

Total No. of printed pages = 8

Cv-601/Est-II/6th Sem/2018/J/A

ESTIMATING – II

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks for the questions.

PART – A

Marks – 25

1. Write true or false : 1×5=5
- (i) Built up area of a building measured at floor level of any storey is called plinth area.
 - (ii) Scheduled rates are prepared by the Junior Engineer in charge of works.
 - (iii) For work charge establishment a percentage 8 to 10 % is provided of the total estimate.
 - (iv) The Engineering department prepares rough cost estimate for administrative approval.

[Turn over

(v) Estimate is prepared during execution and after completion of work.

2. Choose the correct answers from the following options : 1×5=5

(i) Factors to be considered while preparing detail estimate are :

(a) availability of materials.

(b) availability of labour.

(c) location of site.

(d) All of the above.

(ii) Corrugated iron sheet roofing to be calculated in

(a) running metre (b) rum

(c) sq.m (d) None of these.

(iii) For electrification, percentage considered on total cost is

(a) 2% – 2.5% (b) 1.5 %

(c) 8% – 10% (d) 12%

(iv) The measurement is not made in cubic metre in case of

- (a) concrete work
- (b) earth work
- (c) brick work
- (d) None of the above.

(v) Brick work in superstructure shall be of

- (a) first class brick
- (b) over burnt brick
- (c) sundried brick
- (d) Any one of the above.

3. Fill up the blanks : 1×10=10

(i) Nominal size of standard modular brick is _____.

(ii) Wood work in doors and windows shall be measured in _____.

(iii) Earnest money is deposited by contractor along with the tender at the rate of _____ per cent of the estimated value.

(iv) Nominal roll is a part of _____.

- (v) Payment made on a running account of contractor after final completion of work is known as _____.
- (vi) Number of bags of cement required for 10 cum of concrete proportion 1:2:4 is _____.
- (vii) Unit of payment for payment earthwork is _____.
- (viii) Weight of one bag of cement is _____.
- (ix) _____ measurement book is prepared to check the entry made by Junior Engineer.
- (x) _____ may be used as a replacement of traditional clay brick.

4. Explain in one line each. (any five) : $1 \times 5 = 5$

- (i) NIT
- (ii) Pointing
- (iii) Tools and Plants
- (iv) Lump sum contract
- (v) Borrow pits
- (vi) G.S.T

PART – B

Marks – 45

Answer any *five* questions.

5. Analyse the rate of any *two* items of the following : $4\frac{1}{2} \times 2 = 9$

(i) First class brick work with 1:4 cement mortar.

(ii) 6 mm thick cement plastering with 1:6 mortar.

(iii) RCC works (1:1.5:3) in beams, slabs etc.

6. Write briefly any *three* from the following :

$3 \times 3 = 9$

(i) Task or out-turn

(ii) Preliminary estimate

(iii) Overhead expense

(iv) Lead and Lift

7. Estimate the quantity of earth work for a portion of a district road from the following data : 9

Formation width of the road = 10m, side slope in banking = 2:1 and in cutting 1.5:1, downward gradient = 1 in 200, formation level road surface = 150.00.

Chainage	R L of GL
0	149.00
40	148.90
80	148.50
120	148.80
160	148.60
200	148.70
240	149.20
280	140.40
320	149.30
360	149.00
400	148.60

8. Calculate the quantity of earthwork of an irrigation channel with the following data : 9

Bed width=5m, top of the both bank = 2m, free board = 0.60m, full supply depth = 1m, side slope in cutting 1:1 and in banking 1.5:1.

Chainage	R.L of Ground (m)	Proposed bed Level(m)
0	325.24	324.00
100	324.80	323.94
200	324.43	323.88
300	324.12	323.82
400	324.50	323.76
500	324.98	323.70

9. Write briefly the detailed specification of any *two* from the following : 9

- (i) First class brick in cement mortar (1:6)
- (ii) 25mm thick cement flooring (1:1.5:3).
- (iii) Wood work for doors and windows.

10. (a) Write the factors responsible for 'Rate' analysis. 3

(b) Distinguish between Muster Roll and Acquittance Roll. 3+3=6

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