|BCE-034|

DIPLOMA IN CIVIL ENGINEERING (DCLE(G)) DCLEVI

Term-End Examination

December, 2013

BCE-034 : ESTIMATING AND QUANTITY SURVEYING - I
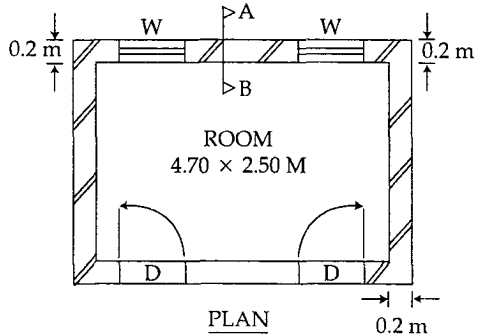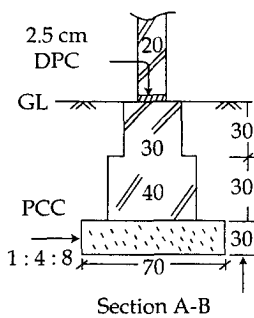
Time : 2 hours   *Maximum Marks : 70*

*Note : Attempt **five** questions in all. Question No. **1** is **compulsory**. Assume suitable datas, whenever required.*

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

   (a)   Unit of measurement of steel truss is :

   (i)   MT

   (ii)   Sqm

   (iii) Covered area

   (iv)   Running Meter

   (b)   In one cubic meter of brick work, Number of bricks are :

   (i)   500 Nos.

   (ii)   525 Nos.

   (iii) 480 Nos.

   (iv)   425 Nos.

(c) Contract Documents should have :

    (i) A set of condition of contract

    (ii) Market rate of materials

    (iii) Standard Schedule of Rate (SSR)

    (iv) Labour rates

(d) In plastering works no deduction is carried out for opening :

    (i) up to 3.00 Sqm

    (ii) up to 1.50 Sqm

    (iii) up to 1.25 Sqm

    (iv) up to 0.50 Sqm

(e) As per BIS (Bureau of Indian Standard) unit of measurement for white washing and colourwashing is :

    (i) Per kg

    (ii) Per litre

    (iii) Per Sqm

    (iv) Per Cubm

(f) Most reliable Estimate is :

    (i) Plinth area Estimate

    (ii) Cube Rate Estimate

    (iii) Detailed Estimate

    (iv) Accurate Estimate

(g) Barbed wire fencing is measured by :

    (i) Meters

    (ii) kgs or Quintals

    (iii) Sqm

    (iv) Wire gauge

2. (a) What do you understand by Estimates. **4** What data are necessary to prepare an estimate of a road ?

(b) With the help of the given drawing, calculate **10** the quantities of following items.

Section A-B   PLAN   0.2 m

(i) Earth work in excavation
(ii) PCC 1 : 4 : 8 in foundation
(iii) Brick work up to GL
(iv) Damp proof course
(v) Flooring area

3. Prepare "Analysis of Rate" for **any two** items of work : **2x7=14**
(a) Brick work 1 : 6 in cement mortar
(b) 12 mm thick 1 : 4 cement plaster
(c) PCC 1 : 4 : 8 in foundation
(d) Two coat white washing on new wall

4. Write down Detailed Specifications of **any two** items of work : **2x7=14**
(a) Earth work in soft rock, hard rock and loose soil
(b) RCC 1 : 2 : 4 in roofing
(c) Distempering on walls
(d) Pointing 1 : 3 on walls

5. Work out quantity of concrete and reinforcement **14** for an RCC Lintel of size 150×300mm used over a clear span of 2.30m. It has a 150 mm-bearing on each side. Lintel has 10 mm ϕ 4 Nos main bar, two of them have been bentup at $L/7$. There are two anchor bars of 6 mm ϕ at top. It has 6 mm ϕ vertical stirrups @ 150 mm c/c through out the length. Assume suitable covers.

6. (a) What are the various types of construction works as per Estimating. Classify them with respect to PWD work procedures ? **2x7=14**

    (b) What do you understand by the term "Termination of Contracts" ? Explains in detail.

7. Write short notes on **any four** of the following :

    (a) Lead and Lift   **4x3½=14**

    (b) Prismoidal formula

    (c) Earnest money

    (d) Technical sanction

    (e) Spoil bank and Borrow pit

    (f) Economical sections in Earth work

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