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BCE-034

Diploma in Civil Engineering
DCLEVI

Term-End Examination

December, 2011

BCE-034 : ESTIMATING AND QUANTITY SURVEYING - I

00642

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt **five** questions in all . Question number **1** is **compulsory**. Assume suitable datas wherever required.*

1. Choose the correct answer from the given alternatives : **7x2=14**

(a) Removing and refixing of wooden chaukhat shall be measured in :

(i) Cubic meters (ii) Square meters

(iii) Inch (iv) None

(b) Generally contractor's profit is taken in an estimate as equal to :

(i) 5% (ii) 10%

(iii) 20% (iv) 2%

(c) Queen post trusses are best suited up to a span of :

(i) 9 m (ii) 12.00 m

(iii) 15.00m (iv) 30.00 m

(d) Reinforcements are provided in R.C.C. structures. Extra length for each hook in reinforcement is taken as :

(i) 9ϕ (ii) 18ϕ

(iii) 16ϕ (iv) 24ϕ

(e) Half brick walls are used in :

(i) Retaining walls

(ii) Crate walls

(iii) Load bearing walls

(iv) partition walls

(f) For Hexagonal building estimate, which method will be useful, give reasons :

(i) General method

(ii) Polygon method

(iii) Long wall Short wall method

(iv) Centre line method.

(g) Distempering is measured in :

(i) Kilograms

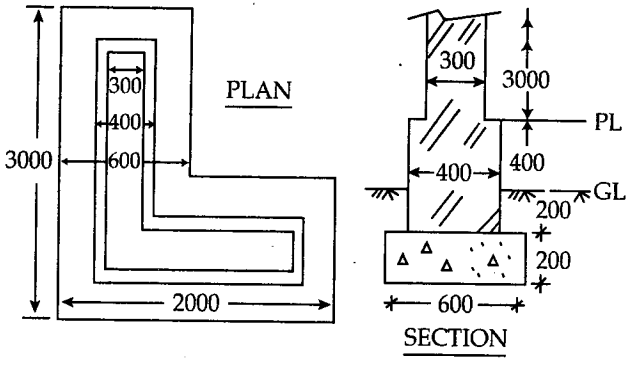
(ii) Litres

(iii) Cubic meters

(iv) Square meters

2. (a) What are different types of estimates ? How do they differ from each other ? **2x7=14**

(b) Find the quantity of earthwork in excavation, cement concrete in foundation, Brickwork 1:6 in foundation and plinth and Brick work 1:6 in superstructure from the given drawing of an L-shaped wall.



3. (a) What are the methods of estimating earthwork in roads ? Write down the procedure to find the earthwork by each method. **2x7=14**

(b) Draw L-section of a portion of a road from the following data :

Formation width = 10 m throughout

Scopes 1:1 (cutting), 2:1 (filling)

Formation level at 0.00 chainage = 104.00m

Down ward gradient 1:100.

Chainage	0	100	200	300	400	500
NSL	100.50	102.80	99.20	103.60	104.50	106.40

Also find depth of cut or fill at each chainage point.

4. Prepare the Analysis of Rate for ***any two*** of the following items of works. **2x7=14**

(a) Plastering on new surface 12 mm tk, 1:6 CM

(b) Lime concrete in foundation 16:32:100

(c) RCC 1:2:4 in beams and columns.

(d) Brick work 1st class 1:6 CM.

5. Write down detailed specification of ***any two*** items of the following works : **2x7=14**

(a) Earthwork in excavation in foundations

(b) Snowcem works

(c) Stone masonry work in walls

(d) 1:2 Flush pointing in CM

6. Differentiate in ***any four*** of the following : **4x3½=14**

(a) Lead and Lift

(b) Technical sanction and Adm approval

(c) Earnest money and Security money

(d) Lump sum contract and Labour rate contract.

(e) Tender and Contract

(f) Spoil bank and borrow pit

7. Write short notes on ***any four*** of the following : **4x3½=14**

(a) Under water concreting

(b) Rate analysis

(c) Bar bending schedule

(d) Contract system

(e) Termination of contract

(f) Types of buildings.