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/m^3

iii) Aggregate = Rs.1400/m^3

iv) Bricks = Rs. 4500/l000No

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

Ql0) 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.

Q NO 5 & 6

Fig 1(a) – Plan.

fig(2) – Section along AA.

Schedule of opening

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

(All dimensions in metre).

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