

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2016

00352

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

Time : 3 hours

Maximum Marks : 70

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

1. (a) Discuss the various factors influencing the accuracy of estimate in building construction. 7
(b) How are bills of quantities made ? Give a step-by-step procedure. 7
2. (a) A school building is proposed to be constructed for 400 students.
Calculate the plinth area. It is given that
 - (i) Carpet area per student : 1.4 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. 7

- (b) Write the units of measurement of the following items : 7×1
- (i) Sand filling
 - (ii) Painting
 - (iii) Grouting of cracks
 - (iv) Spun yarn
 - (v) Mass concrete
 - (vi) Glazing
 - (vii) Pelmet
3. (a) Explain the role of computers in preparing building estimates. 7
- (b) Describe the detailed specifications of "Reinforced Brick-Work". 7
4. Calculate the cost of 1 m³ of R.C.C. 1 : 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate) work in beams. 14
5. (a) Discuss the various factors affecting valuation of land. 7
- (b) Briefly explain the important features of Urban Land (Ceiling and Regulation) Act. 7

6. A building fetches a gross rent of ₹ 15,000 per month. Assuming 30% outgoing for taxes, 20% for repairs and maintenance and 5% be set aside to accumulate the cost of building, determine its capitalized value at 6% interest per annum. 14

7. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Cost Index
- (b) Abstracting of Quantities
- (c) Years Purchase Method
- (d) Acquisition of Land

8. Differentiate between the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Revised and Supplementary Estimate
 - (b) Scrap and Salvage Value
 - (c) Technical and Material Specification
 - (d) Depreciation and Obsolescence
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