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5. Differentiate between the framed structures and load bearing wall type of construction.
6. Explain the functional requirements of a building.

Register Number :

Name of the Candidate :

**5 4 1 9**

**B.Sc. DEGREE EXAMINATION, 2011**

(INTERIOR DESIGN)

(SECOND YEAR)

(PAPER - XVI)

**203. PRINCIPLES AND CONCEPT OF  
STRUCTURES**

*( Including Lateral Entry )*

December ]

[ Time : 3 Hours

Maximum : 60 Marks

**SECTION – A** (10 × 1 = 10)

*Answer any ALL questions.*

*ALL questions carry equal marks.*

1. Types of structural arrangements are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
2. Wind load is considered for a building of height is \_\_\_\_\_.

**Turn Over**

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3. The example of simply supported beam is \_\_\_\_\_ .
4. Moment in fixed beam is \_\_\_\_\_ than continuous beam.
5. The types of loads are \_\_\_\_\_ , \_\_\_\_\_ and \_\_\_\_\_ .
6. The bending of beam is proportional to \_\_\_\_\_.
7. Fe 250 steel is used for RCC – say True or False.
8. Wind load is major load for Mobile Tower – *Say True or False.*
9. Beam fails by bending phenomenon – *Say True or False.*
10. Beam will fail before column – *Say True or False.*

**SECTION – B** (4 × 5 = 20)

*Answer any FOUR questions.*

*ALL questions carry equal marks.*

1. Explain briefly the various loads acting on the structures.

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2. Explain in detail the various ways in which the structures are to be designed.
3. Explain with diagrams the types of beams.
4. Differentiate between Strength, Stiffness and Stability.
5. Explain the functional requirements of a building.
6. What are the advantages of pre-stressed concrete?

**SECTION – C** (3 × 10 = 30)

*Answer any THREE questions.*

*ALL questions carry equal marks.*

1. Explain in detail the various types of materials used for building construction.
2. What are the merits and demerits of fixed beams over continuous beams?
3. Explain the failure criteria of a column with neat sketches.
4. Explain the principal stress and strain with suitable examples.

**Turn Over**