APR-16/BE/Insem-2
B.E. (Civil)
QUANTITY SURVEYING CONTRACTS AND TENDERS
(2012 Pattern)

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:-

    1)   *Answer Q No. 1 or 2, Q.No.3 or 4, Q.No.5 or 6.*

    2)   *Figures to the right indicate full marks.*

    3)   *Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam table allowed.*

    4)   *Assume suitable data, if necessary.*

Q1) a) "Estimation gives exact cost of any construction", Comment. Explain the purpose & necessity of estimation and valuation of any work. What are the different types of data required for estimating any work. **[6]**

b) What are the different types of estimate? Explain difference between.**[4]**

   i)   Supplementary & revised estimate

   ii)   Site plan & layout plan

<div align="center">OR</div>

Q2) a) Under what conditions approximate estimate is made and explain the various purpose of approximate estimate. **[3]**

b) Explain the approximate method for estimating the water supply and Sewage project **[3]**

c) A multi Storied office building has carpet area of 2500 sq-m. 30% of building area is covered by corridor, verandah, toilet, staircase. 10% of building area by walls. Assume a plinth area rate of 6450 per sq-m.Add 25% of total cost for water supply. sanitary. electrical fittings, and contingences. Prepare a preliminary estimate for the building. **[4]**

Q3) a) What do you understand by taking out quantites. explain detailed and abstract estimate with necessary estimate forn **[4]**

b) What is the necessity for accuracy in measurement? Give the limits of measurement and degree of accuracy for, Dimensions, Area. Volume of work. Weight. Rates **[6]**

P.T.O.

Q4) a) Work out the quantity of work for the following item of works for the plan shown in **fig 1. (a) & (b) by centre line method.**

    i)   Earthwork excavation for foundation.   **[3]**

    ii)   Damp proof course (1:2:4) 2.5 cm thick.   **[3]**

    iii)   Brick work in cement mortar 1:6 in foundation and plinth as per section in fig (1.b).   **[4]**

Q5) a) Work out the quantity of work for the following item of works for the plan & section shown in **fig. 1. (a) & (b) by long and short wall method.**

    i)   Brick work in cement mortar 1:6 for superstructure including parapet.   **[4]**

    ii)   RCC Work in Roof slab, lintel. Also find the quantity of steel requirement for the work.   **[4]**

    iii)   Woodwork for door DI. The frame size may be taken as 100 mm × 300 mm.   **[2]**

OR

Q6) a) Define valuation of property. What are the important factors influencing the value of building.   **[3]**

    b) What are the various methods of valuation? Explain value, cost, Gross income and Net Income of a property?   **[3]**

    c) What are the various factors contributing to depreciation of a structure and what are the various methods to work out the depreciation. A person wish to purchase a building at an estimated cost of Rs. 10.00 lakhs. The age of building is 40 years and well maintained. The life of structure may be considered as 80 years. At cost should the person purchase the building?   **[4]**

A

W2   W1

Bath Cum
WC
3.65X3.0   D2   Kitchen
4.60X3.0

W1

D2

Bed Room
3.65X3.0   D2   Hall
4.60X5.0
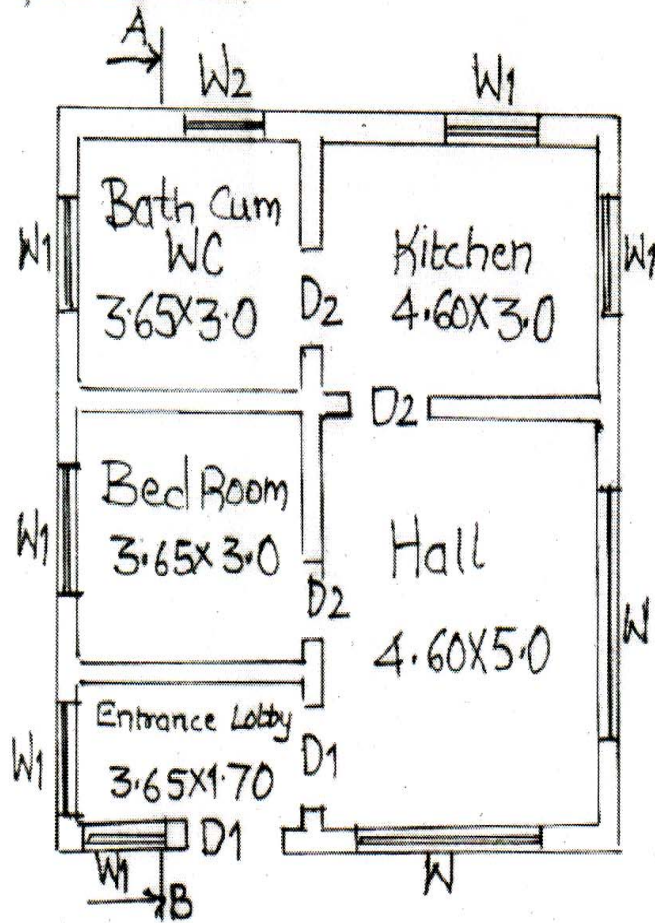
W1

Entrance Lobby
3.65X1.70   D1

W1

W1   B   W   D1

Fig 1(a) - Plan of Building

Schedule of opening
Door
D1 = 1.80 X 2.10
D2 = 1.50 X 2.10
Window
W = 3.0 X 1.80
W1 = 1.80 X 1.50
W2 = 1.50 X 1.20

Parapet Wall
0.20 thick,
0.45 height   0.30 thick
RCC Roof

0.15

1.50   2.10   3.60
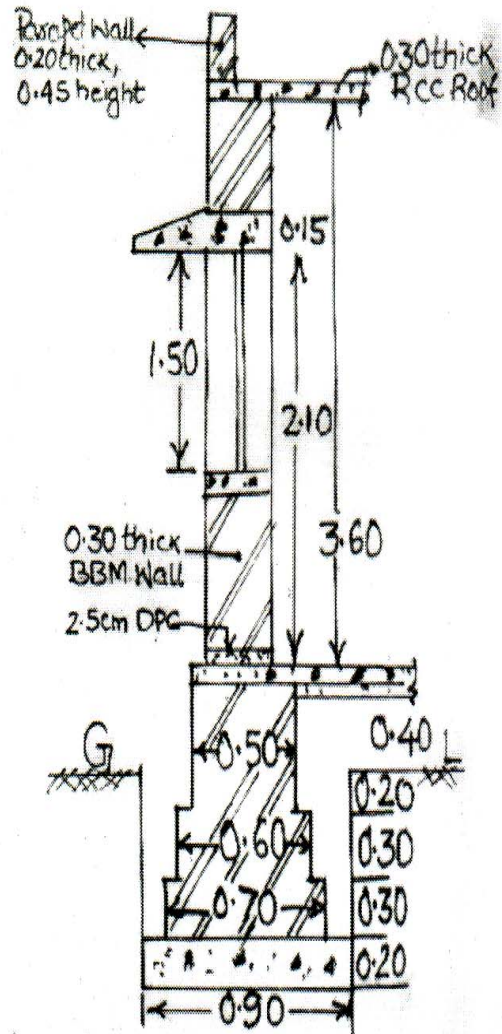
0.30 thick
BBM Wall

2.5cm DPC

G

0.50   0.40
0.20
0.60   0.30
0.70   0.30
0.20
0.90

Fig-1(b) Section along A-B.

All Door & Window frame - 100mm X 300mm

(All dimension in metre.)

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