

B.Tech. Civil (Construction Management)

Term-End Examination

June, 2016

00748

**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 calculator is permitted. Assume missing data, if any.

1. (a) Explain in brief the major subheads or groups into which a detailed estimate of a building project is divided. 7
- (b) What do you mean by Supplementary Estimate ? Discuss the need of preparing a Supplementary Estimate. 7
2. (a) Calculate the carpet area of a building having a plinth area of 1800 m². It may be assumed that 20% of the built area will be taken by corridors, verandah, 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

- (i) Rock excavation
- (ii) Damp proof course
- (iii) Coping
- (iv) Glazing
- (v) Honeycomb brick-work
- (vi) Barbed wire fencing
- (vii) Brick-work in arches

3. (a) Explain the features of a software which can be used in quantity surveying and valuation. 7

(b) Describe the 'detailed specification' of first-class brick-work. 7

4. Calculate the cost of 1 m³ of RCC 1 : 2 : 4 (1 cement : 2 coarse sand : 4 coarse aggregate) work in columns. 14

5. (a) What do you mean by valuation ? Discuss the purpose of valuation of immovable property. 7

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

6. A building, costing ₹ 2,00,00,000, has been constructed on a freehold land measuring 400 m² recently in a big town. Prevailing rate of land in the neighbourhood is ₹ 20,000 per m². Determine the gross rent of the property per month, if the expenditure on all the outgoings including sinking fund is ₹ 5,00,000 per annum.

Also assume net return

- (a) on building @ 8% on the cost of construction,
(b) on land @ 5% on the cost of land. 14

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

- (a) Bills of Quantities
(b) Acquisition of Excess Land
(c) Computerisation of Estimates
(d) Depreciation

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

- (a) Value and Cost
(b) Book Value and Market Value
(c) Covered Area and Carpet Area
(d) Layout and Preliminary Plan