

Roll No. 3322199

24383

B. Tech. 6th Semester (Civil Engg.)

Examination – May, 2014

Engineering Geology

Paper : CE-312-F

Time : Three hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

1. (i) Draw interior structure of earth 4
- (ii) Classify various types of joints. 4
- (iii) What is meant by soil liquefaction ? 4
- (iv) Define sedimentary rocks. How are they formed in nature ? 4
- (v) Explain Dip and Strike. 4

24383- 3,550 -(P-2)(Q-9)(14)

P. T. O.

2. How study of Engineering Geology is useful for Civil Engineers. 20
3. Define Engineering Geology. Discuss the importance of geology in engineering projects. 20
4. What do you understand by weathering? List various weathering agents. Describe the geological works of a river. 20
5. (a) What is a rock forming mineral? 5
 (b) Discuss process of formation of minerals in nature. Which group of minerals is most common in occurrence? Briefly mention its salient features 7 + 3 + 5
6. (a) Define a fold. 5
 (b) How folds are classified? Explain with the help of neat sketches, important types of folds as distinguished on the basis of inclination of axial plane. 7 + 8
7. (a) How is remote sensing useful in geological exploration. 10
 (b) Describe the seismic method of site investigation. 10
8. Explain Earthquake focus and Earthquake intensity. Explain causes of earthquake. Describe methods of earthquake proof construction. 6 + 6 + 8
9. Give a general account of geological characters that have to be known for location of a DAM. How these characteristics influence the choice of the type of DAM to be constructed? 10 + 10