

Ref. No. : Ex/Arch/T/311/2024

Name of the Examinations: **BACHELOR OF ARCHITECTURE THIRD YEAR FIRST SEMESTER - 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 four questions from the following :

25 x 4 = 100

1. A. What is a pneumatic shelter? Describe the two major types of pneumatic shelter? Explain their construction methods and differences? In today's world how these structures are relevant, why are they used for.
B. Draw the plan, elevation and section of a small lecture hall with 20 students capacity and few allied function using pneumatic structure.
2. A. What are the major components of a tensile structure? Explain each component for their details, forms, materials, design consideration etc.
B. Imagine there is a school building that you are designing, design a tensile structure for the assembly of students (replacement of assembly hall or field). The capacity of the students should be 200 numbers.
3. What are the differences between a normal panel door and a sliding folding door? Why is sliding folding door used explain pointwise with examples and sketches.
4. "False ceiling is a true ceiling" is this statement true or false? Justify your answer. What are the design considerations of a false ceiling? What are the different materials used in false ceiling? Explain any two materials and their construction details, along with neat explanatory sketches.
5. 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.