

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

00375

**Term-End Examination**

**June, 2015**

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

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** *There are two parts in the question paper. Part A is compulsory. Attempt any four questions from Part B carrying equal marks.*

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**PART A**

1. Prepare a suitable proportionate and dimensioned plan of a single storey residential building whose details are given below : 30
- (a) Two bedrooms
  - (b) One living cum dining room
  - (c) Two toilets (one of them attached with a bedroom)
  - (d) One kitchen
  - (e) One store
  - (f) One verandah / utility space

**Restrictions :**

- (i) Total covered area should not exceed 65% of plot area
- (ii) Set-back in the front : 5 m  
Set-back in the rear : 4 m  
Set-back on two sides : 2 m to 3 m
- (iii) At least one bedroom should be south facing

Also find out the size of the plot.

## PART B

2. (a) What are the basic requirements for finding the suitability of a site for all types of buildings ? How does an appropriate location influence the project ? 5
- (b) Write briefly about Humidity, Absolute Humidity and Relative Humidity. 5
3. (a) What are the factors to be considered for planning water supply for a building project, if water source is sub-surface ? 5
- (b) Describe the rural sanitary latrine with a sketch. 5
4. (a) What are the factors to be considered while deciding the depth of a foundation ? 5
- (b) Define the superstructure of a building. Describe the various functions served by walls in a building. 5
5. (a) Classify the doors from the operational point of view. Describe any two of them. 5
- (b) What is ventilation ? Describe the wall ventilators and roof ventilators. 5

6. (a) What is roofing ? Name the different types of roofing materials. Describe any two of them. 5
- (b) What are the various acoustic materials used ? Describe in detail any one of them. How are acoustic materials painted ? 5
7. Write short notes on any *four* of the following :  $4 \times 2 \frac{1}{2} = 10$
- (a) Bonds in brick-work
  - (b) Parliamentary hinge
  - (c) Treads and risers
  - (d) Bearing capacity of soils
  - (e) Battened and Ledged doors
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