

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2010

00179

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

Time : 3 hours

Maximum Marks : 70

Note : Attempt *any five* questions. All questions carry equal marks. Use of calculator is allowed.

1. Prepare a Plan of single storied residential building with proper dimensions keeping in view the following provisions : 14
- (i) 3 Bedrooms (at least one bedroom is with attached bath room)
 - (ii) One Dining cum living room.
 - (iii) One common toilet.
 - (iv) One kitchen.
 - (v) One store room.
 - (vi) One verandah.

Assume all standard dimensions. Work out the Plot area by following the standard building rules of a Municipal Corporation.

2. (a) What are the three factors which may cause local deviations from the zonal climate ? Explain. 7
- (b) Define Gravel, Sand, Silt and Clay. Describe briefly their behaviour as foundation material. 7
3. (a) State the guidelines as recommended by NBO for Rural housing on the following aspects: Density, Coverage, Openspace and Health building. 7
- (b) Briefly discuss Rural Sanitary Latrine. Give suitable sketches. 7
4. (a) Define shallow foundation and name various types used in Building construction. Describe briefly *any one* of them. 7
- (b) Explain English Bond and Flemish Bond with proper sketches in Brick works. 7
5. (a) Classify the windows first depending upon the type of material used and then sub classify them considering movements of shutters, location and the manner in which they are fixed. 7
- (b) Describe briefly 'Terracotta Facing' and 'Stucco'. 7

6. (a) Write briefly 7
- (i) Cement Paint.
 - (ii) Synthetic enamel Paint.
- (b) Draw a layout plan of proposed stairs in a 7
stair case having dimension as $1.6 \text{ m} \times 4.25 \text{ m}$
where the vertical distance between the two
floors is 3m.
7. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$
- (a) Water proofing of Mud wall.
 - (b) Thermal insulation.
 - (c) Suspended ceiling.
 - (d) Flush Doors.
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