

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 1708 C Roll No.....

Unique Paper Code : 219405

Name of the Course : B.Sc. (Hons.) Geology

Name of the Paper : GEHT 403 : Engineering Geology

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. Answer any **five** questions.
3. **All** questions carry equal marks.

1. What investigations you would carry out at a site prior to starting construction of a civil engineering structure ? Discuss in detail.

2. What are the causes of landslide ? What precautions and remedial measures can be taken to minimize this natural hazard ?

3. Write notes on **any two** of the followings :

(a) Machu dam failure

(b) Foundation treatment for unconsolidated sediments

(c) Earthquake, a geological hazard

(d) Grouting

4. Give a detailed account of different kinds of construction materials used for different civil engineering works.

P.T.O.

5. Write short notes on **any three** of the followings :
- (a) Trend in material of dams
 - (b) Plasticity Index
 - (c) Graph depicting failure of earth dams
 - (d) Effective porosity
 - (e) Classification of rocks based on RQD
6. What are Index Tests ? Describe any two of these which are used in determination of rock strength.
7. Discuss any **two** of the followings :
- (a) Rock Mass rating
 - (b) Tunneling methods
 - (c) Spillways
8. Discuss in detail the environmental impacts of dams and reservoirs.