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End Semester Examination, December 2024

Program – B.ARCH, 5th Semester

BUILDING CONSTRUCTION & MANAGEMENT (APAR335A)

Time: 3 hrs.

Max Marks: **20**

Instructions: Marks are indicated against each question

- 1) Question No. 1 under Section-A is compulsory.**
- 2) Attempt any ONE question from Section-B**

Section-A (Compulsory)

Q1 a) Analyze the key properties of structural steel that make it suitable for use in long-span and short-span truss systems. Explain how these properties influence the selection of structural steel for roof and bridge applications. [CO-1] [L-4] **5**

Q1 b) In what ways do steel and timber differ in strength and durability when used in building construction? [CO-1] [L-5] **5**

Section-B (Any one)

Q.2 What do you understand from the term stud partition? Describe its function in construction. Also, include a detailed plan and sectional sketch, as shown in class. [CO-2] [L-2] **10**

OR

Q.3 Evaluate the suitability of using steel or timber as complementary materials in RCC column design for a high-rise building. Justify your choice. Sketch various type of steel joints. [CO-2] [L-2] **10**