

24513

B.Tech. 7th Semester (Civil Engg.) Examination,
December-2015

ESTIMATING AND COSTING

Paper-CE-405-F

Time allowed : 3 hours] [Maximum marks : 100

Note : There are nine questions in all. Q. No. 1 is compulsory and students have to attempt one question from each of the four sections.

1. (a) List the data required for preparing an estimate.
- (b) Define revised and supplementary estimate.
- (c) What is importance of detailed specification.
- (d) Name the type of specifications.
- (e) What are the factors on which rate of an item depends ?
- (f) Define security money.
- (g) What all important items are mentioned in tender notice ?
- (h) Write principles of valuations.

24513-P-5-Q-9 (15)

[P.T.O.]

- (1) Write the formula to determine out to out length of a wall for long as well as short wall.
- (2)

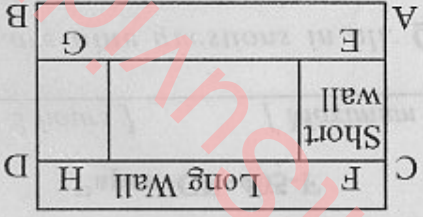


Fig (1)

- (i) What do you mean by administrative sanction ?

$2 \times 10 = 20$

Section-A

2. (a) Write a short note on appropriate estimate. Also give an example.

- (b) What are different methods of calculating sectional area and volume of earth work? Explain.

10

3. Estimate the quantities from fig (2) :

- (i) Earth work in excavation

- (ii) Lime concrete in foundation

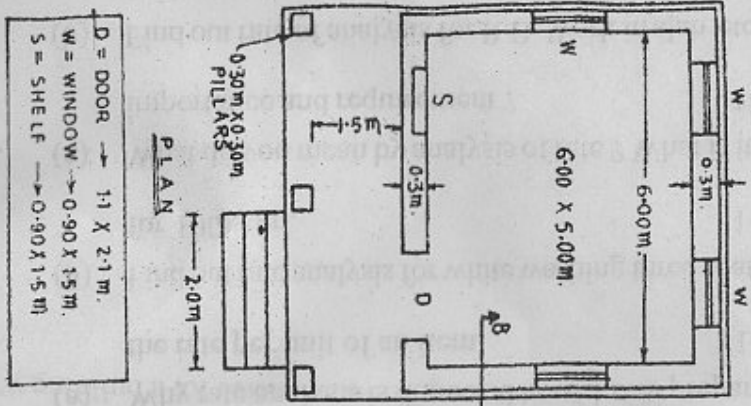
- (iii) First class brick work in foundation and plinth

- (iv) First class brick work in super structure.

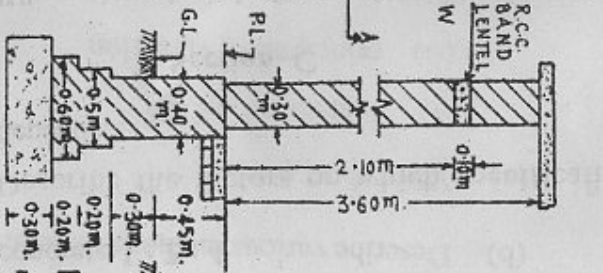
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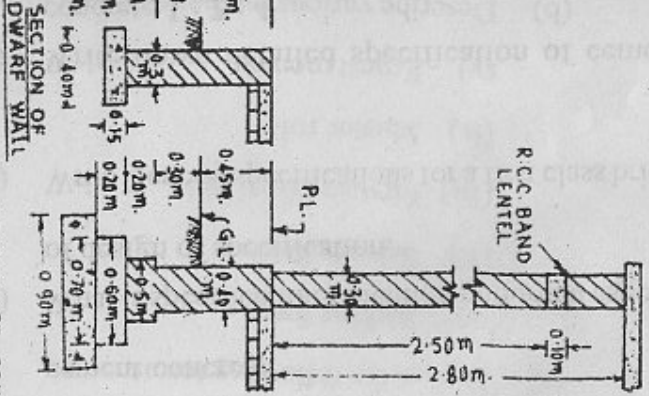
[P.T.O.]



D = DOOR \rightarrow 1.1 X 2.1 m.
 W = WINDOW \rightarrow 0.90 X 1.5 m.
 S = SHELF \rightarrow 0.90 X 1.5 m



SECTION ON MAIN WALL AT AB



SECTION OF SQUARE PILLAR

SECTION OF DWARF WALL

(3)

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Fig.-2

Section-D

(5)

8. (a) Define the following terms :
 (i) Sinking fund
 (ii) Salvage fund
 (iii) First and final bill
 (iv) Muster roll
 (v) Earnest money. 10
- (b) Describe various methods of valuation. 10
9. (a) Write short note on :
 (i) preparation of bill
 (ii) principles of valuation 10
- (b) Write a sample tender notice for a building work. 10

Section-B

(4)

4. (a) Write down detailed specifications of reinforced cement concrete. 10
- (b) What is specification ; Mention important aspects of design of specification. 5
- (c) Write General specifications for a first class brick. 5
5. (a) Write down detailed specification of cement concrete 1 : 2 : 4 10
- (b) Describe the factors on which specification depends. 10
6. (a) Why rate analysis is done and how do we prepare the rate per unit of an item. 10
- (b) Find out rate analysis for white washing three coats for 100 sqm. 10
7. (a) What do you mean by analysis of rate ? What is its importance and requirement ? 10
- (b) Find out rate of analysis for R.B. Work in slab etc. 1 : 3 mortar. 10

[See 5th page]

Section-C