

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2011

**ET-521(D) : QUANTITY SURVEYING &
VALUATION**

Time : 3 hours

Maximum Marks : 70

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

1. (a) Explain in brief, the major sub-heads or groups into which a detailed estimate of a building project is divided. 7
(b) What do you understand by Cost Index ? 7
Explain its significance.
2. (a) A school building is proposed to be constructed for 600 students. Calculate the plinth area. It is given that 7
 - (i) Carpet area per student = 1.6 m^2
 - (ii) 20% of the built up area will be occupied by the corridors, verandah, lavatories, staircases etc.
 - (iii) 15% of the built up area will be occupied by walls.

(b) Write the units of measurement of the following items : 7x1=7

- (i) Honeycomb brick work
- (ii) RCC work in well steining
- (iii) Coping
- (iv) Glazing
- (v) Brick work in Arches
- (vi) Cornice
- (vii) A.C. Sheet roofing

3. (a) Explain the potential role of computers in building estimates. 7

(b) Discuss the detailed specification for painting. 7

4. Calculate the cost for 1 m³ of RCC 1 : 2 : 4 (1 cement : 2 coarse sand : 4 stone ballast of 20 mm gauge) work in beams. Assume suitable data needed. 14

5. (a) Explain various factors affecting valuation of land. 7

(b) Briefly discuss the basic principles of Land Acquisition Act, 1984. 7

6. Find the capital value of a premises consisting of a land and a well built house let out for Rs.6000/- per month inclusive of all taxes. **14**

Assume the following data :

Out goings : 20% of gross rent

Expected rate of return : 9%

Future life of the building : 65 years

Solve the problem by rental method of valuation.

7. Write short notes on the following : **4x3½=14**

- (a) Revised Estimate
- (b) Abstracting of quantities
- (c) Depreciation
- (d) Years Purchase

8. Differentiate between the following : **4x3½=14**

- (a) Value and cost
 - (b) Plinth and covered Area
 - (c) General specification and Detailed specification
 - (d) High level language and Low level language
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