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**END SEMESTER (REGULAR/RETEST)
EXAMINATION, NOVEMBER/DECEMBER, 2024**

Semester : 3rd

Branch : Civil Engineering

Subject Code : Cv-303

CIVIL ENGINEERING DRAWING

Full Marks – 100

Time – Four hours

The figures in the margin indicate full marks
for the questions.

Instruction :

- All questions are compulsory.

1. Choose the correct answers : $1 \times 5 = 5$

(a) When drawings are drawn smaller than the actual size of the objects the scale used is said to be

- (i) Enlarging scale
- (ii) Reducing scale
- (iii) Decreasing scale
- (iv) Any one of the above

[Turn over

(b) Which among the following is not a principle of planning ?

- (i) Furniture requirements
- (ii) Aspect
- (iii) Prospect
- (iv) Respect

(c) A set of rules and guidelines established by local, regional, or national authorities to govern the construction, renovation, and maintenance of buildings is called

- (i) Building code
- (ii) Building bye-laws
- (iii) IS code
- (iv) All of the above

(d) The projections which help in securing the head of a door frame to the masonry is

- (i) reveals
- (ii) stops
- (iii) horns
- (iv) styles

(e) Coping is the

- (i) Horizontal course of masonry projecting from the face of the wall

- (ii) Horizontal moulded projection provided near the top of a building
- (iii) Covering placed on the exposed top of an external wall
- (iv) All of the above

2. Fill in the blanks :

1×5=5

- (a) The size of a step commonly adopted for residential building is _____.
- (b) If height of a building is 3.3 m and riser is 15 cm, the number of tread will be _____.
- (c) Newel posts are provided in _____.
- (d) The minimum width of a stair in residential buildings is _____.
- (e) A horizontal member that separates a door from a window over it is _____.

3. Write True or False :

1×5=5

- (a) The lowest part of a building which transmits the load to the soil is known as basement.
- (b) Nosing is provided in king post truss.
- (c) Mullion is a part of staircase.

(d) A roof which slopes in four directions is called gable end roof.

(e) The inclined support at the ends of treads and rises of a stair, is known as baluster.

4. (i) Draw to a suitable scale, the front elevation and sectional plan of a fully glazed window of size $1500 \text{ mm} \times 1200 \text{ mm}$. $10+5=15$

Or

(ii) Draw a suitable wooden roof truss for a room of clear span 6m. Show all the components with proper sizes. 15

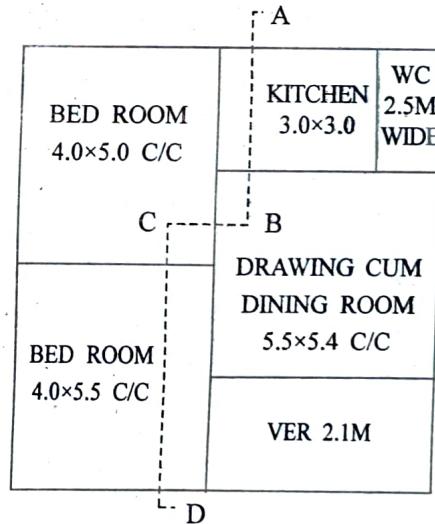
5. A dog-legged stair has to be accommodated in a room having size $3.0 \text{ m} \times 6.0 \text{ m}$ and floor to floor height is 3.30 m . Draw the sectional elevation of the stair to a suitable scale. 15

6. Draw the symbols of the following items : 10

- Cross-section of Wood
- Brickworks
- Double leaf window
- RCC works
- Glass.

7. The line plan of a single storey RCC residential building is given below. Draw to a suitable scale :

- The sectional plan 15
- The front elevation 10
- The sectional elevation along A-B-C-D 20



NOT TO SCALE

DATA :

Wall thickness = 15 cm

Column size = $25 \text{ cm} \times 25 \text{ cm}$

Plinth height = 60 cm

Room height = 3.2 m

RCC slab thickness = 10 cm

Parapet height = 50 cm

Assume any required data suitably.