

Roll No

CE-604 (GS)**B.E. VI Semester**

Examination, May 2018

Grading System (GS)**Geo-Technical Engineering - I***Time : Three Hours**Maximum Marks : 70*

- Note:** i) Answer any five questions.
ii) All questions carry equal marks.

1. Explain formation of soil, soil composition and structure.
2. Discuss determination of permeability in laboratory and field.
3. Detailed notes on: **rgpvonline.com**
 - a) Boussinesq and water gaurd's analysis
 - b) Consolidation test
4. Discuss analytical and graphical methods of stability analysis.
5.
 - a) Describe the types of slope failures.
 - b) Discuss the selection of shear strength parameter in slope stability.

6. Discuss the graphical method of determination of earth pressure on cohesive soil.
7.
 - a) Describe consistency limits of soils.
 - b) Determination of preconsolidation pressure by Burmister method.
8. Answer any four of the following:
 - a) Arching of soils
 - b) Terzaghi theory
 - c) Triaxial compression test
 - d) Mohr's stress circle
 - e) Coulomb's theory
 - f) Formation of clay minerals on its behaviour
