

GANPAT UNIVERSITY

B. TECH. SEMESTER III CIVIL ENGINEERING REGULAR EXAMINATION NOV / DEC - 2011 C – 304: BUILDING PLANNING AND DESIGN

TOTAL MARKS-70

Time: 3 Hours

- Instructions:** - (1) Answer to the two sections must be written in **separate** answer books.
(2) Figures to the right indicate **full** marks.
(3) Assume suitable data if required.

Section - I

- Q.1** Plan a residential bungalow, single storey and load bearing structure to be built on plot admeasuring 20m x 17m. The road 10 m wide is on N-S side parallel to shorter side of plot. The provision for maximum built up area is 50 %. Internal stair case must be provided. Take FSF=1. Fulfill the following requirements at ground floor: (12)
- (a) Drawing room (b) two-bed room (one with attached toilet) (c) Kitchen cum store room (d) Dining Room (e) WC and bath. (f) Pooja room.
Assume necessary data required.
- Q.2** Draw front elevation of building you have planned in Question no. 1. (12)
- OR**
- Q.2** Draw the suitable section of Residential building you have planned in Question no. 1 with full details of specification and symbols. (12)
- Q.3 (A)** Draw a site plan and schedule of openings for building you have planned in Question no 1. (6)
- (B)** Explain in detail with neat sketch which types of precaution we should take in horizontal layout during the earthquake as an architect. (5)
- OR**
- Q.3 (A)** Draw symbols for :- Bell, Exhaust fan, Indian type W.C. , Wood Work, Revolving Door (5)
- (B)** Explain in detail with neat sketch which types of precaution we should take in vertical layout during the earthquake as an architect. (6)

Section – II

- Q.4 (A) What is light plane? Define $63^{\circ}\frac{1}{2}$ rule for fixing the height of buildings. (6)
(B) What is Orientation? Give C.B.R.I recommendation for orientation of buildings. (6)

OR

- Q.4 (A) Explain the function of different components of building with figure. (6)
(B) Draw neat sketch of (a) Fully paneled door (b) Section of R.C.C. Chajja with lintel. (6)

- Q.5 (A) What is building bye – law? Write short note on Floor space index or Floor area ratio. (6)
(B) List out principles of architectural composition. Explain (a) Unity (b) Contrast. (5)

OR

- Q.5 (A) What is meant by byelaws? Briefly explain the function of local authority. (6)
(B) Write short notes on (a) Roominess (b) Grouping. (5)

- Q.6 Draw two point perspective view of object shown in fig.1 below. Assume suitable data necessary. (12)

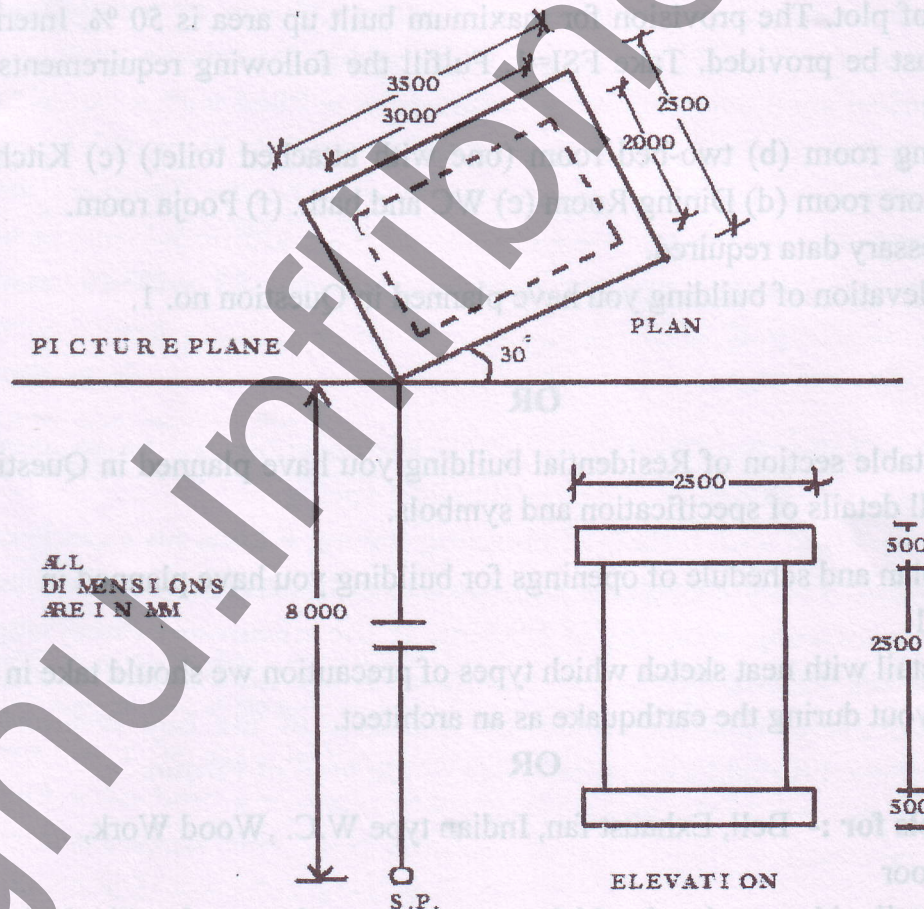


Fig:- 1

END OF PAPER