



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, April 2016
(2008 Scheme)**

08.806.9 Elective – IV : GROUND IMPROVEMENT (C)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. What are the different techniques of insitu stabilisation ?
2. Explain the principle of blasting in soil improvement.
3. Write short notes on preloading technique.
4. What is mechanical stabilisation ? What are the factors which affect the mechanical stability of a mixed soil ?
5. Explain the principle of electro osmotic stabilisation.
6. Describe the advantages of vaccum dewatering drainage system.
7. Explain the principle of reinforced earth structures.
8. Describe the functions of geotextiles. **(8×5=40 Marks)**

PART – B

Module – I

9. a) Describe the different methods of deep compaction. 10
 - b) Explain the principle involved in dynamic compaction. 10
- OR
10. a) Explain briefly the construction of stone column and lime piles. 10
 - b) Write short notes on vertical drains. 10





Module – II

11. a) Explain briefly the process of electro chemical stabilisation. **10**
b) Describe the different steps involved in the process of soil stabilisation using cement. **10**

OR

12. a) Explain the different methods of grouting. **10**
b) Describe the physical and chemical aspects of stabilisation. **10**

Module – III

13. a) Explain the functions of permanent drainage system installed after construction. **10**
b) Explain the working of a sing-stage well point system. **10**

OR

14. Write notes on :
a) Applications of reinforced earth. **10**
b) Different types of geotextiles and their uses. **10**
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