DEPARTMENT OF CIVIL ENGINEERING GOVERNMENT POLYTECHNIC, BALASORE SUBJECT- ESTIMATION & COST EVALUATION-I SEMESTER – 3rd 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?

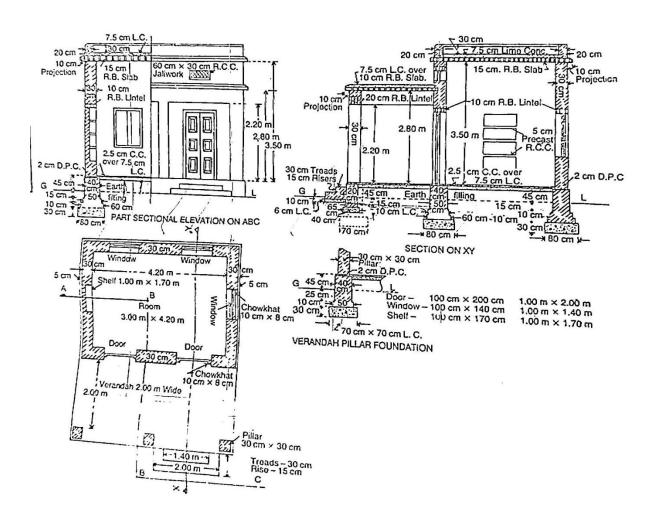
LONG QUESTIONS:-

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

- 3. Calculate the cost of construction of 8cum of brickwork (1:4) using standard bricks of size 19cm×9cm. Use latest OPWD rates.
- 4. Differentiate between Plinth area estimate and cube rate estimate.
- 5. Calculate the quantity of woodwork in frames of 2 doors and 3 windows having specification Size of door=1.2m×2m, size of window=1m×1.5m, size of chowkath=10cm×8cm.
- 6. Describe briefly about different types of estimate.
- 7. Calculate dry material for cement plaster (1:6) of 100sqm area in building.
- 8. Differentiate between Revised estimate and Supplementary estimate.
- 9. Write notes on Long wall and Short wall method and Centre line method.
- 10. What do you mean by analysis of rates? Write down the purpose of rate of analysis.
- 11. Analyse the rate of 1cum of (1:2:4) cement concrete with following rate of materials and follow the latest wages of labours as per OPWD.

 Cement- Rs 600/Quintal, Sand- Rs140/cum, Chips-1150/cum.

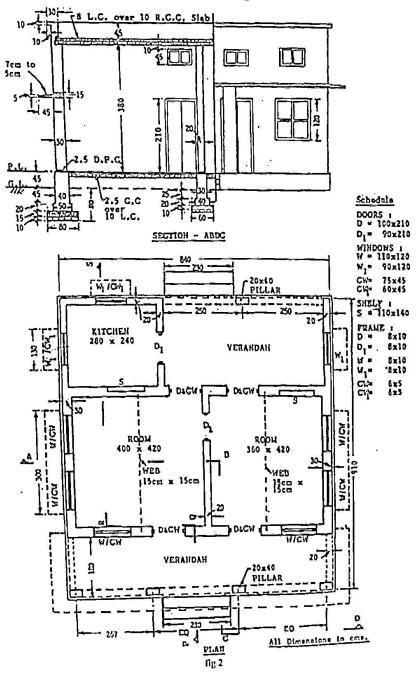
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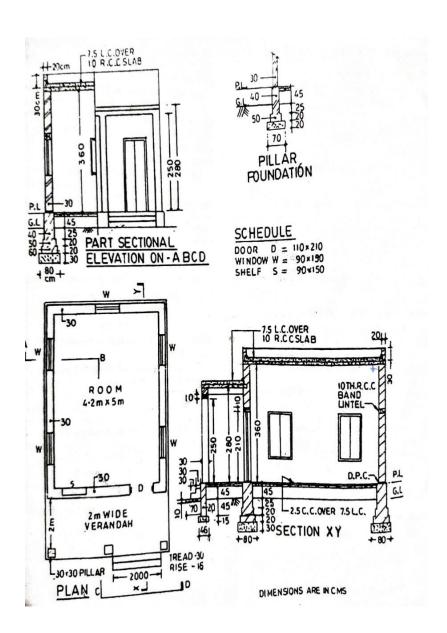


Prepare the quantity estimate for the following items from the above fig.

- a. Earthwork in excavation in foundation.
- b. 1st class brickwork in foundation and plinth.

- 1st class brickwork in super structure (1:3).
- 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" class brickwork in (1:4) in foundation and plinth.
 (c) 2.5 cm thick DPC of cement concrete in (1:3:6).
- (d) 1" class brickwork in 1:6 in super structure.
- (e) 12 mm thick cement plaster inside and outside the building.





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. 1st 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 1st class brickwork in cement mortar (1:6) in super structure.

