

B.Tech. Civil (Construction Management)
BTCLEVI

Term-End Examination

December, 2011

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

Time : 3 hours

Maximum Marks : 70

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

PART - A

1. Prepare a suitable proportioned and dimensioned plan of a single storey educational building whose details are as given below : 30
- (a) Class Rooms - 5 Nos
 - (b) Library - 1 No
 - (c) Workshop - 1 No
 - (d) Laboratory - 1 No
 - (e) Common Room - 1 No
 - (f) Canteen - 1 No
 - (g) Games and Gymnasium Room - 1 No
 - (h) Teacher's Room - 1 No
 - (i) Principal's Room - 1 No
 - (j) Administrative office cum store - 1 No
 - (k) Toilets - 2 Nos
 - (l) Space for water cooler - 1 No.

Guide line for such types of buildings are as follows :

- (i) Administrative office and principal's room should be near the entrance.
- (ii) Common room/ canteen should be away from the study areas.
- (iii) Class rooms and other study rooms like tutorial rooms, library, laboratory etc. should be in relatively silent zone away from noisy roads,
- (iv) Toilets and drinking water cooler should be placed at prominently visible and easily accessible zone.

PART - B

2. (a) Write a classification of buildings based on function. 5
- (b) What are the data to be collected to plan an economical drainage system associated with a given building site ? 5
3. (a) What are the materials used for water proofing of briefly thatched roofs ? Explain. 5
- (b) List different types of construction of a wall with mud. 5
4. (a) What are various causes for settlement of foundations ? 5
- (b) Explain "application of reinforced brick-work" in construction. 5
5. (a) Explain, with a neat sketch, construction of a plywood partition in an office building. 5
- (b) What are the advantages of using concrete block masonry in comparison to brick and stone masonry ? Describe briefly. 5

6. (a) Write various considerations for fixing the location of a door. 5
- (b) Mention some interior finishing materials. 5
Explain any one of them briefly.
7. Write short notes on *any four* of the following :
- (a) Acoustic Insulation. $4 \times 2\frac{1}{2} = 10$
- (b) Suspended Coiling.
- (c) Mechanical System of Ventilation.
- (d) Sky Light and Fan Light
- (e) Fire Resistance
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