Total No. of Questions : 7]   [Total No. of Printed Pages : 2

Roll No ....

CE/FT-305

B.E. III Semester

Examination, December 2016

Building Design and Drawing

Time : Three Hours

Maximum Marks : 70

Note: Attempt any four questions. Question No. 1 is compulsory.

1. Draw of a single-storied Rural Primary Centre with the following units :   28

Waiting Hall	4m × 6m
Doctors Room	2.8m × 4m
Dispensing Room	2m × 2.2m
Toilet	1.7m × 2.8m

   Total floor area is about 50 sq.m. also draw elevation and section.

2. Design and draw a half-paneled and half glazed door with the following dimensions.   14

Door size :	1200 × 2100mm
Door frame :	75 × 100mm
Top rail and Bottom rail :	150 × 40mm each
Lock rail :	200 × 40mm
Stiles :	100 × 40mm
Panelling :	25mm raised panel
Glass panes :	5mm thick

3. Draw a roof truss for a clear span of 4m., with the following dimensions :   14

 | | |
   |---|---|
   | Principal rafter | 125 × 60mm |
   | Tie beam : | 175 × 60mm |
   | Ridge board | 175 × 50mm |
   | Eaves board | 175 × 44mm |

4. Explain with neat diagram a grillage foundation under steel section.   14

5. The inside dimension of a staircase in a residential building are 2.00m × 4.60m. The height of floor is 3.30m and the roof of R.C.C. slab of thickness 120mm. designs and draw a proper layout of stairs.   14

6. Draw one vanishing and two vanishing point perspective from the following views of the objects as shown in fig.   14
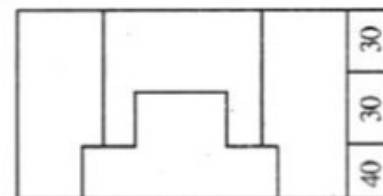
TOP VIEW
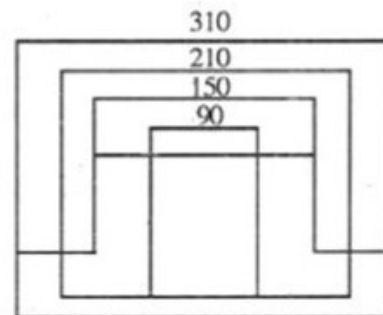
FRONT VIEW

Show plan, elevation and vertical section

7. Describe the following (any four) :   14
   a) Shallow foundation
   b) English Bond and Flemish Bond
   c) Floor area Ratio
   d) Under Reamed Pile
   e) King closer and Queen closer
   f) Types of Windows

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