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**BCE-042** 

# DIPLOMA IN CIVIL ENGINEERING DCLE(G) / DCLEVI

## **Term-End Examination**

00237 D

December, 2017

# BCE-042 : ESTIMATING AND QUANTITY SURVEYING - II

Time : 2 hours

Maximum Marks : 70

- Note: Question no. 1 is compulsory. Attempt five questions in all. Use of scientific calculator is allowed. Assume suitable data wherever required.
- 1. Select the most appropriate answer from the given alternatives.  $7 \times 2=14$ 
  - (a) The most accurate estimate is based on
    - (i) Service unit
    - (ii) Typical bay
    - (iii) Item wise
    - (iv) Plinth area
  - (b) As per general conditions of contract any single work, job or service ordered on a term contract, should *not* exceed
    - (i) ₹ 10,000
    - (ii) ₹ 1,00,000
    - (iii) ₹ 50,000
    - (iv) ₹ 60,000

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(c) Expected out-turn of 12 mm thick plastering with cement mortar is T

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- (i) 15.00 sqm
- (ii) 25.00 sqm
- (iii) 10.00 sqm
- (iv) 7.50 sqm
- (d) Honeycomb brick-work is measured in
  - (i) Sq m
  - (ii) Cum
  - (iii) Running metre
  - (iv) R/feet (Rft)
- (e) MES SSR Part II deals with
  - (i) Structural drawing
  - (ii) Specifications
  - (iii) Rates
  - (iv) Construction drawing
- (f) Dismantling of brick-work is measured in
  - (i) Cum
  - (ii) Nos
  - (iii) Sqft
  - (iv) None of the above

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- (g) "BELDAR", as a category of labour is
  - (i) Skilled
  - (ii) Waterman
  - (iii) Unskilled
  - (iv) Semi-skilled
- 2. (a) What do you understand by the term Estimation ? What are the various data required for the preparation of an estimate ?
  - (b) What are the different forms of measurements? Explain with examples.
- The plinth area of a building is 1650 sq m. The plinth area rate of a similar building in the same locality is ₹ 12,600.00 per sq m + 7% Building Cost Index.

Calculate the cost of the building.

A room of internal dimension 3.0 × 4.0 m has two doors and five windows of size 1.20 × 2.10 m and 1.20 × 1.20 m respectively. Wall thickness is 230 mm.

Calculate the following items of works :

- (a) RCC roofing 1 : 2 : 4 assuming full bearing on walls. Slab thickness is 12 cm.
- (b) Ceiling plaster with 1 : 3 cement sand mortar.

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- 5. Prepare the Analysis of Rate for any *one* of the following :
  - (a) R.C.C. in slabs supported on walls, beams and columns in floors, roofs, landings and the like with 1 : 2 : 4 (20 mm graded aggregate) mix.
  - (b) First class brick-work in superstructure with 1:6 cement mortar.
- 6. (a) Enlist the main items of works for complete estimation of a building. Write a brief specification for any one of these items.
  - (b) Prepare a pro rata for providing a 25 mm thick flush shutter with a solid core construction with block board core. It has plywood face panels of commercial type on both sides.
- 7. Write short notes on any *two* of the following: 2×7=14
  - (a) Requisitions
  - (b) Work Orders
  - (c) Overhead Charges
  - (d) Standard Schedule of Rates

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