

**DEPARTMENT OF CIVIL ENGINEERING**  
**GOVERNMENT POLYTECHNIC, BALASORE**  
**SUBJECT- ESTIMATION & COST EVALUATION-I**  
**SEMESTER – 3<sup>rd</sup> SEM (CIVIL ENGG.)**  
**BY-SOUMITA MOHANTY**  
**QUESTION BANK**

**SHORT QUESTIONS:-**

1. What is plinth area?
2. What is carpet area?
3. What is supplementary estimate?
4. What is revised estimate?
5. Define depreciation and obsolescence.
6. Write the volume and weight of one bag of cement.
7. Write the unit of Earthwork in filling and Lime concrete terracing.
8. Define floor area of a building.
9. What is lead and lift?
10. Calculate the standard weight of 20mm dia. Bar of 1m length.
11. What is sinking fund?
12. What is AR estimate?
13. Draw the details of measurement form used in estimate.
14. What is plinth area estimate?
15. What is cube rate estimate?
16. Write the role of Divisional accountant.
17. Write the role of Executive engineer.
18. Classify the labours as per OPWD and mention their rates.
19. Define salvage value.
20. Define Technical sanction
21. Write down size of a farma or batch box.
22. What is the standard weight of a 16mm dia.bar of 1m length?
23. Write the unit of DPC and reinforcement.
24. Write two duties of Junior Engineer.
25. Differentiate value and cost.
26. What is scarp value?
27. What is analysis of rate?
28. What is detailed estimate?
29. Define Lump sum.
30. What is the size of the nominal and traditional brick?
31. What is the standard weight of a 12mm dia. HYSD bar of 1m?
32. How can you estimate the requirements of binding wire?

**LONG QUESTIONS:-**

1. Write the duties of Junior Engineer.
2. Calculate the dry materials required for 500sqm of cement plaster (1:6) of 12mm thickness.

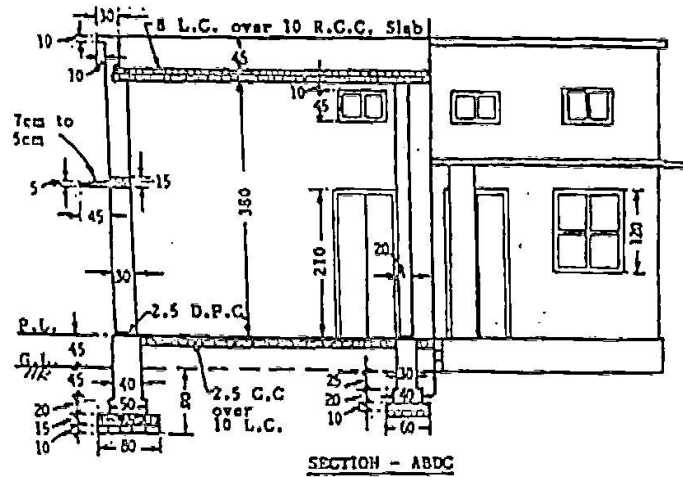


- c. 1<sup>st</sup> class brickwork in super structure (1:3).
- d. 2.5 cm DPC work (1:2:4).

13.

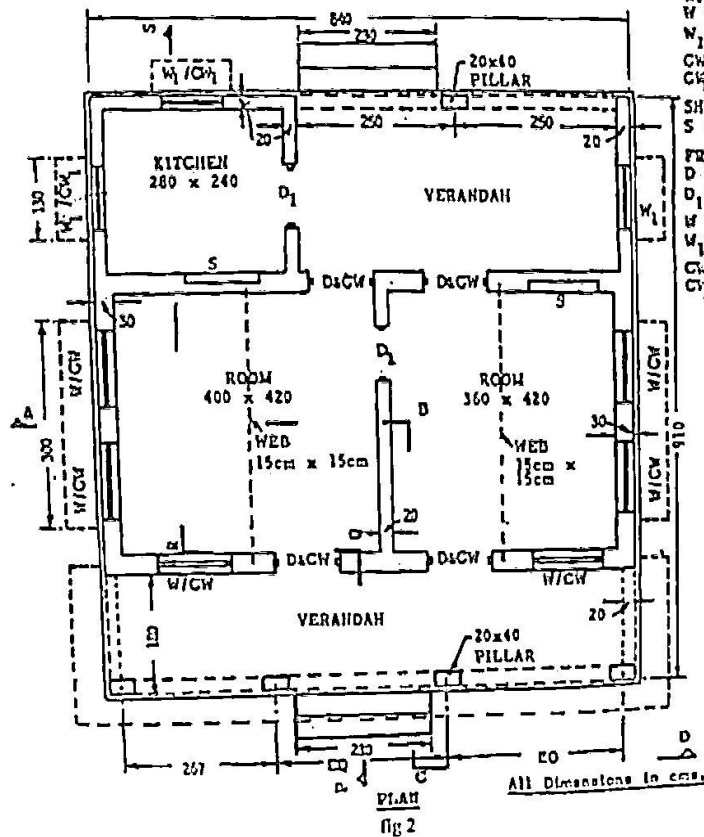
}. Prepare a detailed estimate of a building from the given plan and cross-section as shown in figure-2.

- (a) Earthwork excavation for foundation in hard soil.
- (b) 1<sup>st</sup> class brickwork in (1 : 4) in foundation and plinth.
- (c) 2.5 cm thick DPC of cement concrete in (1 : 3 : 6).
- (d) 1<sup>st</sup> class brickwork in 1 : 6 in super structure.
- (e) 12 mm thick cement plaster inside and outside the building.



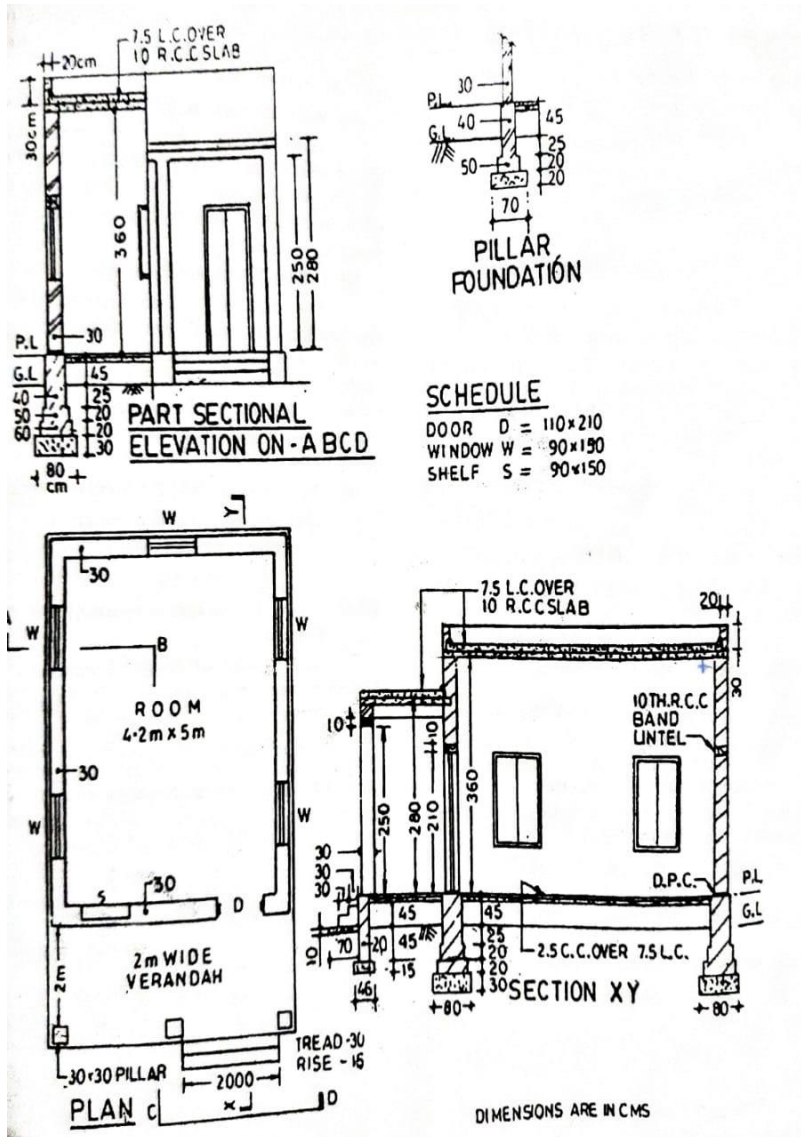
**Schedule**

DOORS :  
 D = 100x210  
 D<sub>1</sub> = 90x210  
 WINDOWS :  
 W = 110x120  
 W<sub>1</sub> = 90x120  
 CW = 75x45  
 CW<sub>1</sub> = 60x45



SHELY :  
 S = 110x140  
 FRAME :  
 D = 8x19  
 D<sub>1</sub> = 8x10  
 W = 8x10  
 W<sub>1</sub> = 8x10  
 CW = 6x5  
 CW<sub>1</sub> = 6x5

14.



Prepare the quantity estimate for the following items from the given plan and section

- a. Earthwork in excavation in foundation.
  - b. DPC of 2.5 cm thick.
  - c. 1<sup>st</sup> class brickwork in foundation and plinth in cement mortar.
  - d. RCC work and ms reinforcement.
15. a. Calculate the quantity of 12mm thick cement plaster (1:6) for inside to brickwork.  
 b. Find out the quantity of dry material required for the quantity calculated.  
 c. Calculate the quantity of 1<sup>st</sup> class brickwork in cement mortar (1:6) in super structure.



