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[4857]-1007

S.E. (Civil) (Second Semester) EXAMINATION, 2015
ARCHITECTURAL PLANNING AND DESIGN OF BUILDINGS
(2012 PATTERN)

Time : Two Hours

Maximum Marks : 50

- N.B. :—** (i) Solve Q. No. 1 or Q. No. 2, Q. No. 3, or Q. No. 4 in the answer-book.
- (ii) Solve Q. No. 5 or Q. No. 6, Q. No. 7 or Q. No. 8 on the drawing sheet only.
- (iii) Figures to the right indicate full marks.
- (iv) Assume suitable data, if required.

1. (a) Explain the role of plan sanctioning authority for Co-op Housing Societies and Apartment. [7]
- (b) Write short notes on :
- (i) Submission drawings
- (ii) Working drawings. [6]

Or

2. (a) What is the importance of safety, amenities and services for town planning ? [6]
- (b) Explain the various safety aspects in detail. [7]
3. (a) Why is the ventilation necessary ? Also explain various objectives of ventilation. [6]

P.T.O.

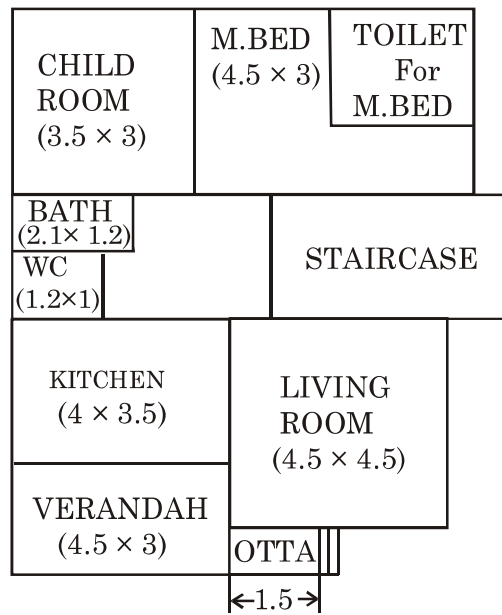
- (b) Explain various rules for lighting, drainage and sanitation as per building rules and byelaws. [6]

Or

4. (a) Explain the important aspects of Noise and Acoustics. [6]
(b) Distinguish between isometric and perceptive views. [6]

5. A line plan for a residential building is shown in following figure. Draw detailed floor plan with 1 : 50 or suitable. Use the following data : [13]

- (a) All external walls are of 230 mm thick
(b) All partition walls are of 150 mm thick
(c) RCC frame structure
(d) Beam sizes = 0.23×0.5
(e) Column sizes = 0.23×0.5
(f) Floor to floor height = 3.2
(g) Plinth height = 0.6
(h) Toilet for M.Bed = 1.2×2.1
(i) All dimensions are in meters.



Or

6. It is proposed to construct a bungalow for a doctor, the following are the requirements for accommodation : [13]

- (i) A drawing hall–25 m²
- (ii) Living room–25 m²
- (iii) Kitchen-cum-dining room–15 m²
- (iv) Guest bedroom–20 m²
- (v) Children's room–20 m²
- (vi) Master bedroom–20 m²
- (vii) Doctor's room–20 m²

Provide adequate verandahs, passages, sanitary units, staircase etc. as per bye-laws. The structure may be planned as G+1 RCC framed structure. Draw detailed ground floor plan.

7. It is proposed to construct a PWD Executive Engineer's office with the following data : [12]

- (1) Entrance + Waiting–12 m²
- (2) Administrative office–15 m²
- (3) E.E. office (attached toilet)–18 m²
- (4) Technical session–15 m²
- (5) Record room–9 m²
- (6) PA to Executive–9 m²
- (7) Sanitary block (Ladies and Gents)–suitable
- (8) Passage–1.5 m wide

Draw to a scale of 1 : 50 or suitable :

- (i) Line plan showing locations of Doors, Windows [10]
- (ii) Schedule of openings [2]

Or

8. It is proposed to construct a single-storeyed shopping complex with the following data : [12]

- (1) Entrance : of suitable size
- (2) Big shops : 6 nos., 30 m² each
- (3) Small shops : 10 nos., 20 m² each
- (4) Telephone booths : 4 nos. of suitable size
- (5) Separate sanitary blocks for ladies and gents
- (6) Staircase for future expansion
- (7) All passages 2.5 m wide
- (8) RCC framed structure
- (9) Assume additional data if necessary :

Draw to a scale of 1 : 50 or suitable, line plan with north line.