

(4 Hours)

[Total Marks: 80]

N. B. : (1) Question No. 1 is **compulsory**.(2) Answer any **three** questions from remaining **five** questions.

(3) Assume suitable data if required and state it clearly.

1. It is proposed to construct a **Boys Hostel** building as (G+1) RCC framed structure with the following requirements.
- | | | | |
|---------------------------|--------|-------------------------|--|
| 1) 2 Seated Rooms | 10 nos | -each 15 m ² | |
| 2) 3 Seated Rooms | 10 nos | -each 25 m ² | |
| 3) Guest Room | | - 20 m ² | |
| 4) Entrance and Reception | | - 20 m ² | |
| 5) Hostel Warden Room | | - 15 m ² | |
| 6) Indoor Games | | - 35 m ² | |
| 7) TV/Audio Room | | - 40 m ² | |
| 8) Newspapers & Magazines | | - 30 m ² | |
| 9) Kitchen | | - 40 m ² | |
| 10) Dining Area | | - 120 m ² | |
- Provide passage, toilet, Dog legged staircase, etc as per the bye-laws. Assume floor to floor height as 4 m .
Draw with suitable scale
- i) Draw the ground floor plan 15
- ii) Draw the line plan of first floor. 5
2. It is proposed to construct a Residential Bungalow as (G+1) R.C.C framed structure with the following requirements.
- | | |
|----------------------------|---------------------|
| a) Living Room | -24 m ² |
| b) Master Bedroom with A.T | - 20 m ² |
| c) Bed Room | - 18 m ² |
| d) Kitchen | - 12 m ² |
| e) Dinning Area | - 14m ² |
| f) Guest Room | - 15 m ² |
- Provide entrance porch for vehicle parking, verandah, staircase, passage and sanitary units as per byelaws.
Assume floor to floor height -3.3 m.
- i) Draw the **Ground Floor plan**. 15
- ii) Draw the **line plan** of first floor. 05
- 3 Draw the Sectional Elevation for the Boys Hostel you have planned in Q.no1. 20
- 4 (a) Explain all types of pitched roof in detail, with proper diagrams 10
- (b) Write principles of planning for Residential Building. 10
5. Draw Two -point perspective for the Boys Hostel you have planned in Q.no.1 20
6. (a) Explain various types of Staircases with proper sketches. 10
- (b) Explain Sun path diagram & Wind rose diagram with sketches. 10
