

Total No. of Questions : 12]

SEAT No. :

P2122

[Total No. of Pages : 5

[5254]-515

B.E. (Civil)

QUANTITY SURVEYING, CONTRACTS & TENDERS
(2012 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q.No. 1 or 2, 3 or 4, 5 or 6, 7 or 8, 9 or 10, 11 or 12.*
- 2) *Neat diagram should be drawn wherever necessary.*
- 3) *Figures to right indicate full marks.*
- 4) *Use of electronic pocket calculator is allowed.*
- 5) *Assume suitable data, if necessary.*

Q1) a) Define estimate & what are the methods of estimate? **[3]**

b) Differentiate between estimate and quantity surveying. **[3]**

OR

Q2) a) State the unit of measurement for the following : **[3]**

- i) Brick masonry in super structure in cm 1:6
- ii) RCC (1:2:4) for beam and lintel
- iii) Plastering (internal & external)

b) Write detailed note on DSR. **[3]**

Q3) a) Briefly explain about preliminary Estimate, and how does it differ from detailed estimate. **[3]**

b) Enlist various method of preliminary Estimate and explain any one method. **[3]**

OR

P.T.O.

- Q4)** a) Explain the need for work charge establishment and contingency. [3]
b) What is an item of work? Explain the deductions for brickwork in super structure. [3]

Q5) Work out the quantity for the following item of work from fig. 1 & 2

- a) PCC (1:4:8) for foundation [4]
b) Footing in stone masonry for substructure any III footing. [4]

OR

Q6) Work out the quantity for the following item of work, from fig.1 & 2

- a) Brick masonry in super structure in CM 1:6 [4]
b) RCC work in beam and lintel and quantity of steel [4]

- Q7)** a) What are the basic cost and indirect cost involved in the analysis of various item rates of a building. [6]
b) Explain open, restricted and closed specification with necessary examples. [6]
c) What is specification and how does the specification of material and item of work differ. [6]

OR

- Q8)** a) Prepare a detailed specification for Brick masonry in super structure.[6]
b) What are the factors which affect the rate of an item of work. Explain the affect of lead on the rate an item of work. [6]
c) Prepare the rate analysis for the following item of work (any one) [6]
i) 12 mm thick internal plastering
ii) Earthwork excavation for foundation

The following rates for material & labour may be considered for rate analysis.

- i) Cement = Rs. 300/bag,
- ii) Sand = Rs. 1400/m³
- iii) Aggregate = Rs.1400/m³
- iv) Bricks = Rs. 4500/1000No
- v) Steel = Rs. 38,500/MT

Labour rates/day

- i) Head mason = Rs. 600/-
- ii) Mason = Rs. 450/-
- iii) Mazdoor = Rs. 300/-
- iv) Helper = Rs. 350/-

- Q9)** a) What is a tender notice? What informations should a contract document contain? [6]
- b) Explain the unbalanced tender and ring contract in detail. [6]
- c) Explain the following with examples [4]
- i) Distress value and
 - ii) Depreciation

OR

- Q10)** a) Explain in detail the process of administrative approval and technical sanction in PWD for execution of any work. [6]
- b) What are the different establishments in PWD. Explain briefly regular establishment in PWD. [4]
- c) What is comparative statement, its use and how is it prepared. [6]

- Q11)** a) What are the different types of contracts? Explain them briefly. [4]
- b) Explain the role of Arbitrator in Civil engineering works. Explain how an arbitrator can be appointed and his powers. [6]
- c) Explain the important legal implications of a contract and explain the conditions under which a contract can be terminated. [6]

OR

- Q12)** a) Prepare a tender document for construction of office building. The cost of building may be taken as 1.5 crore. The building is to be completed in 24 months including monsoon period. [8]
- b) Explain briefly any two of the following : [8]
- i) Dispute Resolution board.
 - ii) Prequalification for tenders.
 - iii) Voidable contract.

5 NO 5 & 6

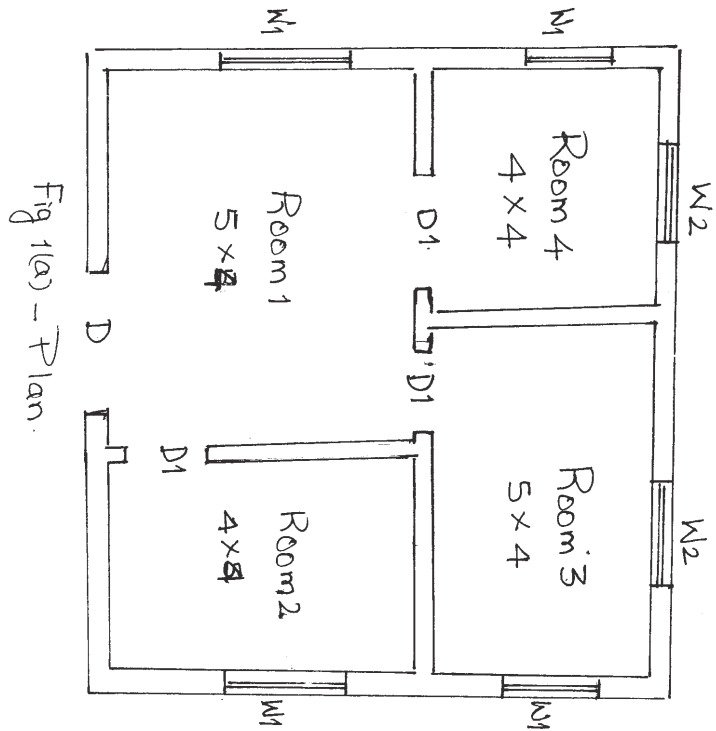


Fig 1(a) - Plan.

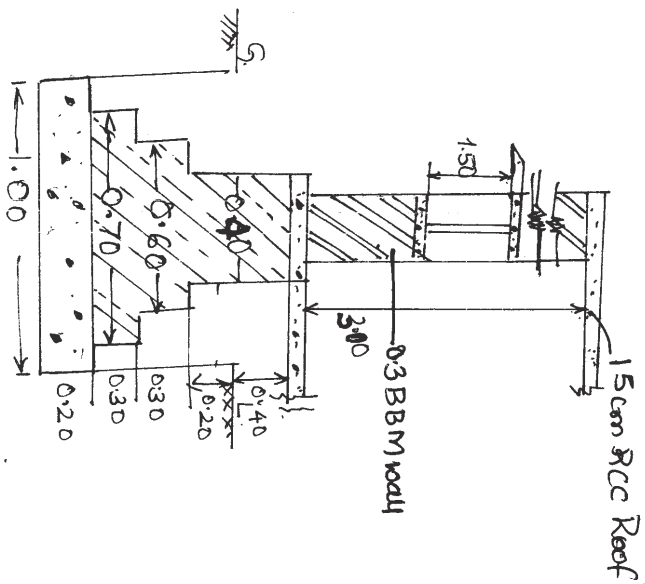


Fig 2) - Section along AA.

Schedule of opening

D = 1.20 x 2.10
D1 = 0.90 x 2.10
W1 = 1.20 x 1.80
W2 = 1.20 x 1.50

(All dimensions in metre).

