B. Tech Degree VIII Semester (Supplementary) Examination September 2006

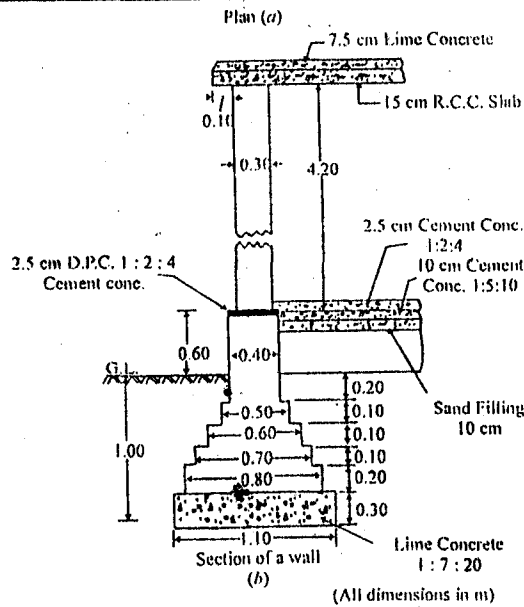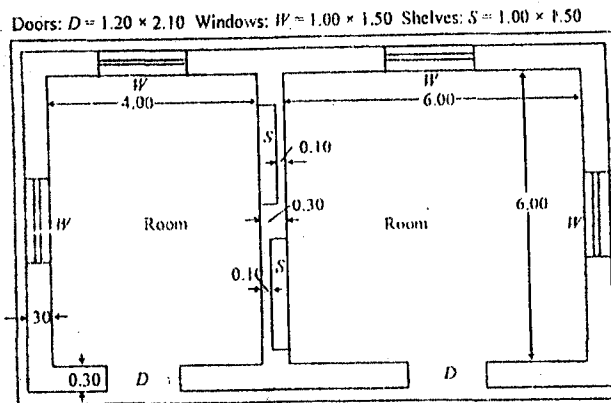## CE 801 A/B QUANTITY SURVEYING AND VALUATION
(2002 Admissions)

Time : 3 Hours

Maximum Marks : 100

(Any missing data may be assumed suitably)

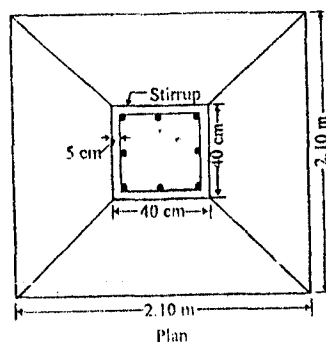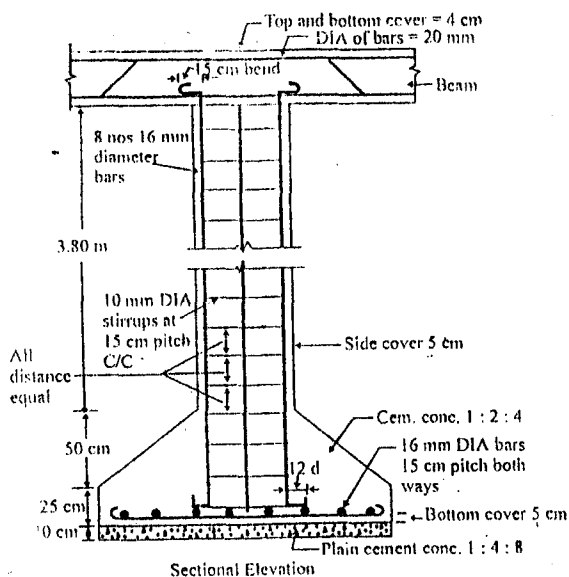I. Estimate the quantities of the following items of a residential building shown in figure.

Doors: $D = 1.20 \times 2.10$ Windows: $W = 1.00 \times 1.50$ Shelves: $S = 1.00 \times 1.50$

Plan (a)

7.5 cm Lime Concrete
15 cm R.C.C. Slab
2.5 cm Cement Conc. 1:2:4
10 cm Cement Conc. 1:5:10
2.5 cm D.P.C. 1 : 2 : 4 Cement conc.
Sand Filling 10 cm
Lime Concrete 1 : 7 : 20

Section of a wall (b)

(All dimensions in m)

    (i)   Earthwork excavation in foundation
    (ii)   Lime concrete in foundation
    (iii)   Ist class brick work in cm 1:4 up to plinth
    (iv)   First class brick work in super structure (1:6)   (40)

OR

II. Work out the quantities of steel in a R.C.C column shown in figure.   (40)

(Turn Over)

Top and bottom cover = 4 cm
DIA of bars = 20 mm
15 cm bend
Beam
8 nos 16 mm diameter bars
3.80 m
10 mm DIA stirrups at 15 cm pitch C/C
Side cover 5 cm
All distance equal
Cem. conc. 1 : 2 : 4
50 cm
16 mm DIA bars 15 cm pitch both ways
12 d
25 cm
Bottom cover 5 cm
10 cm
Plain cement conc. 1 : 4 : 8

Sectional Elevation

Stirrup
5 cm
40 cm
2.10 m
40 cm
2.10 m

Plan

III. (a) What is specification? What are the different types?
(b) Write down the specification for Ist Class BW in superstructure
(c) Write down the specification for RCC 1:1 ½ :3
(d) Write down the specification for earth work excavation. (20)

OR

IV. Calculate the materials required for the following item per m^3 :
(i) Cement concrete 1:2:4
(ii) Ist class BW in superstructure with 1:3 lime Surkhi mortar. (20)

V. Explain the following :
(i) Outgoings (ii) Sinking fund
(iii) Year of purchase (iv) Depreciation. (20)

OR

VI. A property has been purchased by a person at a cost of Rs. 50,000/- excluding the cost of land. Determine the amount of sinking fund annually deposited at the rate of 5% compound interest. Assume the future life of the building as 30 years and scrap value of the building materials as 10% of the cost of purchase. (20)

VII. A building in a city is let out @ Rs.5000/- P.M. The total outgoings of the property is estimated to be 15% of the gross income. Calculate the capitalized value of the property if the present rate of interest is 8% and life of the property is 50 years. (20)

OR

VIII. A building whose plinth area is 800 sq.m was constructed 10 years ago having the cost of land as Rs. 40,000/-. Find the capitalized value allowing for depreciation etc. In case this building needs immediate repair of Rs. 30000/-. What is the net value of the building. Take the present cost of construction per sq.m as Rs. 750/-. The rate of interest 6% for depreciation and further life of building 50 years. (20)

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