

Seat No. : _____

N09-104

November-2014

Third Year B.Arch. / ID / BCT, (Sem. – III)

Building Construction – III (AR – 302)

(New Syllabus)

Time : 3 Hours]

[Max. Marks : 100

- Instructions :** (1) Draw neat sketches wherever required.
(2) Assume any missing data, if required.

1. Design a main door of size 1.8M × 2.7M, with material and operating system of your choice, generating plan, section, elevation and details explaining the design clearly. **30**

OR

Draw plan, elevation and section for aluminum sliding window of size 2.4 M × 1.2 M, with specific details for the following purposes :

- (a) Noise and dust insulation
 - (b) Rain protection
 - (c) Locking
2. Describe terms with neat sketches with dimension (any **four**). **20**
- (a) Ledge and Brace.
 - (b) Rebate, groove and notch.
 - (c) Pitch, eaves and ridge.
 - (d) Stringer and soffit.
 - (e) Lock rail, top rail and bottom rail.

3. Propose a form of the staircase and support system of treads for a residence having 3M height from floor to floor, choosing the dimension, and materials, along with details. **30**

OR

Illustrate with sketches, the number of ways, a tread of staircase can be supported. Explain with details and 2 of the support system, along with structural, construction and materials. Explain this for single material & composite order material separately.

4. Describe terms with neat sketches with dimension : **20**
- (a) Joinery detail for wooden frame and shutter.
 - (b) Pivot and door closer.
 - (c) Louvers-operable and fixed.
 - (d) Friction hinge and butt hinges.

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