

Ref. No. : Ex/Arch/T/311/2024(S)

Name of the Examinations: BACHELOR OF ARCHITECTURE THIRD YEAR FIRST SEMESTER SUPPLEMENTARY - 2024

Subject : ARCHITECTURAL CONSTRUCTION III

Time : 3 Hrs. Full Marks : 100

Please follow the instructions carefully:

- Neat, to the point, bulleted answers with small paragraph against each bullet is preferred
- Always use examples, details, section, materials etc.
- Drawings/ sketches/ diagrams with neat labelling carry extra credit

Answer **any five** questions from the following:

20 x 5 = 100

1. Draw proper plan, elevation and section of a sliding folding door with all its components for construction for a door which is 2.5M wide and 2.1M high. The material of the door can be selected as per your choice but the construction details should be according to material with fittings and fixtures.
2. What are the benefits of a sliding door over a panel door? Why is it used. Specifically categorize each benefits and explain each. What are the two major types of sliding door by mechanism, show the basic construction drawing for both.
3. A. What are the major components of a tensile structure? Explain each component for their details, forms, materials, design consideration etc.
B. Name some of the buildings/ architecture with tensile structure? Draw a tensile structure roofing for a hall with capacity of 100 people.
4. Draw the wall panelling details where on one side of the wall there is a room for doing yoga and on the other side there is a busy, noisy restaurant. Plan, elevation and section of the partition wall with the panelling has to be shown with necessary materials marking and details.
5. What is a pneumatic shelter? Describe the two major types of pneumatic shelter? Explain their construction methods and differences? In todays world how these structures are relevant, why are they used for.
6. Briefly explain the evolution of curtain walls from a construction point of view. What are the major characteristics of a curtain wall and what are the broad classifications or types? Each type should be neatly sketched to support your answer. How acoustic and thermal factors are taken care of in a glass – aluminium curtain wall.