

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Summer 2017 - 18 Examination

Semester: 2
Subject Code: 03215180
Subject Name: Geosynthetics and Reinforced Earth

Date: 28/05/2018
Time: 2.00 pm to 4.30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1(A)** Design the reinforced soil wall for given data **(10)**
Mechanical Height of wall = 6.68 m
Wall Height = 6.3 m
Wall Design Height = 6.03 m
Calculate only external stability of wall and do check for sliding along base.
Assume the suitable data
- Q.1(B)** What do you mean by Soil Confinement? Enlist various methods adopted for soil confinement. **(05)**
- Q.2** Answer the following questions. (Attempt any three) (Each five mark) **(15)**
- (A) Describe construction steps for gabion structure in brief
(B) Describe steps for design of reinforced soil wall in brief
(C) Explain Cyclic triaxial test in brief
(D) Write a note on Geocomposites in brief
- Q.3 (A)** Write a note on gabion walls or crib walls **(07)**
- Q.3 (B)** Write notes on types & applications of anchors. **(08)**
- OR**
- Q.3 (B)** Write a note on types of Geosynthetics **(08)**
- Q.4 (A)** Enlist test methods for geotextiles and explain any one method. **(07)**
- OR**
- Q.4 (A)** Describe Uplift Capacity of Anchors in brief **(07)**
- Q.4(B)** Explain Electrokinetic stabilization of soil with applications and Advantages **(08)**