

Civil / IV / CBS GS / BDD-I

4.6.14

QP Code : NP-19782

[REVISED COURSE]

(4 Hours)

[Total marks: 80]

NOTE:

- ix) Question No. 1 is compulsory.
- x) Attempt any three out of the remaining five questions.
- xi) Figure to the right indicates full marks
- xii) Assume any suitable data and clearly state the same.

- Q.1 It is proposed to construct a RCC Framed structure (G+1) Bungalow for a businessman with the following area requirements, same on each floor.
Drawing Hall = 25 m^2 , Master Bed Room = 25 m^2 , Children's Bed Room = 20 m^2 , Guest Room = 20 m^2 , Kitchen and Dining Room = 20 m^2 .
Provide verandah, staircase, passage and sanitary units as per bye laws.
- i) Draw the Ground Floor plan 14
 - ii) Draw the Front elevation 06
- Q.2 A) Draw the cross section passing through staircase, bath, WC of building drawn in Q. no.01 15
B) Draw the site layout plan for building drawn in Q. no. 01 clearly indicating various services, open spaces etc. 05
- Q.3 A) Draw the foundation plan with dimensions for the building drawn in Q no. 01. Also draw the section of one footing. 10
B) Suggest the type of pitched roof for a factory of size $8.5\text{m} \times 20\text{m}$. Draw the plan and section of the same showing all details. 10
- Q.4 A) Explain the 'principles of planning' used in planning of a residential building. 10
B) Explain the zoning regulation and Building bye laws in detail. 10
- Q.5 A) Explain with the help of sketches, Load bearing structure, framed structure and composite structure 07
B) Draw the plan, elevation and section of the half paneled and half glazed door. Assume the door size as $1.2\text{m} \times 2.1\text{m}$. 07
C) Explain carpet area, built up area and FSI. 06
- Q.6 Write short notes on the followings (any four)
i). Sun path diagram, ii). Wind rose (circulation) diagram. Iii). Functional planning of a residential building, iv). Sun shading devices, v). orientation of building. 20