Seat No. : _____

NO-123

December-2015

B.Arch., Sem.-III

AR-302 : Building Construction – III

Time : 3 Hours] **[Max. Marks : 100**

Instructions : (1) **All** questions are compulsory.
(2) Figure on the right indicates full marks.
(3) Draw neat sketches wherever required.
(4) Assume suitable data, if required and state the same.

1. Draw plan, elevation and section of wooden panelled door for the entrance of a residence of size 1.5 m × 2.1 m in 1 : 10 scale. Draw any three joinery and fixing details in suitable scale. **30**

OR

Draw plan, elevation and section of sliding folding door for the opening of size 2.4 m × 2.1 m in 1 : 10 scale. Draw any three joinery and fixing details in suitable scale.

2. Design and Draw plan, elevation and section of 1.2 m wide Straight flight RCC staircase with floor to floor height of 3.0 m. Calculate the no. of tread and riser required and draw two alternative details of railing and nosing each. **30**

OR

Design and draw plan, elevation and section of a wooden staircase for a residential bungalow where floor to floor height is 3.0 m. Assume suitable width of the staircase and draw connection details at ground and first floor level and newel post detail in suitable scale.

3. Explain with help of neat sketches any **five** of the following truss : **15**
   (a) Pratt Truss
   (b) Warren Truss
   (c) Fink Truss
   (d) North Light Truss
   (e) Howe Truss
   (f) Scissor Truss

4. Explain in brief with help of neat sketches any four type of compound wall based on material used for construction and draw foundation detail for any one type. **10**

5. Differentiate between any **two** of the following : **10**
   (a) Ledge and Brace
   (b) Jamb and Reveal
   (c) Sliding door and sliding folding door

6. Explain any **one** terms with help of neat sketches : **5**
   (a) Newel post
   (b) Louvered window
   (c) Waist slab

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