JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TERM 1 EXAMINATIONS–2023

M.Tech.–II Semester (Structural Engineering)

COURSE CODE (CREDITS): 11M1WCE214 (3)   MAX. MARKS: 15

COURSE NAME: Theory of Plates and Shells

COURSE INSTRUCTORS: Sugandha Singh   MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

1. Describe the various Theories of Plates along with conditions in which they may be applied.
[4]

2. For a Thin Plate, derive the following relationships: [6]
   a. Strain and Displacement [3]
   b. Stress and Strain [3]

3. Write, in detail, the assumptions used in Thin Plate Theory along with all contradictions involved in the same.   [5]