

FIFTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/  
TECHNOLOGY—MARCH, 2013

QUANTITY SURVEYING – II AND VALUATION  
(Common to CE, EV and WR)

[Time : 3 hours

(Maximum marks : 100)

- [Note : 1. Missing data may be assumed.  
2. Sketches to be accompanied.  
3. Quantities to be worked out in standard form.]

PART—A

(Maximum marks : 10)

Marks

Answer the following questions in one or two sentences. Each question carries 2 marks.

1. How to calculate the length of hip rafter in a tiled roof ?
2. Write down the standard units of the following :
  - (i) RCC 1 : 2 : 4.
  - (ii) Earth work excavation in foundation.
3. For a standard hook in reinforcement, how much additional length is required ?
4. What is meant by standard rent ?
5. Differentiate between scrap value and salvage value. (5×2=10)

PART—B

(Maximum marks : 30)

II Answer any five of the following. Each question carries 6 marks.

1. Work out the quantity of wood work for door frames for the building shown in figure (I).
2. Work out the quantity of earth work excavation and brick masonry for the soak pit given in figure (VI).
3. Work out the quantity of ceiling plastering for the building shown in figure (I).
4. Work out the quantity of RCC 1 : 1.5 : 3 for beam and slab of the T-beam bridge shown in figure (V) for a length of 10 m.
5. Work out the quantity of RCC 1 : 1.5 : 3 for the sunshade of the building shown in figure (I). Thickness of sunshade at support and free end are 100 mm and 50 mm respectively.
6. Write detailed specification for Random Rubble masonry in cement mortar.
7. Write short notes on :
  - (i) Free hold property
  - (ii) Lease hold property (5×6=30)

## PART—C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each question carries 15 marks.)

## UNIT—I

- III Figure (I) shows the details of a Residential building. Work out the quantities for the following items :
- (a) Painting doors, windows and ventilators with synthetic enamel paint 2 coats.
  - (b) Work out the quantity of cement concrete 1: 4: 8 for foundation for the building shown in figure (I).

OR

- IV Work out the quantity of R.R. Masonry in cement mortar 1: 8 for foundation and basement.

## UNIT—II

- V Work out the quantity of brick masonry (1<sup>st</sup> class) in cement mortar 1: 4 using wire cut bricks for foundation and super structure of the pier shown in figure (II).

OR

- VI (a) Work out the quantity of reinforcement for the base slab of the retaining wall shown in figure (IV).
- (b) Prepare a detailed estimate for the retaining wall shown in figure (IV).
- (i) Earth work excavation.
  - (ii) RCC 1 : 1.5 : 3 for base slab and stem.

## UNIT—III

- VII For the building shown in figure (I), prepare an estimate for R.C. C. 1: 1.5: 3 for the following. Take reinforcement @ 80 Kg/m<sup>3</sup>.

- (a) Lintel.
- (b) Roof slab.

OR

- VIII (a) Prepare the bar bending schedule for the beam shown in figure (III).
- (b) What are the documents to be submitted for :
- (i) Getting building permit from local authorities.
  - (ii) Sanctioning loan from bank.

## UNIT—IV

IX (a) Define the terms :

(i) Outgoings

(iii) Year's purchase

(ii) Net income

(iv) Sinking fund.

(4×2=8)

(b) What are the different methods of calculating depreciation? Explain any one method in detail.

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OR

X Work out the value of a premises consisting of land and a house in a poor condition. The property receives a rental income of ₹ 6,000 per month inclusive of all taxes. The house is in such a condition that the effective life cannot be more than 20 years and after that the house shall have to be rebuilt at an estimated cost of ₹ 8 lakhs. The rent by comparison with other premises is fair and likely to be maintained for a very long period provided yearly repairs are regularly executed. Assume the following data :

Cost of annual repairs : 8% of the gross rent.

Re-building time : One year :

Interest on capital @ 7% and for redemption of estimated cost to rebuild the house @ 4%.

Other outgoings = 18%.

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