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School of Engineering**B.TECH Civil Engineering
Mid Term Examination - Nov 2023****Duration : 90 Minutes
Max Marks : 50****Sem V - G1UA505T - Foundation Engineering**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Define insitu tests K2 (2)
- 2) Sketch the various types of footings K1 (3)
- 3) Describe the components of retaining wall with figure K2 (4)
- 4) Develop the effect of wall movement on earth pressure with neat sketch K2 (6)
- 5) The cone penetration resistance obtained in a clay soil in a CPT was 50kg/cm². Determine the undrained strength of the clay. The total overburden pressure at the depth was 100kN/m² K3 (6)
- 6) Illustrate the technical formalities of seismic refraction method with required figure K3 (9)
- 7) Prescribe the assumptions of coulomb's wedge theory. K4 (8)
- 8) Derive the correlation between angle of friction and standard penetration number K4 (12)

OR

Summarize the working procedure of cone penetration test and its relationship between D_r and q_c for sand K4 (12)