

Total No. of Questions—9]

[Total No. of Printed Pages—4+2

Seat No.	
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S.E. (Second Semester) (Civil) EXAMINATION, 2014

BUILDING PLANNING

(2008 PATTERN)

Time : Four Hours

Maximum Marks : 100

N.B. :— (i) *All* questions are compulsory.

(ii) Answers to the two sections should be written in separate answer-books.

(iii) Draw neat sketches wherever necessary.

(iv) Section two should be drawn on drawing sheet only.

(v) Figures to the right indicate full marks.

(vi) There will be no internal option for questions in section II.

(vii) Assume suitable data if necessary.

SECTION I

1. (a) Explain the requirements of Residential and Industrial zones need to be adopted during land zoning. [6]

P.T.O.

(b) List out the objectives of Development Plan (DP) and highlight the stages involved in preparation of DP. [5]

(c) Write a note on 7/12 Abstract. [5]

Or

2. (a) List out the principles of architectural planning and explain Mass Composition with sketch [5]

(b) Write a note on Submission drawings and Working drawings. [5]

(c) Explain in detail concept and applications of Rain water harvesting (RWH). [6]

3. (a) Write a note on Built up area and Carpet area. [5]

(b) Explain with sketch Natural ventilation due to Wind effect and Stack effect. [5]

(c) Define Daylight factor and explain with sketch components of it. [6]

Or

4. (a) Explain the concept of Transfer of Development Rights (TDR). [5]
- (b) Explain with sketch Building Line and Control Line. Mention the distances for the same for various types of roads. [6]
- (c) Write a note on Summer and Winter Air Conditioning. [5]
5. (a) Explain with sketch Double wall construction and Cavity wall construction. [6]
- (b) Write a note on Fire load. [6]
- (c) Explain in brief Electrical and telecommunication services in multistoried building. [6]

Or

6. (a) Explain the terms involved in water supply and drainage layout of residential bungalow. (Draw supportive sketch). [6]
- (b) Write a note on "Reverberation". [6]
- (c) Write a note on "Vertical circulation" in a building. [6]

SECTION II

7. Plan a residential building G+1 framed structure with the following requirements. Calculate the total built-up area and give schedule of openings. The ext. wall tk. is 230 mm and int. wall tk. is 150 mm. Indicate N-line. [20]

	Type of unit	No. of units	Internal area of unit in sq. m.
1	Living room	1	18
2	Bed room	2	12
3	Additional bed room with attached toilet	1	16
4	Kitchen	1	12
5	W.C.	1	1.5
6	Bath	1	2.8
7	Staircase	1	Use suitable dimensions

8. It is proposed to construct a post office with the following data :
- (a) Entrance-cum-waiting space = 50 sq.m

- (b) Public dealing counter (six in numbers) = total 30 sq.m.
- (c) Working space for other staff = 35 sq.m.
- (d) Post separation room = 30 sq.m.
- (e) Post master office = 15 sq.m.
- (f) Store room = 15 sq.m.
- (g) Meeting room = 20 sq.m.
- (h) Sanitary units : as per standards
- (i) All passages = 2000 mm wide
- (j) Assume any additional suitable data if necessary and mention it clearly with justification.
 - (i) Draw a scale 1 : 100 or suitable line plan showing location of doors and windows. [15]
 - (ii) Show line sketches of furniture arrangement. [3]

9. Draw to scale of 1 : 100 or suitable a two point perspective view of the steps shown in figure. [12]

- (a) Eye level at 1500 mm above ground level.
- (b) All dimensions are in mm.

- (c) Station point 5000 mm away from picture plane vertically below the corner of the steps touching the picture plane.
- (d) Retain all construction lines.

