

**DIPLOMA IN CIVIL ENGINEERING  
DCLE(G) / DCLEVI**

**Term-End Examination**

00393

**June, 2015**

**BCE-034 : ESTIMATING AND QUANTITY  
SURVEYING – I**

*Time : 2 hours*

*Maximum Marks : 70*

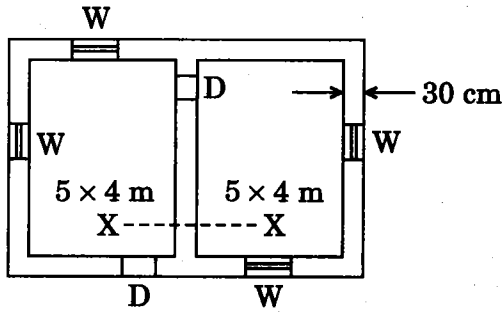
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**Note :** *Question number 1 is compulsory. Solve any other four questions. Assume any missing data. Use of calculator is allowed.*

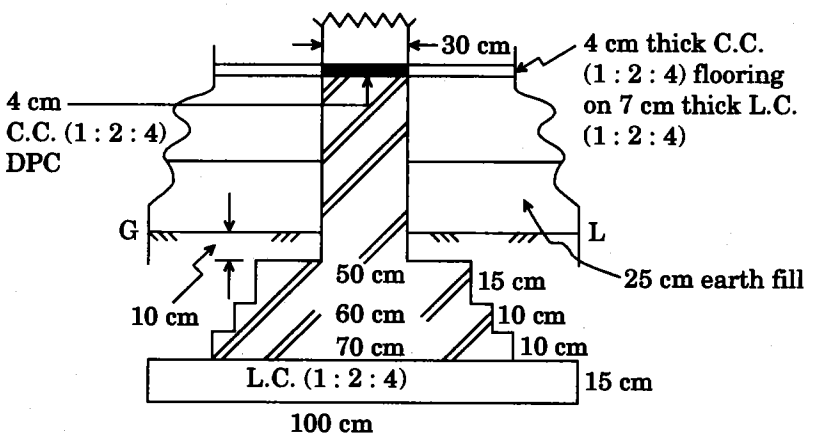
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1. With reference to the plan and section (Figure 1) of a two-room shelter, calculate the following items in the usual tabular form :  $5+9=14$
- (a) E.W. in filling – below and above G.L., separately.
- (b) Second class B.W. below G.L., above G.L., and in superstructure, if the height of the rooms is 3 m above the floor level.



(PLAN)



(Section X - X)

Figure 1

Lintels over D and W are 12 cm thick and 20 cm longer than the opening.

Note: Hatched section indicates second class brick-work.

W = 1.2 × 1.5 m (High) window

D = 1 × 2.1 m (High) door

2. (a) Compute the E.W. (area) in cutting and filling, separately.

7

AB  $\Rightarrow$  Formation level

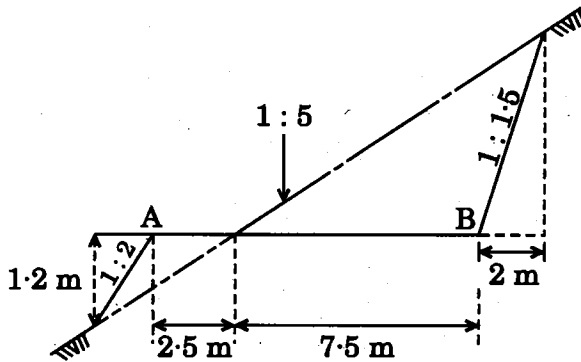


Figure 2

- (b) Prove that under suitable conditions, centre-line and long-and-short wall methods yield same results in building estimation work.
3. Assuming suitable rates for men and materials, prepare an analysis of rates for the following items of work :
- 7+7=14
- (a) Earthwork in excavation (in hard soil), assuming 2 m depth of excavation and 30 m distance to dump off the material.
- (b) 1 m  $\times$  1.5 m 4-piece window wooden chowkat, assuming normal sections of finished pieces.
4. Sketch out a typical wooden R.C.C. form-work for a slab-cum-column-cum-beam ceiling formation. Label the items.

14

5. Write out general specifications for the following : 7+7=14

(a) Joinery and Glazing

**OR**

(b) Plastering and Painting

6. Discuss, in detail, the following : 7+7=14

(a) Classification of works

(b) Approval and sanction of works

7. (a) List out and explain what is understood by contract documents. 7

(b) Explain what is meant by conditions of contract. Bring out the significance of each condition in the execution of works. 7

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