

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 893

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Your Roll No.....

Unique Paper Code : 219405

Name of the Course : **B.Sc. (H) Geology**

Name of the Paper : Engineering Geology [GEHT-403]

Semester : IV

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. All questions carry equal marks.
3. Answer any five questions.

1. Write notes on the following :

- (a) Causes and prevention of landslides
- (b) Tunnel through basaltic rocks
- (c) Presence of faults on a dam site

2. Describe various methods of improving weak rocks for making it suitable for tunnel driving.

3. Discuss suitability of the following engineering sites :

- (a) A dam across a river downstream of a synclinal axis
- (b) A road passing through a hill slope has beds dipping in the direction of the slope.
- (c) Driving a tunnel across a fault

4. What are the building stones ? Considering various examples discuss various properties of good building stones.

P.T.O.

5. Write short notes on :
- (a) Hillslope stability
 - (b) Occurrence of tachylitic basalt in Tail channel area of a dam site
 - (c) Treatments given to the faults on damsites
6. Write short notes on :
- (a) Point load test
 - (b) Brazilian test
7. Give generalized section of an earth dam. Explain their failure and remedial measures.
8. "Tunnel design and tunnelling methods are dependent upon the geology of the area" Justify the statement with suitable sketches.