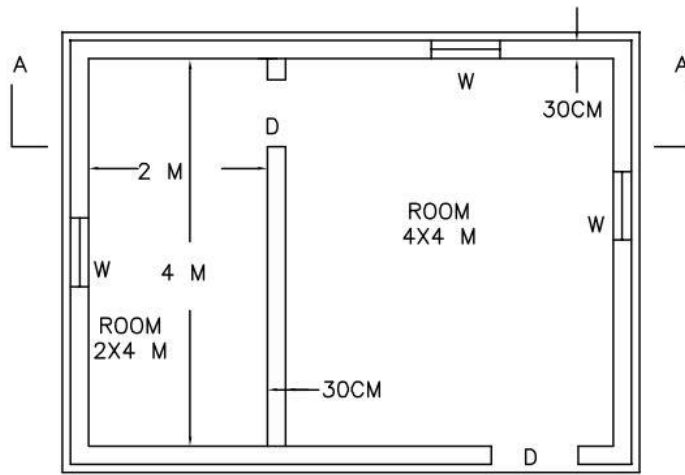


GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – V• EXAMINATION – SUMMER 2016

Subject Code: 3356206**Date: 04/ 06 /2016****Subject Name: ESTIMATION AND COSTING****Time: 02:30 PM to 04:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

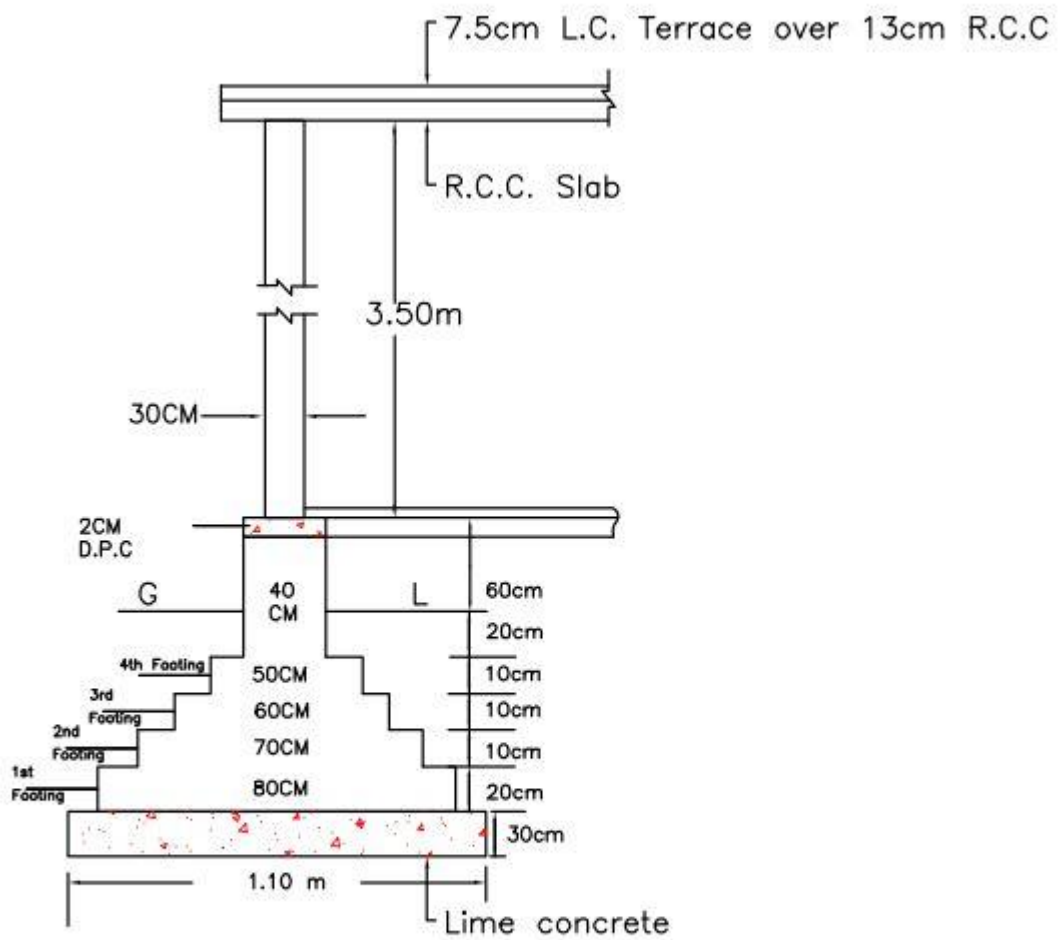
- Q.1** Estimate the quantities of the following items of a two roomed building from the given plan and section in **Figure 1** (Any Five) **10**
Note: Deduct only door and windows.
- (1) Earthwork in excavation in foundation
 - (2) Lime concrete in foundation
 - (3) First class brick work in cement mortar 1:6 in foundation for 1st footing only
 - (4) 2.5 cm Damp Proof Course(D.P.C)
 - (5) First class brick work in lime mortar in superstructure
 - (6) Smooth plaster on inside rooms
 - (7) Smooth plaster on ceiling (1:3)
- Q.2** (a) Define Estimate. **02**
(b) Adopt suitable rates and prepare Abstract Sheet for the items calculated in above question 1. **08**
- Q.3** (a) What is specifications? Write Detailed specification for the following items.(Any two) **10**
1. Earthwork in excavation
2. Cement Concrete in Foundation (1:4:8).
3. Sand Filling In Plinth.
- OR**
- (a) Write Purpose (Necessity) of Specification? **10**
- Q.4** (a) Define rate analysis. List and explain the factors that affect rate analysis. **10**
- OR**
- (a) Find rate of 12mm Plastering (1:6) per sq.m. by Rate Analysis. Assume suitable rates of material and labour. Take 100 sq.m. **10**
- Q.5** Define contract. List different types of contracts and explain any two. **10**
- OR**
- (a) Which are the qualities of good estimator? **05**
(b) Define Following: **05**
1. Work charged Establishment Charges
2. Schedule of rate (S.O.R.)
3. Costing
4. Provisional sum
5. Estimating



ALL WALLS ARE OF SAME SECTION HAVING 30CM. THICK. LINTELS OVER DOORS, WINDOWS AND SHELVES ARE 15CM THICK.

DOORS D 1.20m x 2.10m
Window W 1.00m x 1.50m

PLAN



CROSS SECTION OF WALL ON AA'

FIGURE 1

BEST OF LUCK