

[01 - 2211]

II/IV B.E. DEGREE EXAMINATION.

Second Semester

Civil Engineering

BUILDING PLANNING AND DESIGN

(Common with Civil Environmental Engineering and
Dual Degree in Civil Engineering)

(Effective from the admitted batch of 2006-2007)

Time : Three hours

Maximum : 70 marks

Question No. 1 is compulsory.

Answer any THREE from the remaining.

All questions carry equal marks.

1. Design and draw to a suitable scale. (34)
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|-------------------------------|---|----------|
| Plan | : | 14 marks |
| Site plan | : | 5 marks |
| Elevation | : | 5 marks |
| Section | : | 5 marks |
| Schedule of doors and windows | : | 5 marks |

Design a Residential house for following particulars. Site particulars 15 m × 20 m (interior plot) with road parallel to width of site and facing East. Wind direction is S-SW-W. Climatic zone is hot and humid, Space requirement: Kitchen, dining room, master bedroom with attached toilet, child bedroom, common toilet, drawing room and stair case room. Plinth area should be between 130 and 150 sq.m.

2. Answer the following : (12)
- (a) Distinguish between detached and semi-detached houses.
 - (b) Mention the conditions for human comfort.
 - (c) What are the factors governing orientation?
 - (d) What is FAR?
 - (e) Mention the purpose of sunshades.
3. Write the significance of topography and nature of sub-soil in the selection of site for a residential building. (12)
4. (a) With neat sketches explain furniture requirements of
- (i) Kitchen
 - (ii) Dining room (6)
- (b) What is aspect? Explain. (6)

5. What is NBC? Write the building bye-laws for open spaces, plinth height and plinth area restrictions for different plot sizes. (12)

6. (a) Draw the conventional signs for

(i) Stone masonry

(ii) Concrete

(iii) Wood. (6)

(b) Draw the conventional symbols for

(i) Abed

(ii) Refrigerator

(iii) A kitchen sink (6)