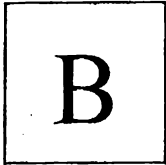
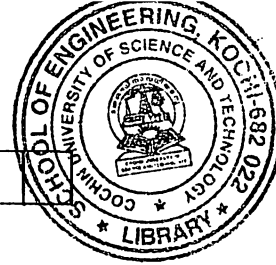


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**B.Tech. Degree VII Semester Examination November 2018**

**CE 1704 (A/B) QUANTITY SURVEYING AND VALUATION  
(2012 Scheme)**

Time : 3 Hours

Maximum Marks : 100

**PART A**  
(Answer *ALL* questions)

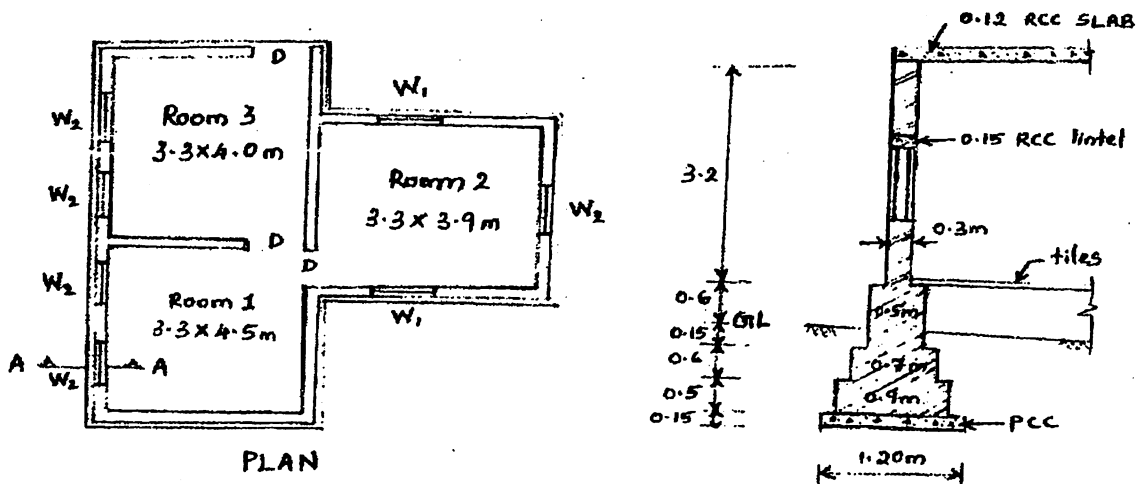
(8 × 5 = 40)

- I. (a) Write down the importance of Estimation.
- (b) What is rate analysis? Outline the factors to be considered for analysis of rate for various items of work.
- (c) Explain mid sectional area method and mean sectional area method.
- (d) List out factors to be considered while valuing an old building.
- (e) Differentiate between market value and book value.
- (f) How would you calculate the ingredients for 1m<sup>3</sup> of concrete?
- (g) An owner has to purchase a machine at a cost of ₹ 8000. If the life of machine is 18 years, calculate Sinking Fund to accumulate the above cost at 5% interest.
- (h) What do you understand by standard rent?

**PART B**

(4 × 15 = 60)

- II. Estimate the quantities required for the following items for the building shown. (15)  
Assume any missing data suitably.  
(i) Brick work for walls (ii) RR masonry for foundation and basement  
(iii) Plastering of walls



SECTION OF WALL AT A-A

OR

(P.T.O.)

- III. Estimate the quantity of earth work for a road between two stations A to B with the following data: (15)

Width of the road is 10 m at formation surface and side slope 2:1. The field book data for the portion of road are as below:

Chainage	:	0	1	2	3	4	5	6
Reduced level	:	120.90	122	121.60	119.90	118.60	118	117.40
Formation level	:	120.20	120.60	121	120.60	120.20	119.80	119.40

- IV. (a) Discuss the necessity of specification. (5)  
 (b) Assuming current schedule of rates for materials and labour, prepare data for plastering the walls in CM 1:5, 12 mm thick for 10 m<sup>2</sup>. (10)

OR

- V. (a) How will you analyse the rate of a particular item of work? (5)  
 (b) Discuss the detailed specification of 1<sup>st</sup> class brick work in cement mortar and RCC work for roof slab. (10)

- VI. (a) Differentiate between depreciation and obsolescence. (5)  
 (b) The cost of construction of a new building is ₹90,000 and life of the building is 60 years. But if the building is 20 years old, determine depreciation amount which should be deducted from cost of new building at 6% interest. (10)

OR

- VII. Explain the terms: (15)  
 (i) Speculation  
 (ii) Net income  
 (iii) Capitalized value  
 (iv) Declining balance method  
 (v) Betterment Charges.

- VIII. A property consists of a south facing plot of land having south, east and north sides measurements as 50 m, 150 m and 80 m respectively. It consists of an old building having total cubical content as 2500 m<sup>3</sup>. Assuming prime cost of construction of the building as ₹500 per m<sup>3</sup> and allowing 10% old materials value only for the building, what will be the value of the property if the front belt be estimated at ₹100/m<sup>2</sup>. The depth of front belt is 25 m. (15)

OR

- IX. Calculate the standard rent of a building with the following data. Cost of land is ₹7,00,000/- and cost of building ₹16,00,000/- Expected life of building is 65 years. Returns expected 5% on land and 8% on building. Annual repair 1% on the cost of building. Sinking fund on 4% interest basis on 90% of the cost of building, other outgoings 30% of the return from the building. (15)

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