

B.Tech. Degree VIII Semester (Supplementary) Examination, September 2008

CE 802 QUANTITY SURVEYING AND VALUATION (1999 Scheme)

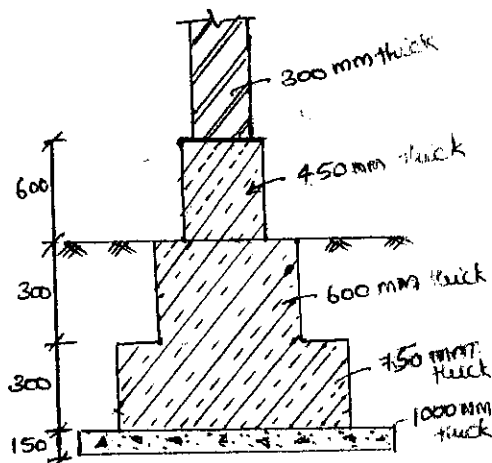
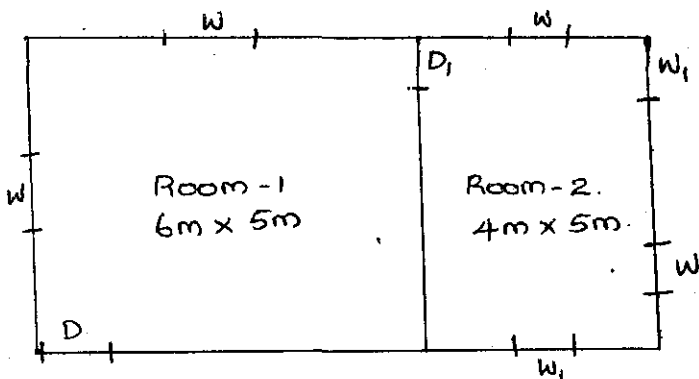
Time: 3 Hours

Maximum Marks: 100

I Estimate the quantities of all the items of a double room single storeyed building shown in figure : (40)

Specifications:

- | | | |
|---|---|--|
| Foundation concrete | - | PCC - 1:4:8 |
| Foundation and Basement | - | R R Masonry with CM 1:4 |
| Superstructure | - | 1 st Brick work with CM 1:5 |
| Floor to Floor height | - | 3.15 m |
| Parapet wall | - | 150mm thick; 600mm high with 1 st class brick in CM 1:5 |
| RCC Roof slab [1:2:4] | - | 150mm thick |
| Lintel [1:2:4] | - | All round; 100mm thick |
| Sun shade [1:2:4] | - | 600mm wide all round having a uniform thickness of 100mm |
| Sand filling | - | 450mm thick |
| Flooring concrete | - | PCC - 1:2:4 - 130 mm thick |
| Floor finish | - | Granite finish over CM 1:3 |
| Any other data may be assumed suitably. | | |



Doors and Windows:

D = 1.2m x 2.1m

D₁ = 1.0m x 2.1m

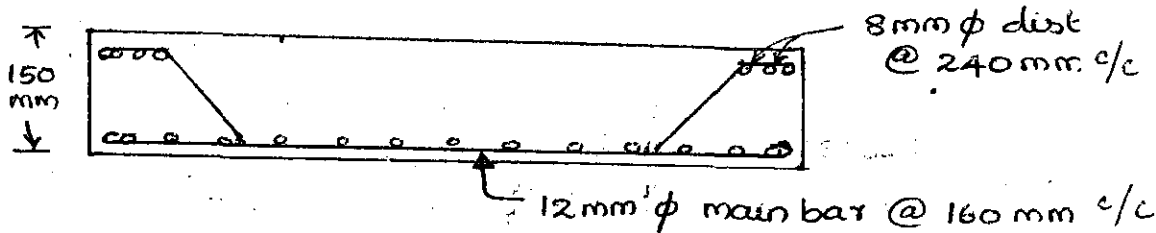
W = 1.5m x 1.5m

W₁ = 1.2m x 1.5m

Assume 4 steps of 250mm tread; 150 mm rise and 1.8 m length.

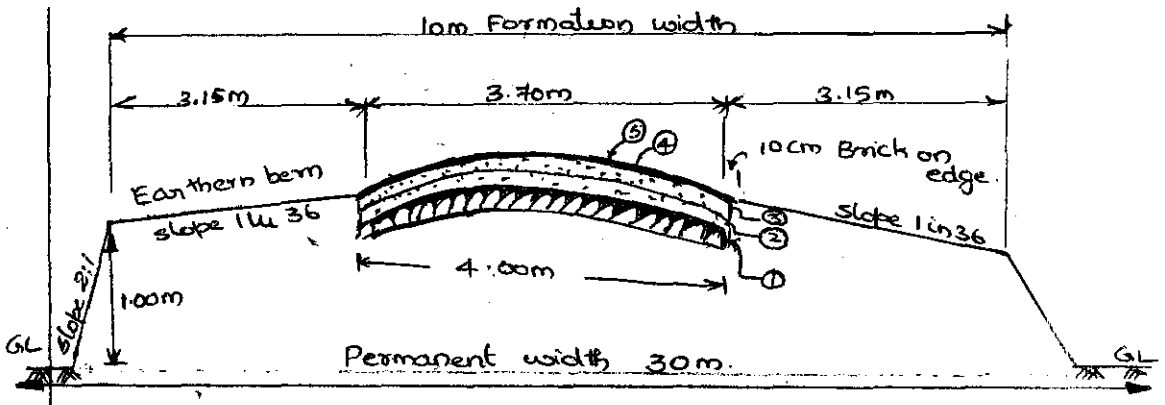
OR

II a) Work out the quantities of concrete and detailed bar bending schedule of steel in an RCC one way slab as shown in figure below. The slab is for a room of size 7.5m x 4.5m. The concrete adopted is M15. (20)



(Turn Over)

- b) Prepare an estimate for the construction of a state highway of length 1 km. From the given drawing of cross section the formation width is 10m, average height of bank is 1m and side slope 2:1. The metalled width is 3.70m and three coats of metalling are to be provided and the surface is finished with two coats of tar/asphalt. Other suitable data can be assumed.



- i) → Soiling coat 15cm thick boulders
- ii) → Inter coat 50mm stone ballast of 8 cm thick (after compaction)
- iii) → Top coat 40mm stone ballast of 8cm thick (after compaction)
- iv) → 1st coat of painting with Road tar
- v) → 2nd coat of painting with Asphalt (20)

- III a) Write down the detailed specification for reinforced cement concrete. (10)
 b) Write down the rules and methods of measurements for a structural steel works. (10)

OR

- IV a) Write down the detailed specifications for a road work. (10)
 b) Write down the methods for measurement of brickwork and stone masonry. (10)

- V a) Write down the purpose of valuation. (6)
 b) Explain 6 major types of outgoings. (6)
 c) Explain year's purchase and sinking fund. (8)

OR

- VI a) What do you mean by depreciation? Explain four major methods of calculating depreciation. (8)
 b) A three storey building is standing on a plot of land measuring 800 Sq.m. The plinth area of each storey is 400 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. 1500 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. 40 per Sq.m. Other data required may be assumed suitably. (12)

- VII a) Differentiate Market Value and Book Value. (5)
 b) Differentiate Free hold property and leasehold property. (5)
 c) A building is situated by the side of a main road of Bangalore city on a land of 500 Sq.m. The built up portion is 20m x 20m. The building is first class type and provided with water supply, sanitary and electric fittings. The age of building is 30 years and life of building is 100 years. Work out the valuation of property. (10)

OR

- VIII a) Explain 6 different methods of building valuation. (8)
 b) In a plot a residential building has to be constructed. Write a report on estimates for the construction of the same. (6)
 c) A building costing Rs. 7,00,000 has been constructed recently on a free hold land measuring 100 Sq.m in a big city. Prevailing rate of land in the neighbourhood is Rs. 150.00 per Sq.m. Determine the net rent of the property, if the expenditure on an outgoing including sinking fund is Rs.24000.00 per annum. Workout gross rent of the property per month. (6)