



In Sem Examination-II Summer 2024		
Exam Seat No.:		
Academic Year: 2023-2024	Semester: II	
Name of Programme: F. Y. M.Tech (Structural Engg.)	Pattern: 2022	
Name of Course: Theory of Plates and Shells	Course Code: CIV225107	
Max. Marks: 30	Duration: 1 hr	

<p>Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.</p> <ol style="list-style-type: none">1. This question paper contains 1 page(s).2. Answer to each new question is to be started on a new page.3. Assume suitable data wherever required, but justify it.4. Draw the neat labelled diagrams, wherever necessary.5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.	
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Question No. 1 Attempt following Question

- a) Discuss the Thin and Thick plate bending. (5) CO1

OR

- b) State the assumptions in the small deflection theory of thin plate. (5) CO1

- c) Derive the Equations of the Stress and Moment resultant of the Rectangular Plate. (10) CO1

OR

- d) Examine Navier's resolution for a simply supported rectangular plate under a Point Load (UDL). (10) CO1

Question No. 2 Attempt following Question

- a) Discuss the difference between the Classical plate theory and First-Order shear deformation Theory. (5) CO2

OR

- b) State the assumptions of Levy's plate theory. (5) CO2

- c) Explore Levy's solution for a simply supported rectangular plate exposed to a UDL. (10) CO2

OR

- d) Discuss Levy's solution of simply supported rectangular plate subjected to LVL. (10) CO2

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