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ET-521(D)

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2014

00380

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) Explain in brief, the steps adopted in preparing a Preliminary Estimate. 7

(b) How is bill of quantities prepared ? Give a step-by-step procedure for the same. 7

2 (a) A school building is proposed to be constructed for 700 students. Calculate the plinth area. It is given that 7

(i) carpet area per student = 2·0 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 : *7×1*

(i) Brick edging

(ii) Varnishing

(iii) Rock excavation

(iv) Skirting

(v) Tar felting

(vi) Sand filling

(vii) Spun yarn

3. (a) Describe the role of computers in managing a big building construction project. *7*

(b) Discuss the detailed specification of "first class brick work". *7*

4. Calculate the cost of 1 m^3 of providing and laying cement concrete 1 : 5 : 10 (1 cement : 5 coarse sand : 10 stone aggregate) in foundation and plinth. Assume the rate as per present market. *14*

5. (a) What do you mean by valuation ? List different methods of valuation of properties and explain any one method. *7*

(b) Discuss briefly the significance of "case laws" in valuation of a property. *7*

6. A building costing ₹ 20,00,000 has been constructed on a freehold land measuring 200 m^2 recently in a small town. Prevailing rate of land in the neighbourhood is ₹ 500 per m^2. Determine the gross rent of the property per month if the expenditure on all the outgoings including sinking fund is ₹ 59,000 per annum. *14*

Also assume net return

(a) on building @ 10% on the cost of construction.

(b) on land @ 5% on the cost of land.

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

(a) Revised Estimate

(b) Cost Index

(c) Depreciation

(d) Acquisition of land

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

(a) Unit method and Cube method of estimation

(b) Scrap and Salvage value

(c) Layout and Preliminary plan

(d) Depreciation and Obsolescence
