

Reg. No. :

--	--	--	--	--	--	--	--	--	--

**Question Paper Code: 44102**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Civil Engineering

14UCE402 - SOIL MECHANICS

(Regulation 2014)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

- Identify for which the particle size distribution curve with hump is obtained for
  - Uniform soil
  - Well graded soil
  - Gap-graded soil
  - Poor graded soil
- Predict the range of optimum water content for standard proctor test for clay soil is
  - 6 to 10 %
  - 8 to 12 %
  - 12 to 15 %
  - 14 to 20 %
- A flow net has 4 flow channels and 20 equi-potential drops, the shape factor is
  - 1/5
  - 5
  - 8
  - None of these
- The possibility of quick sand condition will be there when flow of water to soil is
  - Horizontal
  - upwards
  - downwards
  - laterals
- Compaction of a soil is measured in terms of
  - dry density
  - specific gravity
  - compressibility
  - permeability
- When Consolidation of a Saturated soil Sample occurs, the degree of Saturation
  - increases
  - decreases
  - Remains constant
  - May increases or decreases



14. Describe about Vane shear Test. Give its merits and demerits. (8)
  15. Describe the types of slope failure with neat sketches. (8)
-

