H.T.No. | | | | | | | | | | |

Code No: CE1539 **GEC-R14**

IV B. Tech I Semester Regular Examinations, November 2017

ESTIMATING, COSTING AND VALUATION

(Civil Engineering)

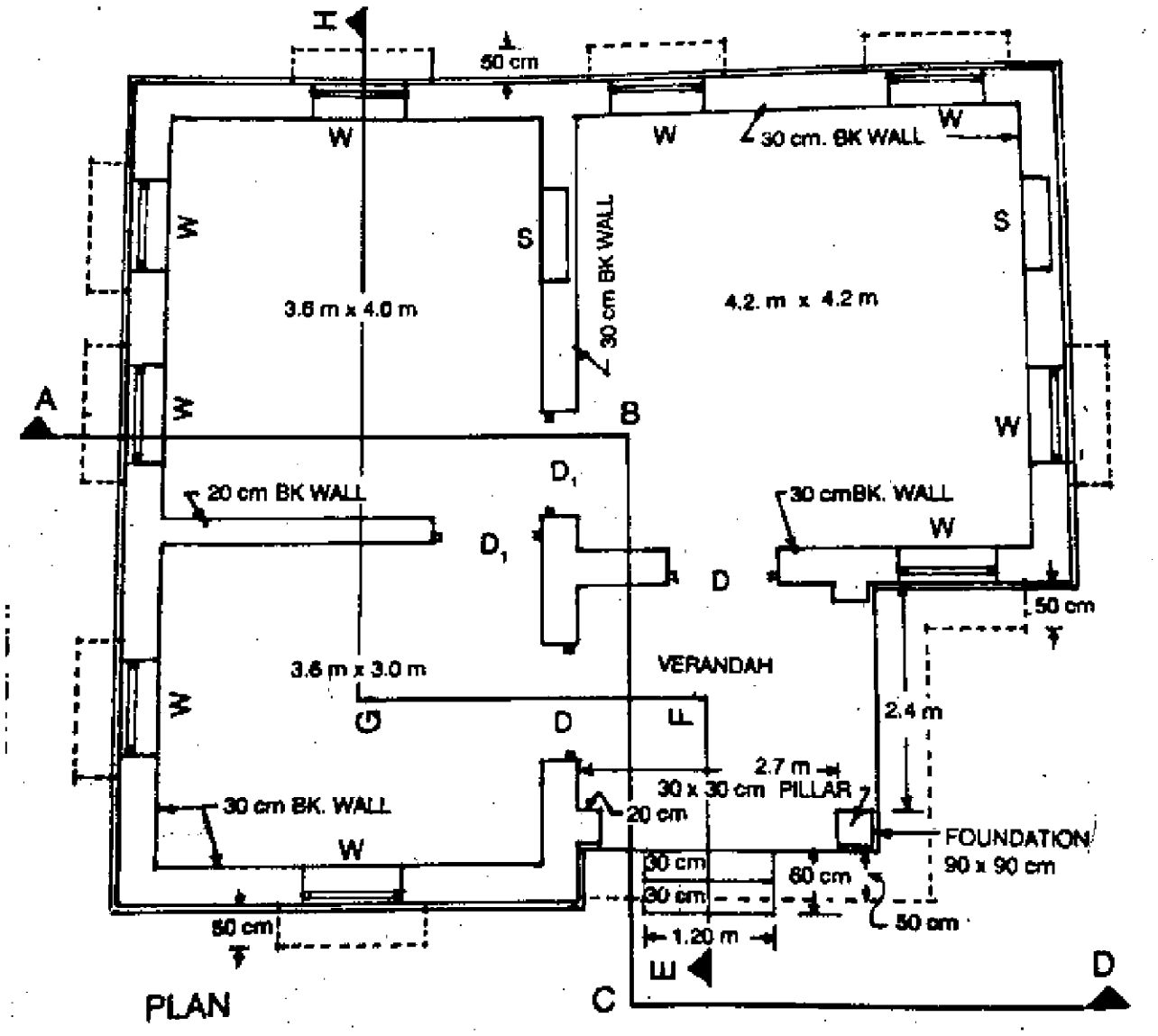
Time: 3 Hours **Max. Marks: 60**

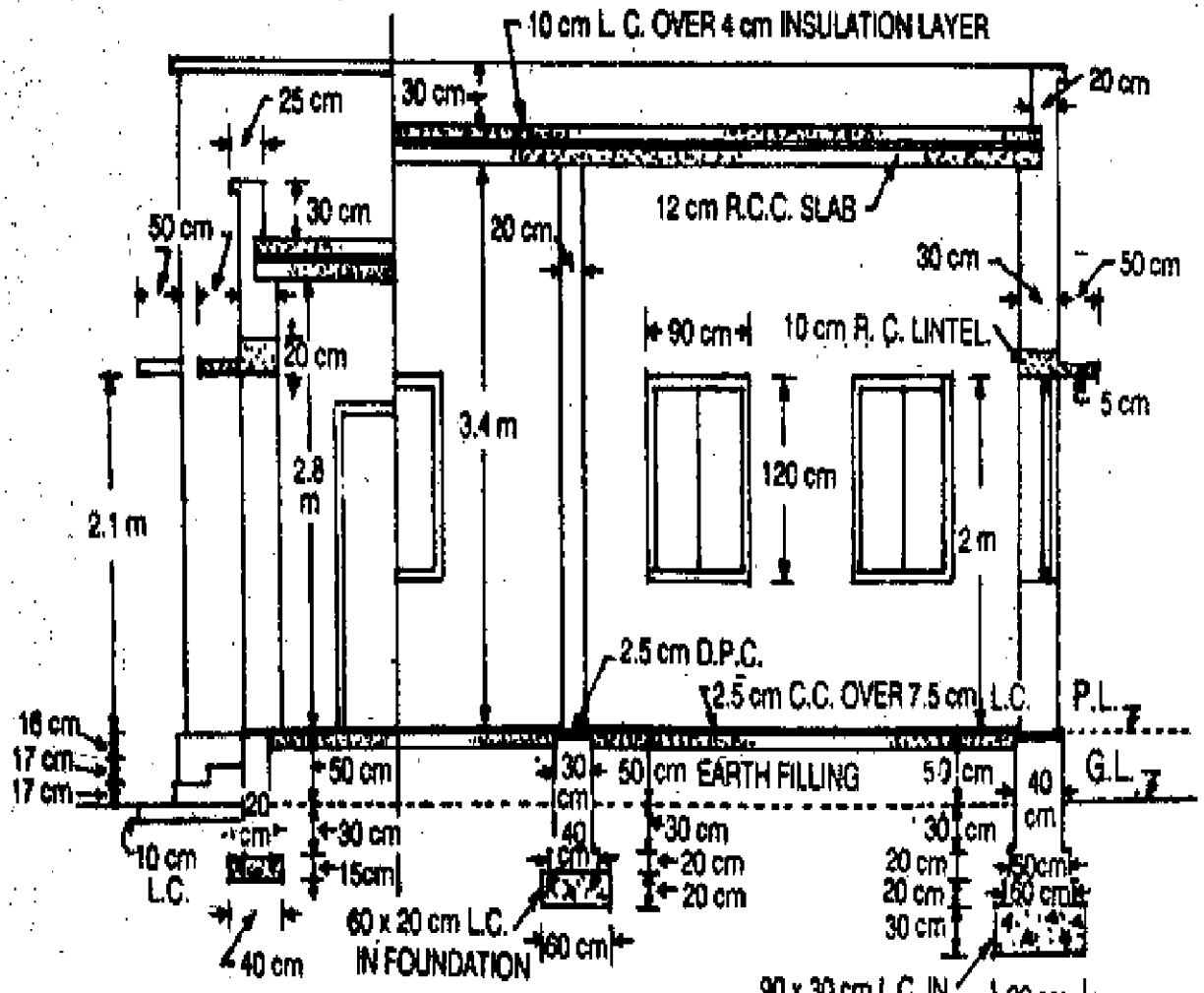
Note: Answer **ONE** Question from **PART-A**.
Answer any **THREE** questions from **PART-B.** All Questions carry equal Marks.

PART-A

1 × 24 = 24M

1. Figure shows a three room plan and section. Workout the quantities required for the following items using Long wall- short wall method.
   a. Lime concrete in foundation
   b. Ist Class Brickwork in Lime Mortar in foundation and plinth
   c. Ist Class Brickwork in Lime Mortar in Superstructure.
   d. Damp Proof course

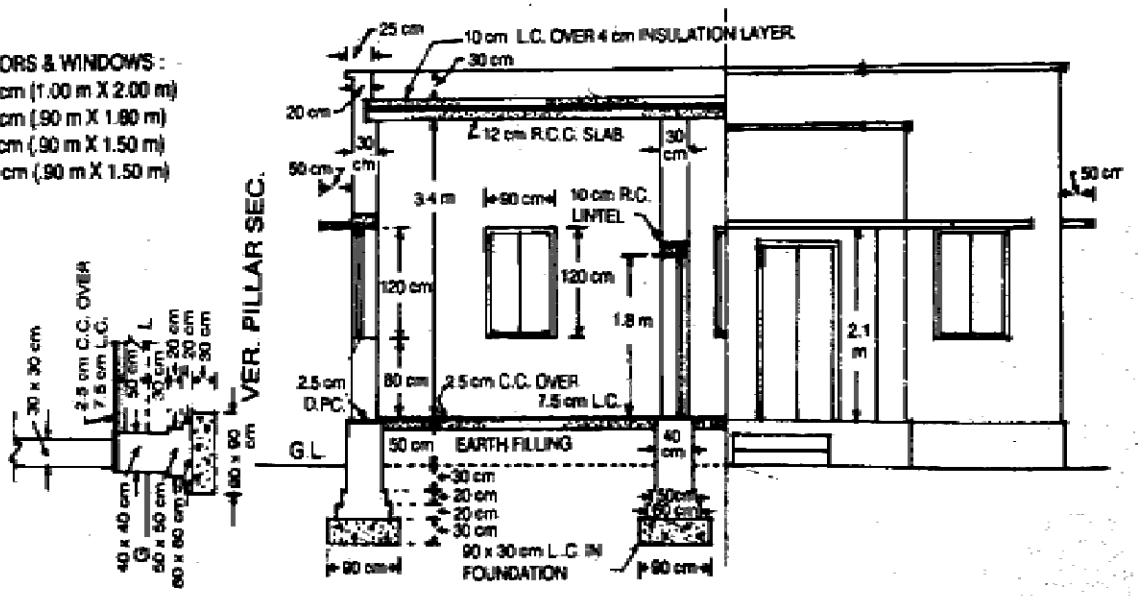




SECTION ON EFGH.

THREE ROOMED BUILDING.

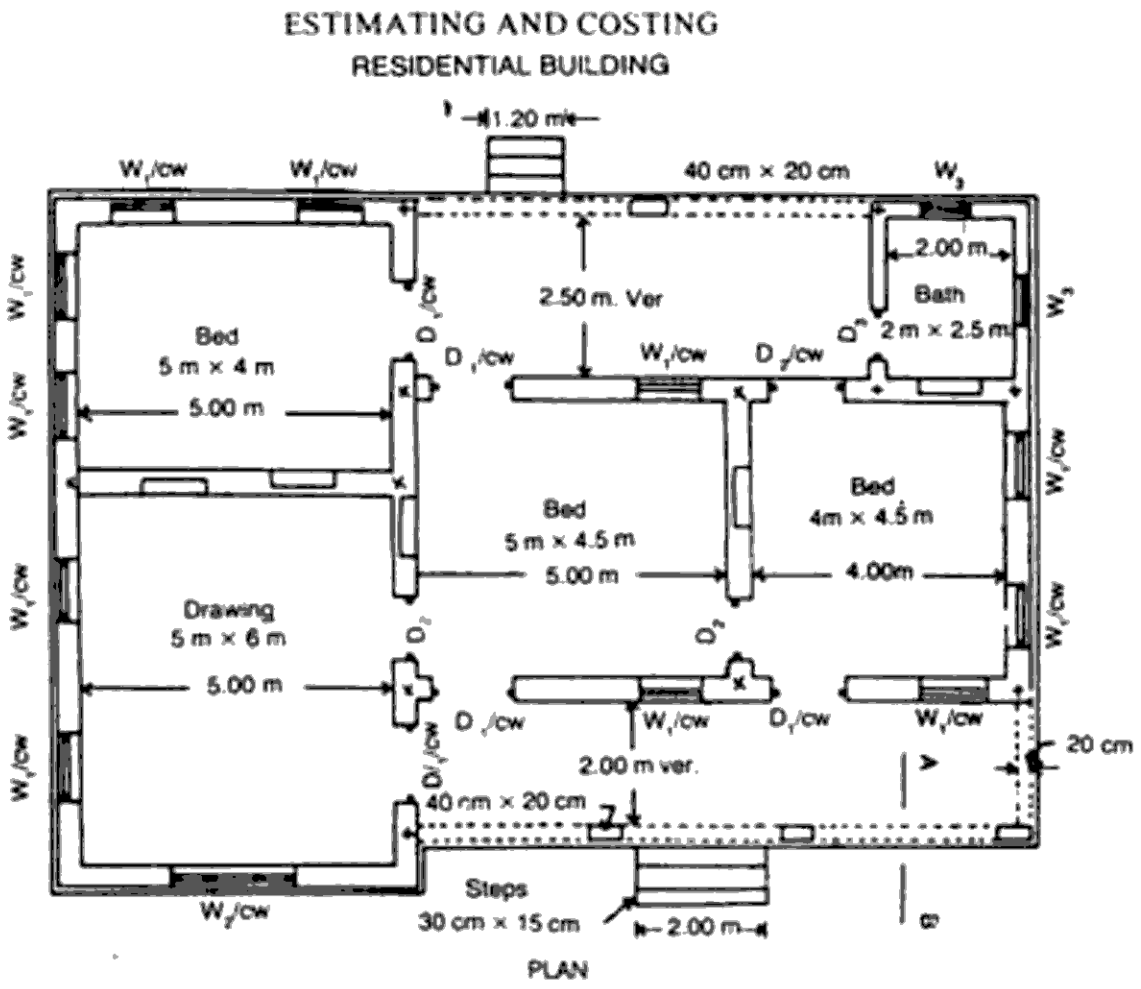
SCHEDULE OF DOORS & WINDOWS :
D - 100 cm X 200 cm (1.00 m X 2.00 m)
D1 - 90 cm X 180 cm (.90 m X 1.80 m)
W - 90 cm X 120 cm (.90 m X 1.50 m)
S - 90 cm X 150 cm (.90 m X 1.50 m)

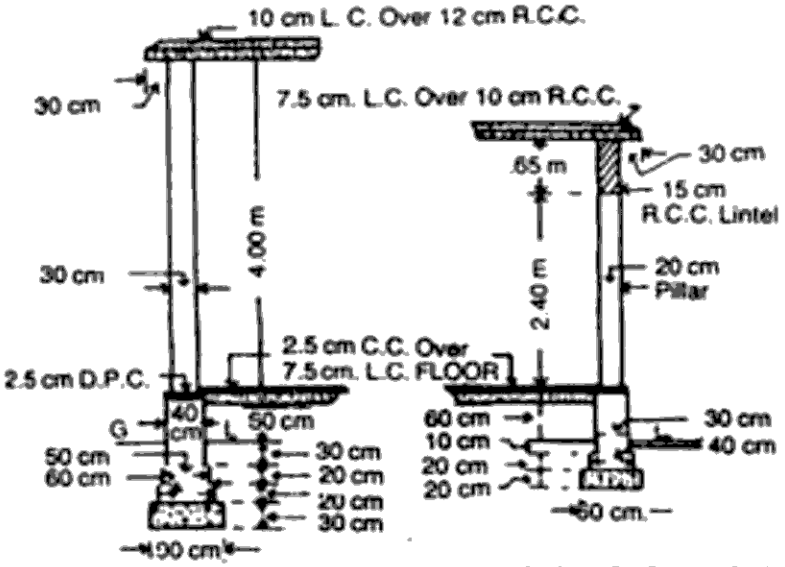


SECTION ON A B C D.

HALF ELEVATION.

2. Estimate the quantities of the following items of a residential building from the drawing
   a. Earth work in excavation
   b. Lime concrete in foundation
   c. First class brick work in 1:6 cement sand mortar in foundation and plinth





CROSS SECTION OF MAIN WALLS

CROSS SECTION AB OF VER.WALL

Doors:-
D_1 – 120 cm × 210 cm (1.20 m × 2.10 m)
D_2 – 100 cm × 200 cm (1.00 m × 2.00 m)
D_3 – 75 cm × 180 cm (.75 m × 1.80 m).

Windows:-
W_1 – 100 cm × 150 cm (1.00 m × 1.50 m)
W_2 – 200 cm × 150 cm (2.00 m × 1.50 m)
W_3 – 75 cm × 120 cm (.75 m × 1.20 m)
C.W. – 75 cm × 60 cm (.75 m × .60 m).

Shelves:-
S – 100 cm × 150 cm (1.00 m × 1.50 m)
Lintel Over Doors, Windows Etc.
15 cm R.B.

All walls of Drawing Rooms and Bed Rooms have same section

Bath Room walls have similar section.

PART-B

3 × 12 = 36M

1. The ground levels along the center line of the road are given below

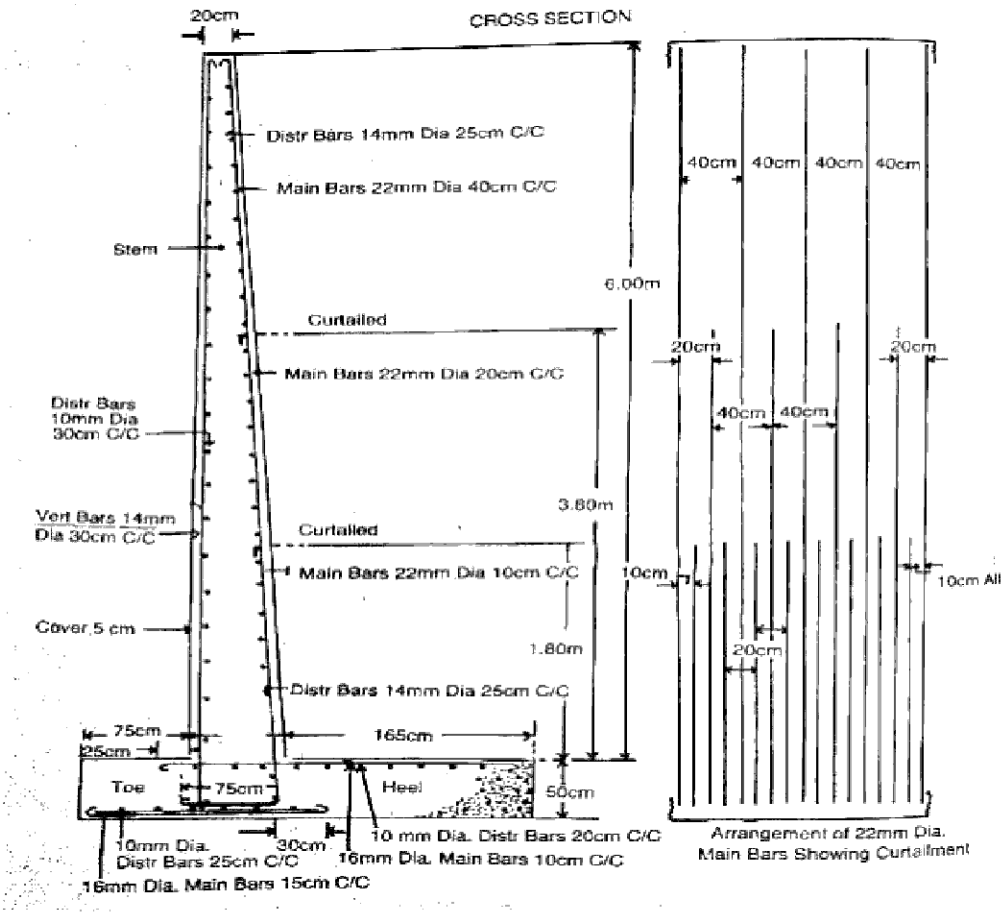
Chainage (m)	0	50	100	150
Ground Level	97.00	96.50	96.00	97.50

The road is to be formed in embankment with the formation level at 100.00m throughout the length. If the road width is10.00 m and the side slopes 2:1, Calculate the quantity of earthwork required by Trapezoidal rule. Assume transverse slope as level. (12M)

2. a) Calculate the rate per Sq.m of White washing two coat. (8M)

   b) Define Contingencies and Workcharged Establishment. (4M)

3. The section shows a cantilever type RCC retaining wall and arrangement of main bars. If the length of the retaining wall is 30m and cement concrete of 1:2:4 is used, prepare the detailed estimate of the retaining wall. (12M)



4. a) List out the documents required for a contract. Explain importance of each document. (8M)

   b) Mention various conditions of Contract. (4M)

5. a) Explain the terms:Gross Income and Net Income (4M)

   b) What is Obsolescence and annuity? Explain different materials that come under scrap. (8M)

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