

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2018

00443

**ET-521(D) : QUANTITY SURVEYING
AND 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) Classify the construction estimates on the basis of purpose for which they are prepared. 7
- (b) How are bills of quantities made ? Give a step by step procedure. 7
2. (a) Calculate the plinth area of a building having a carpet area of 1800 m^2 . It may be assumed that 30% of the built-up area will be taken by corridors, verandahs, lavatories, staircases, etc., and 10% of the built-up area will be occupied by walls. 7

(b) Write the units of measurement of the following items : 7×1=7

- (i) Well sinking
- (ii) AC sheet roofing
- (iii) Sand filling under floors
- (iv) Sawing of timber
- (v) Quarrying of stones
- (vi) Cornice
- (vii) Mass concrete

3. (a) Explain the potential role of computers in quantity surveying and valuation. 7

(b) Discuss the detailed specification of Damp Proof Course (DPC) 2.5 cm. 7

4. Calculate the cost of 1 m³ of Ist class brickwork in superstructure with 20 cm × 10 cm × 10 cm brick with 1 : 6 cement sand mortar. Assume suitably the data which is not provided. 14

5. (a) What is rent capitalisation method ? Where is it used in valuation ? 7

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

6. The gross rent accruing to a property is ₹ 45,000 per year. Allowing 20% as deductions for repair, maintenance and management of the property, estimate the rental value of the property @ $i = 9\%$. Assume that the rent is to be realised for a very long period. 14

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

- (a) Revised Estimate
- (b) Computerisation of Estimate
- (c) Year's Purchase Method of Valuation
- (d) Elements of Natural Justice

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

- (a) Plinth area and Covered area
 - (b) High-level language and Low-level language
 - (c) Amount and Compensation
 - (d) Layout plan and Preliminary plan
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