

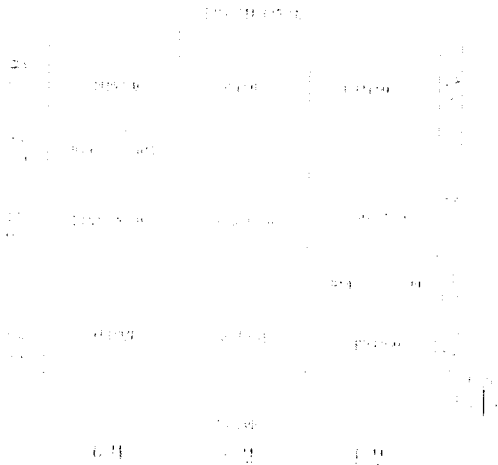
**B.I.D. (Sem.-IV) Examination**  
**402 Ar. Materials & Construction IV**  
**May-2017**

Time : 3 Hours]

[Max. Marks : 100

- Instructions:** (1) Figures to the right indicate full marks.  
 (2) Assume suitable data, if necessary.  
 (3) Neat proportionate sketches are necessary to explain theories

Q.1 ..... Take any intermediate appropriate area of 6 m<sup>2</sup> to design for the given conceptual plan of a residence. Provide mezzanine floor, staircase and false ceiling into it. Height restriction is 4.5 m. You may redesign the functions around your designated area. Redefine the periphery of your 4m<sup>2</sup> area according to the functions around as such that your design should NOT create haphazard or disturbance in overall plan. Provide all necessary plan, sections, elevations and details of your design. 35



----OR----

- A. Draw a detailed section of any staircase and elaborate all elements and technical terms. 25  
 B. Draw a typical section of Metal deck mezzanine floor for double height space in commercial office. Enhance all required elements and provide details if necessary. 10

Q.2 ..... Explain Installation of timber suspended ceiling through plan, detailed section, and enlarged details. 20

----OR----

Elaborate General Installation method for Gypsum Board false ceiling through a detailed section and enlarged details. Provide sketches of different view if necessary.

Q.3 ..... Design a composite mezzanine floor for industrial building. Elaborate the construction method through detailed sketches. Provide all necessary construction details. 15

----OR----

1. List the advantages of low height partition.
2. What are the basic criteria for designing the mezzanine floor?
3. What is newel post? Explain its use and functions, with neat sketches.

Q.4 ..... Make a comparative analysis of following. Provide all Specification regarding construction methods, enhance various use and functions, advantages and disadvantages and also give all necessary detailed sketches wherever required. 20

Glass Partition wall – Timber Partition wall – Brick Partition wall – concrete partition wall

Q.5 ..... Explain Classification of different types of staircases with neat and detailed sketches 10

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