BTS 179 (D)

B.Tech Degree VIII Semester Examination in Civil Engineering, November 2002

CE 802 QUANTITY SURVEYING AND VALUATION

(1998 Admissions)

Time : 3 Hours Max. Marks: 100

(Assume suitable data, if necessary)

I. Estimate the quantities for the following items and also the cost, assuming suitable rate, for the building shown in the accompanying sketch. (Fig.1).

(i) Earth work in foundation.
(ii) Base concrete 1:4:8.
(iii) Brick work in superstructure using lime mortar.
(iv) Plastering outside walls using cement mortar 1:6. (40)

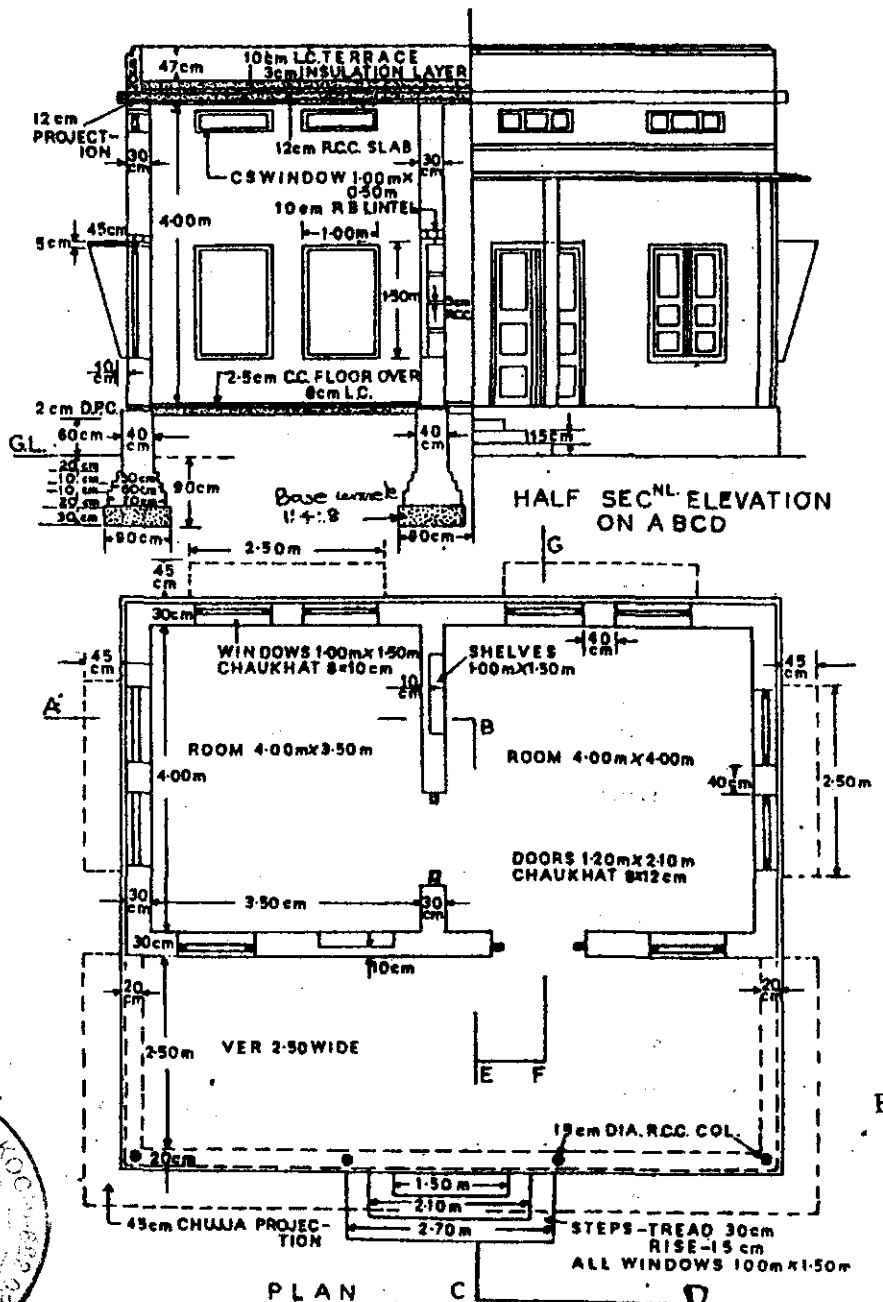

Fig.1

(Turn over)

OR

II. Prepare a detailed estimate of a R.C.C. beam of 8 metre clear span and 75 cm x 40 cm in section from the given drawing (Fig.2). Steel in detail and R.C.C. work shall be calculated separately. Also prepare a schedule of bars. (40)

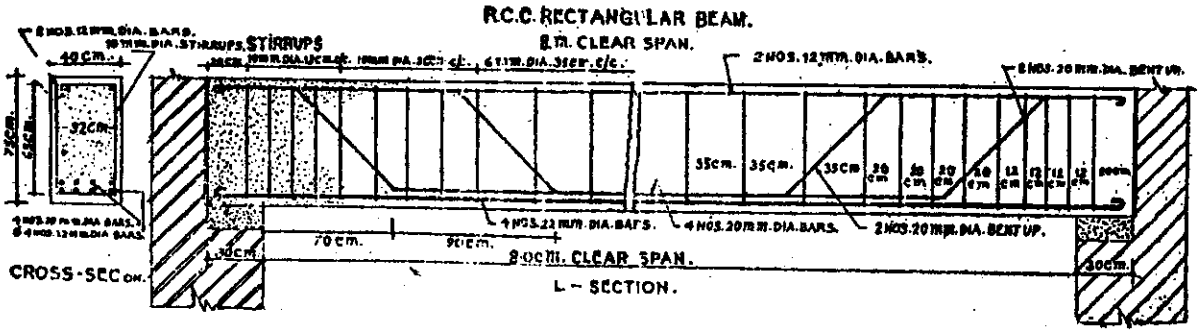

Fig.2

III. Write detailed specification for -

(i) Earth work in excavation in foundation
(ii) Reinforced cement concrete
(iii) Brick work I class
(iv) Pointing. (20)

OR

IV. Work out the cost per unit of the following items for work at the prevailing rates in your area -

(i) Lime concrete in foundation using 40 mm stone ballast (Proportion 1:2:4).
(ii) I - class Brick work in superstructure with 20 x 10 x 10 cm Brick with 1:6 cement mortar.
(iii) Ashlar masonry in superstructure with 1:6 cement mortar.
(iv) White washing one coat. (20)

V. (a) Define valuation. What are the purposes of valuation? (8)

(b) Explain the following:

(i) Year's purchase
(ii) Sinking fund
(iii) Depreciation. (12)

OR

VI. Describe the different methods to -

(i) calculate depreciation. (12)
(ii) A generator set has been installed in a building at cost of Rs.3,00,000/-. Assuming the life of the generator as 20 years, work out the amount of annual instalment of sinking fund required to be deposited to accumulate the whole amount of 4 % compound interest. (8)

VII. A three storied building is standing on a plot of land measuring 600 sq.m The plinth area of each storey is 300 sq.m. The building is of RCC framed structure and the future life may be taken as 70 years. The building fetches a gross rent of Rs.2000/- per month. Work out the capitalized value of the property on the basis of 6 % net yield. For sinking fund 3 % compound interest may be assumed. Cost of land may be taken as Rs.90/- per sq.m. Other datas may be assumed suitably. (20)

OR

VIII. A building is situated by the side of a main road of a city on a land of 600 sq.m. The built up portion is 18m x 14m. The building is first class type and provided with water supply, cable connection, sanitary and electric fittings and the age of the building is 40 years. Work out the valuation of the property. (20)

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