I.D. No. 24513

B.Tech. 7th Semester F. Scheme Civil Engineering-XI

Examination, May–2014

ESTIMATING AND COSTING

Paper–CE-405-F

Time allowed : 3 hours]   *[Maximum marks : 100*

Note :   *(i)*   *Question No. 1 is compulsory.*

      (ii)   *All questions carry equal marks.*

      (iii) *Attempt one question from each unit.*

      (iv) *Assume missing data, if any, suitably.*

1.   (a)   Define the principle of estimate.

     (b)   What are the general items for building construction ?

     (c)   Describe the necessity of specifications.

     (d)   Define detailed specification of earthwork.

     (e)   Describe examination and payment of bills ?

     (f)   What do you mean by "Salvage value"?

     (g)   Briefly describe the procedure for cancellation of any entry in M.B.

     (h)   What do you mean by rate analysis ?

     (i)   What are the different methods of estimation ?
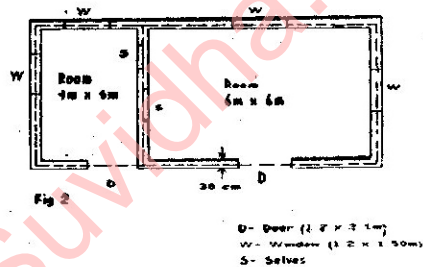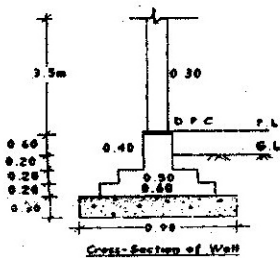
     (j)   Define earnest money and retention money.

                              $2 \times 10 = 20$

I.D. No. 24513-P-4-Q-9 (14)   [P.T.O.

Section–A

2. (a) Write different types of estimate. Explain any one. 10

   (b) What are the Methods adopted to calculate Earthwork of Roads ? Explain with Sketches. 10

3. (a) Calculate the details of measurement and quantity of two rooms of given figure by using Centre Line Method ?

Cross-Section of Wall

Fig 2

D= Door (1.2 x 2.1 m)
W= Window (1.2 x 1.50m)
S= Selves

15

   (b) What are methods used for calculating the earthwork in case of canals and dams. 5

Section–B

4. (a) Write specifications of the following items :
   Bricks   Cement
   Sand   Water and lime   10

   (b) Differentiate between 1st class, 2nd class and 3rd class buildings. 10

5. Write the detailed specification of D.P.C., cement plastering, earthwork for foundation and finishing. 20

Section–C

6. (a) What is the importance of rate analysis ? Explain the procedure of rate analysis for the following items :

    Earth work

    Concrete work

    Reinforced brick work.   10

    (b) Prepare detailed analysis of rate for brickwork in cement mortar 1:6 in superstructure.

    Labour required for 30 Cum of brickwork is

    Mason-27 Nos. and

    Labourers-60 Nos.

    Rates of materials and labours may be assumed suitably.   10

7. (a) Write the units of measurement and mode of measurement of different items of work.   10

    (b) Estimate the quantity and cost for R.C.C. work in beam, slab etc. 1:2:4 - unit 100 cum. Assume suitable data.   10

Section–D

8. What are the different methods of valuation ? Explain each in detail. 20

9. (a) What are the different types of contracts ? Write advantage and disadvantage of any two types of contracts. 10

   (b) What is the procedure for the measurement of work for payment of contractors ? Explain in detail the different types of payments made to the contractor. 10