

Government Engineering College, Dahod

Branch: Civil Engineering

Semester: 5th **Subject:** Soil Mechanics (2150609)

Re-Mid Exam Syllabus, April 2019

Chapter 1: Compaction

- (1) Explain standard/modified compaction test in brief.
- (2) What are the factors affecting the compaction of soil, explain the same.
- (3) Write a short note on effect of compaction on soil properties.
- (4) Write a short note on methods of compaction used in the field.
- (5) Explain in brief about field control of compaction.
- (6) Write a brief note on placement water content and field layer thickness.
- (7) Problems.

Chapter 2: Shear strength of soil

- (1) Explain mechanism of shear resistance.
- (2) Write a short note on Mohr-Coulomb strength theory.
- (3) Explain in brief about direct shear test.
- (4) Explain in brief about unconfined compression test.
- (5) Explain in brief about laboratory vane shear test.
- (6) Explain shear tests based on drainage condition.
- (7) Problems.

Chapter 3: Basics of Foundation

- (1) Define the term foundation and footing.
- (2) Write a short note on different types of shallow foundation.
- (3) Classify the deep foundation and explain about it.
- (4) Explain the factors affecting the selection of type of foundations.
- (5) Discuss the steps in Choosing Types of Foundation.