

**B.Tech. Degree VIII Semester (Supplementary) Examination in
Civil Engineering (Habitat Engineering and Construction
Management), October 2002**

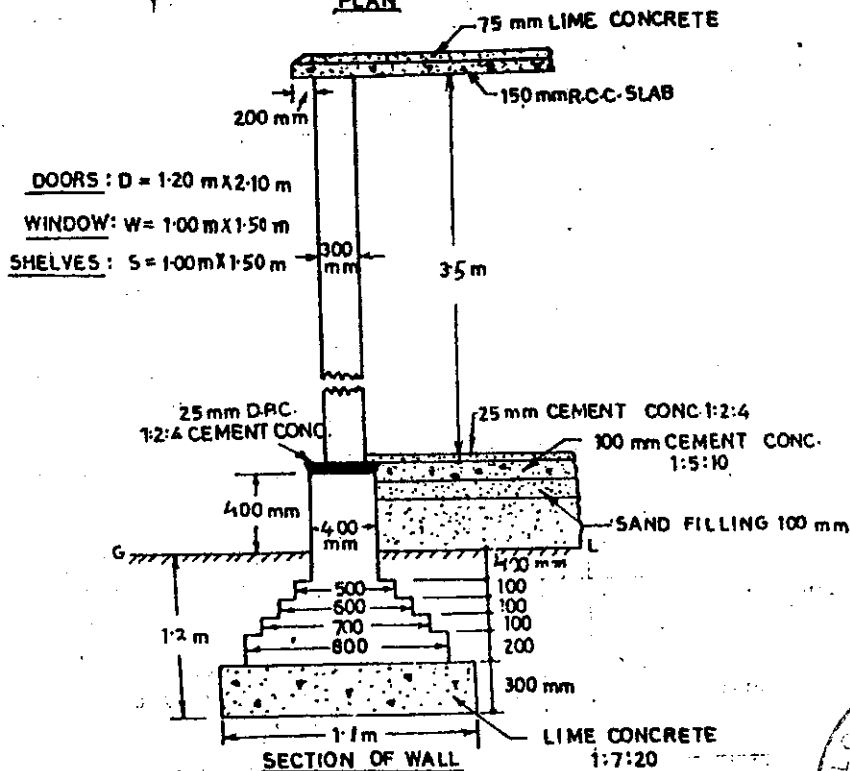
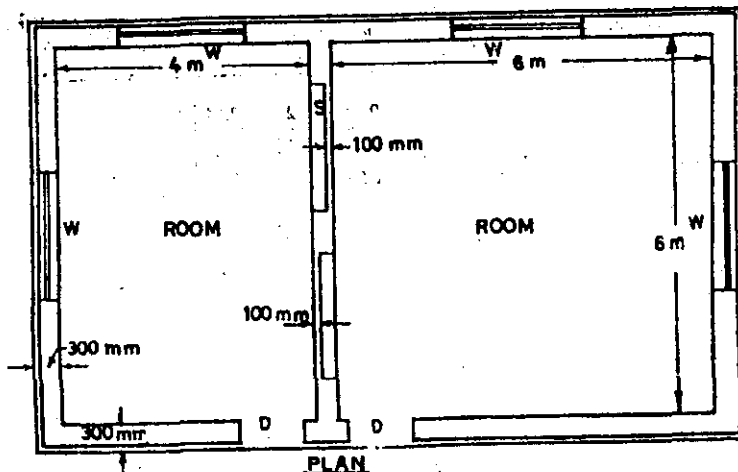
CE 802 QUANTITY SURVEYING AND VALUATION

Time: 3 Hours

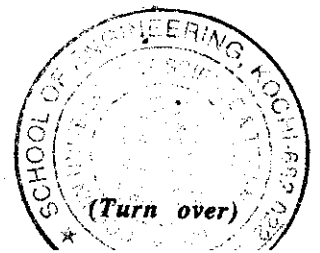
Maximum Marks: 100

(Assume suitable data, if necessary)

- I. A residential building is shown in the sketch. Estimate the quantities for the following and also the cost assuming suitable rate for the building:
- (i) Earth work excavation in ordinary soil in foundation
 - (ii) Lime concrete in foundation
 - (iii) First class brick work in C.M 1 : 6 in foundation upto plinth
 - (iv) First class brick work in lime mortar for superstructure.
- (40)



OR



- II. Work out the quantities of concrete and reinforcement for a RCC lintel used over a clear span of 2m and has 200 mm bearing on the wall on either side. Lintel has 10 mm diameter four main bars which have been bent up 45° at 320mm from ends. There are 2 anchore bars at the top side 6mm diameter. The lintel has 6mm diameter vertical stirrups at 130mm c/c through out the length of the lintel. Also prepare the schedule of bars. (40)
- III. Write the detailed specifications for
 (i) Earth work excavation
 (ii) First class brick work
 (iii) RCC
 (iv) Wood work (20)
- OR**
- IV. Define analysis of rates, what are the factors affecting the analysis of rates? (20)
- V. (a) Explain the terms:
 (i) Market value (ii) Depreciation
 (iii) Free hold property (9)
 (b) Explain straight line method and constant percentage method. (11)
- OR**
- VI. (a) What are the different methods to find out the present day cost of a building? (8)
 (b) Find the capital value of house which has been let out for Rs.1000/- per month inclusive of all the taxes. The house is in good condition and well maintained. Total outgoings amount to 18% of the gross rent and expected rate of return is 8%. Future life of building 60 years. (12)
- VII. A newly constructed building stands on a plot costing Rs.60000/-. The construction cost of the building is Rs.200000/- and the estimated life of the building is 66 years. The investor desires to have 8% return on the construction cost and 5% return on the land cost. Assuming annual repairs to be at 0.5% of the cost of construction and other outgoings at 30% of the gross rent, calculate the annual rent that will have to be charged for the building. The annual instalment of the sinking fund for a life of 66 years of the building at 3% may be taken as 1/2 paisa per rupee. (20)
- OR**
- VIII. An RCC framed structure building having estimated future life 80 years, fetches a gross annual rent of Rs.2,220/- per month. Work out its capitalized value on the basis of 6% net yield. The rate of compound interest for sinking fund may be taken 4%. The land plot of above building measures 1400 sqm and cost of land may be taken to be Rs.120/- per sqm. The other outgoings are -
 (i) repair and maintenance $1/12^{\text{th}}$ of gross income.
 (ii) Municipal taxes and miscellaneous charges 7% of gross income.
 The plinth area of the building is 800 sqm and plinth area rate of the above type of building may be taken as Rs.150/- per sqm. (20)