks. .

1. Attempt any **Two** parts of the following. 5 X 2
  - (A) Define Mineral. Describe the physical properties of minerals in brief
  - (B) Explain the Suitability of Rocks as an Engineering material
  - (C) Engineering consideration of Faults?
  - (D) What is the difference between true dip and apparent dip?
  
2. Attempt any **Two** parts of the following 5 X 2
  - (A) Draw a neat diagram of a fault and a fold showing all the different parts.
  - (B) What are unconformities? How are they classified.
  - (C) Why study of Dip and Strike is important in engineering practice.
  - (D) What are joints? Briefly classify various kind of Joints.
  
3. Attempt any **One** parts of the following 10X1
  - (B) Differentiate the confined and unconfined aquifer with the help of neat diagram.
  - (C) What are tunnels? What are the uses of tunnels? Discuss various aspects of geological investigation to be undertaken to select a site for tunnel

4. Attempt any **One** parts of the following

10X1

(A) Write Short notes on

- a. Syncline
- b. Anticline
- c. Porosity
- d. Permeability
- e. Building Stones

(C) Explain the following in brief

- (a) Oxides
- (b) Sulphate

5. Attempt any **One** parts of the following

10 X 1

(A) What are folds? Explain various types with the help of neat sketches.

(C) Discuss the wave generated during the Earthquake in details. (explain with the help of neat diagram)

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