# B. Tech. DEGREE EXAMINATION, MAY - 2015 <br> (Examination at the end of Final Year) <br> CIVIL ENGINEERING <br> Paper - V : Estimation \& Valuation 

Time : 3 Hours
Maximum Marks : 75

| Answer question No. 1 compulsory | $(15 \times 1=15)$ |
| ---: | :--- |
| Answer ONE question from each unit | $(4 \times 15=60)$ |

1) a) What is muster role?
b) What is carpet area?
c) Define estimating.
d) Define salvage value.
e) What is Annuity?
f) Define Mortgage.
g) Define toothing and bonding.
h) Define sinking fund.
i) List out the methods of estimating cost depreciation.
j) Explain Net income.
k) What are municipal taxes?
2) Define contract document.
$\mathrm{m})$ What do you mean by technical sanction?
n) Write note on a administrative approval?
o) Define gross rent?

## UNIT - I

2) a) Explain individual wall method with a suitable example?
b) Briefly explain the main items of works in estimation and degree of accuracy in estimating.

## OR

3) a) Explain the various methods of estimating?
b) Calculating the quantity of brick work in a segmental arch of 2.50 m span, 60 cm rise and 35 cm thick. The breadth of the wall is 35 cm .

## UNIT - II

4) Explain briefly earthwork in canals with different cases.

## OR

5) Estimate the quantity of earth work in cutting and banking for an irrigation canal.

Details of irrigation canal is as follows :
Bed width $=4 \mathrm{~m}$
Top width of left bank $=3 \mathrm{~m}$
Side slopes in cutting 1:1
Side slopes of both banks $11 / 2: 1$
Height of bank from the bed $=2.55 \mathrm{~m}$
L. Slope of the bed is 1 in 4000 m

There is no Traverse Slope of the bed and the ground levels at 6 Consecutive Stations at 50 m intervals are as given below :
R.L of bed level at station $1=98.00$

| Station | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| RL of GL | 100 | 100.30 | 100.55 | 100.60 | 99.60 | 99.00 |

## UNIT - III

6) Workout the unit rates for the following items of work.
a) Coarsed rubble stone masonry in $\mathrm{CM}(1: 6)$ for the basement of a building.
b) Brick masonry in $\mathrm{CM}(1: 8)$ with II class bricks for the super structure.
c) Plastering in $\mathrm{CM}(1: 6) 12 \mathrm{~mm}$ thick.
d) Cement Concrete 1:4:8 in foundation.

## OR

7) a) Calculate the rate for $10 \mathrm{~m}^{3}$ of coarsed rubble masonry in foundation in cement Mortar (1:6).
b) What do you understand about the bar bending and what factors plays major roll in the case of bar bending?

## UNIT - IV

8) a) Explain the various elements of cost with necessary examples.
b) What do you mean by depreciation? Explain any three methods of calculating depreciation.

## OR

9) Explain the following :
a) Wealth Tax.
b) Price and value.
c) Plinth Area estimate.
d) Cash book.
e) Technical Sanction.

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