COURSE CODE: 12M1WCE214   MAX. MARKS: 15

COURSE NAME: THEORY OF PLATES AND SHELLS

COURSE CREDITS: 03   MAX. TIME: 1 HR

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Assume suitable data if needed.

Q1. Deduce the relation between bending moments and curvature in pure bending of plates

(5 marks)

Q2. For uniformly loaded circular plates find the equation to calculate deflection. Assume that the circular plate has clamped edges. **(5marks)**

Q3. In case of pure bending of plates deduce equations for principal curvatures and principal planes. Also represent it in Mohr's circle. **(5marks)**