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**B.Tech. Civil (Construction Management)**

**Term-End Examination**

**June, 2011**

**ET-521(A) : PLANNING CONSTRUCTION  
OF BUILDINGS**

*Time : 3 hours*

*Maximum Marks : 70*

*Note : Attempt any five questions. All questions carry equal marks.*

1. A plot of land measures 10 m × 20 m. The front road is 18 m wide facing north. Service lane is on the rear measuring 6 m. 14  
Prepare a suitable plan of two bedroom residential house keeping in mind the restrictions imposed by local body as maximum covered area to be 75% of the total plot area with minimum set back of 2 m in front and rear of the building.
  
2. (a) Give the classification under which the following buildings fall. 7×1=7
  - (i) Rooming house
  - (ii) Hospitals
  - (iii) Gymnasiums
  - (iv) Stores

- (v) Computer Installations
  - (vi) Refineries
  - (vii) Cold storages
- (b) Describe briefly various steps involved in the Planning Process of a building. 7
3. Determine the minimum area of a plot for three storied residential building having four flats of 200 m<sup>2</sup> area in each floor for the given data : 14
- (a) Area for stair case and access should not exceed 25% of the ground floor area of the building, and
  - (b) FAR is to be restricted to 1.50.
4. (a) Explain major road blocks in the way of feasible solutions to the rural housing. 7
- (b) Discuss various factors to be considered for the selection of suitable type of foundation for a given situation. 7
5. (a) Describe different functions served by walls in a buildings. 7
- (b) Define Treads and Risers in a stair. 7
- How will you decide the dimensions of treads and risers in stairs ?
6. (a) Explain the design criteria of windows in a room. 7
- (b) Describe the different kinds of thermal insulation. 7

7. Write short notes on the following. **4x3½=14**
- (a) Deep foundation
  - (b) Orientation of buildings
  - (c) Components of Rural houses
  - (d) Accoustic insulation in buildings
8. Differentiate between the following. **4x3½=14**
- (a) Super structure and Sub structure
  - (b) Brick and Stone masonry
  - (c) Thermal and Vapour insulation
  - (d) Flush and Louvered doors
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