## B.Tech. Civil (Construction Management)

## $\square \square 13$ Term-End Examination

June, 2018

## 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 major subheads or groups into which a detailed estimate of a building project is divided.
(b) What do you mean by abstracting of quantities and how is it done?
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: $1.5 \mathrm{~m}^{2}$
(ii) $20 \%$ of the built-up area 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 for the following: $7 \times 1=7$
(i) Rough excavation
(ii) Stone work in wall facing
(iii) Barbed wire fencing
(iv) Damp proof course
(v) Brickwork in arches
(vi) Painting
(vii) Glazing
3. (a) State the features of a latest software which can be used in the preparation of building estimates.
(b) Discuss the detailed specification of cement concrete

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1 \text { (cement) : } 1 \frac{1}{2} \text { (fine aggregate) : } 3 \text { (coarse } \begin{gathered}
\text { aggregate). } \quad 7
\end{gathered}
$$

4. Calculate the cost of $1 \mathrm{~m}^{3}$ of RCC $1: 2: 4$ ( 1 cement : 2 coarse sand : 4 stone aggregate) work in beams. Assume suitable data wherever it is not provided.14
5. (a) What do you mean by valuation? Discuss the purpose of valuation of immovable property.
(b) Briefly describe the important features of the Urban Land (Ceiling and Regulation) Act.
6. A building is fetching a gross rent of ₹ 15,000 per month. Assuming $30 \%$ outgoings for taxes, $15 \%$ for repairs and maintenance and $5 \%$ to set aside to accumulate the cost of buildings, determine the capitalized value at $6 \%$ interest per annum. 14
7. Write short notes on the following : $\quad 4 \times 3 \frac{1}{2}=14$
(a) Supplementary Estimate
(b) Specification
(c) Depreciation
(d) Acquisition of Land
8. Differentiate between the following: $\quad 4 \times 3 \frac{1}{2}=14$
(a) Covered area and Carpet area
(b) Market value and Book value
(c) RAM and ROM
(d) Scrap and Salvage value
