CLASS: MTECH   SEMESTER : I
BRANCH: CIVIL   SESSION : MO/18

SUBJECT: CE501-ADVANCED SOILD MECHANICS

TIME: 03:00   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1   Derive the relation between strain component & displacement.   [10]

Q.2   Analyse the bending of a beam by uniform load.   [10]

Q.3   Analyse stress distribution in a Hollow Cylinder subjected to internal pressure p_i and outer pressure P_o [10]
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Q.4   Analyse the torsion of an elliptical shaft.   [10]

Q.5   Explain Tresca[IS] Theory of failure and Van Mises theory of failure.   [10]

******26.11.18******M