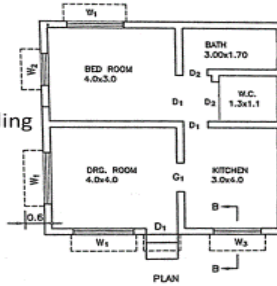


Example

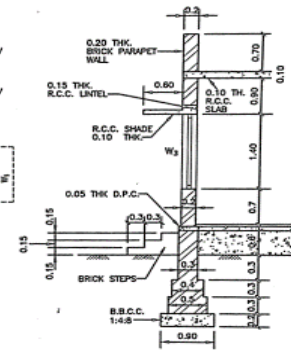
Figure shows detail of a residential building. Calculate the quantities and costs of following items;

1. Earthwork in excavation for foundation
2. P.C.C. (1:4:8) for foundation
3. Brick masonry up-to plinth level
4. Brick masonry above plinth level
5. Smooth plaster inside the rooms and ceiling



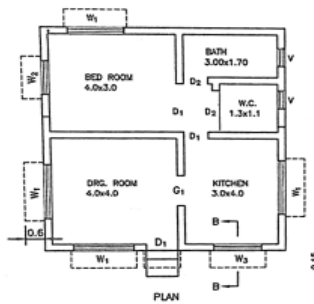
DOOR-WINDOW SCHEDULE

D₁ = 1.10x2.10
 D₂ = 0.90x2.10
 G₁ = 1.20x2.10
 W₁ = 1.80x1.40
 W₂ = 1.20x1.40
 W₃ = 1.50x1.40
 V = 0.60x0.60



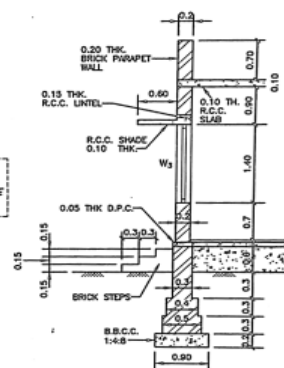
NOTES:-
 ALL DIMENSIONS ARE IN METER
 NOT TO SCALE

Measurement sheet							
Item No.	Description	No.	Length (m)	Width (m)	Height (m)	Quantity	
01	Earthwork in excavation for foundation	Long wall: L = (4+3+2x0.2) = 2x0.45 = 8.3m	3	8.3	0.9	1.1	24.65
		Short wall-1: L = 4.2 = 2x0.45 = 3.3m	3	3.3	0.9	1.1	9.80
		Short wall-2: L = 3.2 = 2x0.45 = 2.3m	4	2.3	0.9	1.1	9.11
		Short wall-3: L = (1.1+0.2) = 2x0.45 = 0.4m	1	0.4	0.9	1.1	0.40
02	P.C.C. in Foundation	Long wall	3	8.3	0.9	0.2	4.48
		Short wall-1	3	3.3	0.9	0.2	1.78
		Short wall-2	4	2.3	0.9	0.2	1.66
		Short wall-3	1	0.4	0.9	0.2	0.07
						7.99 m³	
03	Brick masonry up-to plinth level	For Long wall:					
		First step: L = 8.3 = 2 x 0.2 = 7.9m	3	7.9	0.5	0.3	3.56
		Second step: L = 7.9 = 2 x 0.05 = 7.7m	3	7.7	0.4	0.3	2.81
		Third step: L = 7.8 = 2 x 0.05 = 7.7m	3	7.7	0.3	0.85	5.89
		For short wall-1:					
		First step: L = 3.3 = 2 x 0.2 = 3.7m	3	3.7	0.5	0.3	1.67
		Second step: L = 3.7 = 2 x 0.05 = 3.8m	3	3.8	0.4	0.3	1.37
		Third step: L = 3.8 = 2 x 0.05 = 3.9m	3	3.9	0.3	0.85	2.98
		For short wall-2:					
		First step: L = 2.3 = 2 x 0.2 = 2.7m	4	2.7	0.5	0.3	1.62
		Second step: L = 2.7 = 2 x 0.05 = 2.8m	4	2.8	0.4	0.3	1.34
		Third step: L = 2.8 = 2 x 0.05 = 2.9m	4	2.9	0.3	0.85	2.96
		For short wall-3:					
		First step: L = 0.4 = 2 x 0.2 = 0.8m	1	0.8	0.5	0.3	0.12
		Second step: L = 0.8 = 2 x 0.05 = 0.9m	1	0.9	0.4	0.3	0.11
		Third step: L = 0.9 = 2 x 0.05 = 1m	1	1	0.3	0.85	0.26
		Steps:					
		First step	1	1.10	0.9	0.15	0.15
		Second step	1	1.10	0.6	0.15	0.10
		Third step	1	1.10	0.3	0.15	0.05
						24.99 m³	
04	Brick masonry above plinth level	Long walls: L = 7.7 = 2 x 0.05 = 7.6m	3	7.6	0.2	3	13.68
		Short wall-1: L = 3.9 = 2 x 0.05 = 4m	3	4	0.2	3	7.2
		Short wall-2: L = 2.9 = 2 x 0.05 = 3m	4	3	0.2	3	7.2
		Short wall-3: L = 1 = 2 x 0.05 = 1.1m	1	1.1	0.2	3	0.66



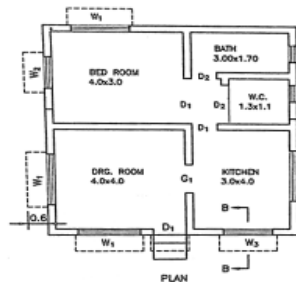
DOOR-WINDOW SCHEDULE

D₁ = 1.10x2.10
 D₂ = 0.90x2.10
 G₁ = 1.20x2.10
 W₁ = 1.80x1.40
 W₂ = 1.20x1.40
 W₃ = 1.50x1.40
 V = 0.60x0.60



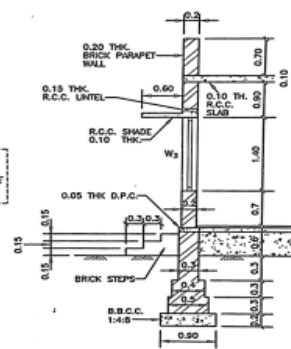
NOTES:-
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Item No.	Description	No.	Length (m)	Width (m)	Height (m)	Quantity		
05	Deductions	For doors and windows						
		D ₁	3	1.1	0.2	2.1	1.39	
		D ₂	2	0.9	0.2	2.1	0.76	
		G ₁	1	1.2	0.2	2.1	0.50	
		W ₁	4	1.8	0.2	1.4	2.02	
		W ₂	1	1.2	0.2	1.4	0.34	
		W ₃	1	1.5	0.2	1.4	0.42	
		V	2	0.6	0.2	0.6	0.14	
								-5.57m³
		For Lintels above door and windows						
		D ₁	3	1.4	0.2	0.15	0.126	
		D ₂	2	1.2	0.2	0.15	0.072	
		G ₁	1	1.5	0.2	0.15	0.045	
		W ₁	4	1.8	0.2	0.15	0.25	
		W ₂	1	1.5	0.2	0.15	0.045	
W ₃	1	1.8	0.2	0.15	0.054			
V	2	0.9	0.2	0.15	0.054			
						-0.646m³		
						28.74		
						-5.57		
						-0.646		
						-22.52 m³		
05	Smooth plaster inside rooms and ceiling	Plaster for walls:						
		Drawing room	4	4	-	3	48 m ²	
		Bedroom	2	4	-	3	24 m ²	
		Kitchen	2	3	-	3	18 m ²	
		Bath	2	3	-	3	18 m ²	
		W.C.	2	1.7	-	3	10.2 m ²	
								138 m²
		In front of W.C.						
								9 m²
								6.6 m²
		Plaster for ceiling						
		Drawing room	1	4	4	-	16 m ²	
		Bedroom	1	4	3	-	12 m ²	
		Kitchen	1	3	4	-	12 m ²	
		Bath	1	3	1.7	-	5.1 m ²	
W.C.	1	1.3	1.1	-	1.43 m ²			
In front of W.C.	1	1.5	1.1	-	1.65 m ²			
						238.38 m²		



DOOR-WINDOW SCHEDULE

D₁ = 1.10x2.10
 D₂ = 0.90x2.10
 G₁ = 1.20x2.10
 W₁ = 1.80x1.40
 W₂ = 1.20x1.40
 W₃ = 1.50x1.40
 V = 0.60x0.60



NOTES:-
 ALL DIMENSIONS ARE IN METER
 NOT TO SCALE

Deductions						
For Doors and windows						
D ₁ (5/2)	2.5	1.1	-	2.1	5.78	
D ₂ (4/2)	2	0.9	-	2.1	3.78	
G ₁ (2/2)	1	1.2	-	2.1	2.52	
W ₁ (4/2)	2	1.8	-	1.4	5.04	
W ₂ (1/2)	0.5	1.2	-	1.4	0.84	
W ₃ (1/2)	0.5	1.5	-	1.4	1.05	
						-19.01 m²
						238.38
						-19.01
						219.37 m²

Abstract sheet					
No.	Item Description	Quantity	Rate	Per	Amount (₹)
01	Earthwork in excavation for foundation	43.96 m ³	85	m ³	3737
02	P.C.C in Foundation	7.99 m ³	3200	m ³	25568
03	Brick masonry up-to plinth level	24.99 m ³	3200	m ³	79968
04	Brick masonry above plinth level	22.52 m ³	3500	m ³	78820
05	Smooth plaster inside rooms and ceiling	219.37 m ²	150	m ²	32906
					₹ 220999
				Add 3% contingencies charge	+ 6630
				Add 2% work charge establishment	+ 4420
				Total	₹ 232049