Name : ....

Reg. No: ....

EIGHTH SEMESTER B.TECH (ENGINEERING) DEGREE EXAMINATION, MAY 2012

CE 04 801 - QUANTITY SURVEYING & VALUATION

Time : Three Hours   Maximum : 100 Marks

Schedule of rate of Kerala PWD and standard data book of Kerala PWD are permitted.

Answer All Questions.

I. a. Explain the necessity of an estimate and mention the different types of estimate.

   b. Explain   i. Supplementary estimate,   ii. Contingencies.

   c. Calculate the quantity of foundation concrete 1:4:8, for a building if the quantity of earthwork excavation for foundation is 80 m3, with a width of 90cm and depth 15 cm. Also calculate the quantity of RR masonry work for first footing having a depth of 60 cm and the offset on either side is 15 cm each wrt PCC.

   d. Write short notes on data book and schedule of rates.

   e. What is Bar bending schedule. Explain its significance in the preparation of estimates

   f. Work out the unit rate for earth work excavation for foundation in hard soil.

   g. Differentiate free hold property and lease hold property.

   h. Define Year's purchase. Work out the years purchase for 8% interest rate.

II. a. Prepare a detailed estimate of quantities of the following items of the building shown in fig 1.

   i. Earthwork excavation in foundation.

   ii. Brick work for superstructure.

   iii. Wood work for frames of doors and windows.

   iv. Ceiling plastering

OR

   b. Prepare a detailed estimate of quantities of the following items of the building shown in fig 1.

   i. PCC in foundation.

   ii. Plastering of walls inside and outside

   iii. Wood work for shutters of doors and windows.

   iv. Reinforcement for RCC slab.

III. a. Prepare a detailed estimate for supplying and laying 100 mm glazed SW pipes for 300 in length, jointing with CM. 1:2, including trenching up to a depth of 1m.

OR

   b. Write down the detailed specification for the following item:

   i. Colour washing two coats on newly plastered walls,

   ii. Anjili Wood work for frames of door and windows.

IV. a. (i) Prepare the rate of 1st class brickwork with cement mortar 1:6 using country burnt brick for ground floor using SOR and Data book. Provide necessary lorry conveyance of 25 km for each item.

(ii) Prepare a bar bending schedule for a typical RC simply supported beam of 6 m clear span and 30 cm x 60 cm in section, supported over 20 cm brick wall. Use Tor steel of 20 mm dia as main reinforcement and 10 mm dia as stirrups. Reinforcement in tension side is 6 nos , with two in bent up state

OR

b. (i) Prepare the rate of cement concrete 1:1.5:3 used in beam for ground floor using SOR and Data book. Provide necessary lorry conveyance of 30 km for each item.

(ii) Prepare a bar bending schedule for a typical isolated RCC column footing.

V. a. (i) Define Outgoings. Explain the various types of outgoings.

(ii) An old building has been purchased by a person at a cost of Rs. 25,0000/-, excluding the cost of land. Calculate the amount of annual sinking fund at 6% interest assuming the future life of building as 25 years and the scrap value of buildings as 15% of cost of purchase.

OR

b. A lease hold property is to produce a net income of Rs. 20,000/- per annum for the next 50 years. What is the value of the property. Assume that the land desires a return of 5% on his capital and the sinking fund to replace the capital is to accumulate at 6%. What will be the value of the property if the rate of interest for redemption of capital is 4%.
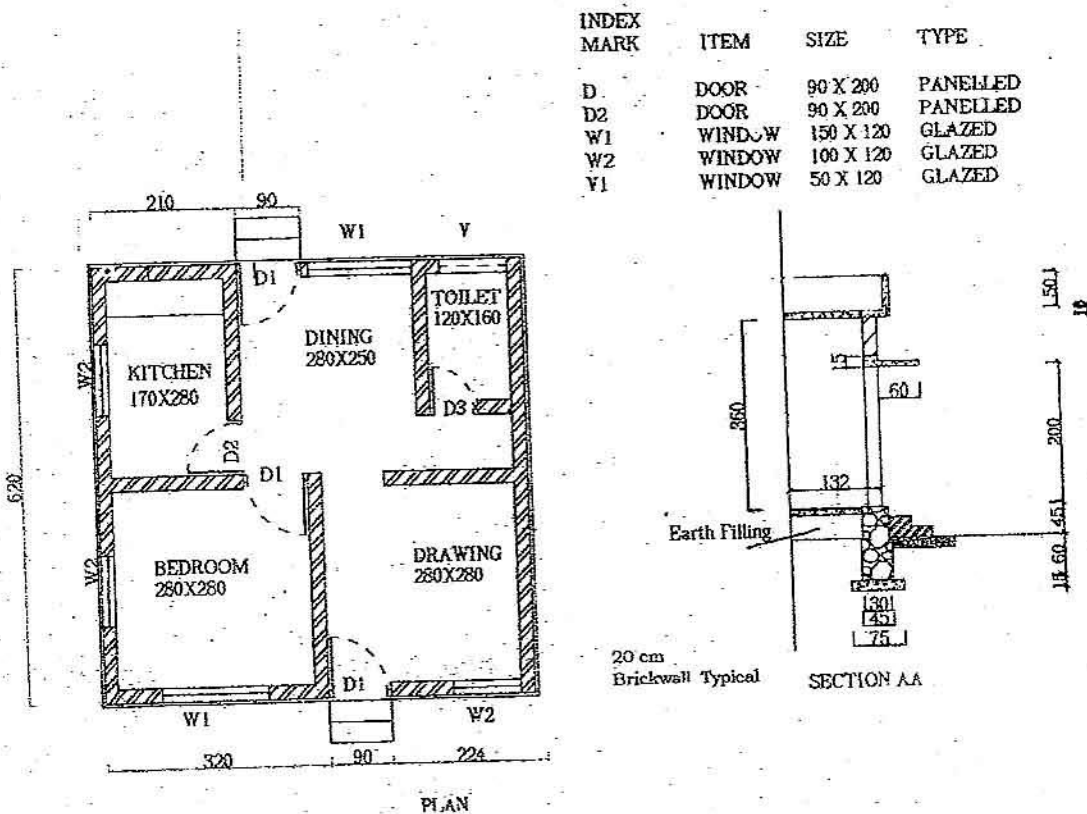
INDEX MARK	ITEM	SIZE	TYPE
D	DOOR	90 X 200	PANELLED
D2	DOOR	90 X 200	PANELLED
W1	WINDOW	150 X 120	GLAZED
W2	WINDOW	100 X 120	GLAZED
V1	WINDOW	50 X 120	GLAZED

PLAN

Fig. 1

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