CE 313 (R-20)

Total No. of Questions : 10] [Total No.of Pages : 01

III/IV B. Tech. DEGREE EXAMINATIONS, DECEMBER - 2022

First Semester

CIVIL ENGINEERING

GEO TECHNOLOGY ENGINEERING - I

Time : **Three Hours** Maximum : **60** Marks

Answer ONE question from each Unit.

All questions carry equal marks. 5x12=60 M

UNIT - I

1. Explain various relations are used in Geo Graphical Engineering.

(OR)

2. a) Explain in detail about Atterberg Limits.
   b) Explain Grain Size Distribution in detail.

UNIT - II

3. a) Explain in detail about classification as per IS-Code.
   b) Describe the permeability of stratified soil deposits in detail.

(OR)

4. Explain Unified Soil Classification System in detail.

UNIT - III

5. a) Define Compaction Field? Explain compaction specifications and field control in detail.
   b) Explain Boussinesq's Equation in detail.

(OR)

6. a) Explain New Mark's influence chart in detail.
   b) How we can do the laboratory tests in compaction of fields.

UNIT - IV

7. a) Explain various principles of effective stress in detail.
   b) Explain Computation of Settlement in detail.

(OR)

8. Explain the exploration of field consolidation curve in detail.

UNIT - V

9. Describe the Shear strength of Claycy Soils and Sand in detail.

(OR)

10. Explain the Rankine's theory of Earth Pressure in detail.