

QP Code : 1528**[4 Hours]****[Total Marks: 100]**

1. Q.No. 1 is compulsory
2. Attempt any four questions from remaining six questions.
3. Assume any data suitably if not given and state it clearly.

1. It is proposed to construct a residential bungalow for an executive engineer in the suburban of Mumbai . The building is G+1 R.C.C. framed structure, having the following requirement. The plot area is 28 m x 26 m.

(i)	Entrance Lobby	: min 4 mt wide
(ii)	Engineer's office	: 40 sq mt
(iii)	Living Room	: 30 sq mt
(iv)	Bed Room [2 Nos.]	: 12 sq mt each
(v)	Master Bedroom	: 20 sq mt
(vi)	Kitchen cum Dining Area	: 25 sq mt
(vii)	Store	: 10 sq mt
(viii)	Reading Room	: 12 sq mt
(ix)	Guest Room with attached Toilet	: 20 sq.mt

Provide passages, staircase , sanitary unit, parking area etc. as per byelaws.

Draw Ground floor plan. [20]

2. (a) Draw first floor line plan of the building given in Q.No.1. [10]

(b) Draw the front elevation of the building given in Q.No.1. [10]

3. Draw the detailed sectional elevation passing through staircase and other important unit of building given in Q.No.1. [20]

4. (a) Explain Principle of Planning with neat sketches . [10]

(b) Explain F.S.I. with neat sketch. Define Carpet area, plinth area and built-up area [10]

5. (a) Draw the plan and section of a pitched roof over a hall measuring 10 m x 8 m [10]

(b) Draw the roof terrace plan of the building given in Q.No.1. [10]

6. (a) Draw the foundation plan for the building given in Q.No.1 [10]

(b) Draw the site plan showing proposed built-up area, internal road, parking area, open space etc of the building given in Q.No.1. [10]

7. (a) Draw plan and section of staircase for an educational building R.C.C.Framed (G+1) [10]

(b) Explain [i] sunpath diagram [ii] Various types of structures [10]