

00120

**DIPLOMA IN CIVIL ENGINEERING**  
**DCLE(G) / DCLEVI**

**Term-End Examination**

**December, 2015**

**BCE-042 : ESTIMATING AND QUANTITY**  
**SURVEYING - II**

*Time : 2 hours*

*Maximum Marks : 70*

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- Note :* (i) *Question no-1 is compulsory. Attempt total five questions.*  
(ii) *Use of calculator is allowed.*  
(iii) *Assume suitable data wherever necessary.*
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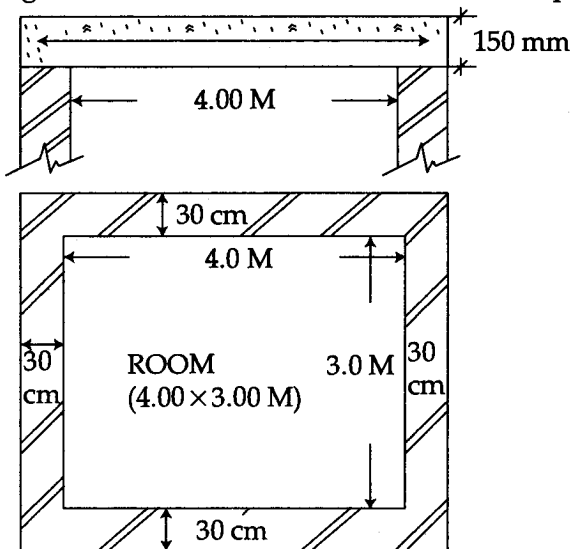
1. Select the correct answer from the given alternatives : 7x2=14
- (a) The essence of estimated cost of work lies in the fact that, actual completion cost should not vary more than :
- |           |          |
|-----------|----------|
| (i) 2%    | (ii) 5%  |
| (iii) 10% | (iv) 15% |
- (b) Unit of measurement for surface dressing, levelling and cleaning of earth is :
- |                  |                    |
|------------------|--------------------|
| (i) Cubic Meters | (ii) Square Meters |
| (iii) Job work   | (iv) Numbers       |
- (c) In the process of "Rate analysis", Beldar is a category of labour :
- |                    |                |
|--------------------|----------------|
| (i) Skilled        | (ii) Unskilled |
| (iii) Semi-skilled | (iv) Labourer  |
- (d) The process of measuring dimensions from working drawing and recording them in the recognised form is known as :
- |                  |                  |
|------------------|------------------|
| (i) Abstracting  | (ii) Billing     |
| (iii) Taking off | (iv) Measurement |

- (e) In M.E.S., Maintenance works are carried out through Term Contract (T. C.), for this purpose, \_\_\_\_\_ is prepared :
- (i) Tender (ii) Petty Contract  
(iii) Annual repairs (iv) Requisitions
- (f) When there is no rate of an item for deviation work available in SSR, then rate of similar items can be obtained through :
- (i) Prorate (ii) Star Rate  
(iii) Rate Analysis (iv) Market Rates
- (g) MES SSR Part - I deals with :
- (i) Structural drawings  
(ii) Rates  
(iii) Specifications  
(iv) Constn. Techniques

2. (a) What are the various methods of estimation ? Explain any one method in detail. 2x7=14
- (b) What are the functions of each column of take off sheet ? Explain with an example.
3. A stadium is proposed to be constructed for 560 - seat capacity. If cost of similar construction is ₹ 35,450 per seat +7.5% building cost index, calculate the cost of the stadium. 14
4. Prepare the Analysis of Rates for the following items : 2x7=14
- (a) Stone walling of random rubble, uncoursed well bonded, bedded and solidly hearted, built in cement mortar (1 : 6), in foundation and plinth.
- (b) Cement concrete in foundations, filling and mass concrete, Type D<sub>2</sub> 1 : 4 : 8 (40 mm graded aggregate).

5. Calculate the painting area for the following types of doors, windows and ventilators : 14
- Flush door  $1200 \times 2100$  mm – 2 Nos.
  - Fully Glazed window  $1000 \times 600$  mm – 4 Nos.
  - Panelled door  $1000 \times 2100$  mm – 3 Nos.
  - Iron grill in windows –  $1000 \times 600$  mm – 4 Nos.

6. Estimate the quantities of material required for an RCC roof slab 150 mm thick with 1% reinforcement for the room shown in the figure 1. Also calculate the form work required. 14



(Figure : 1)

7. Write short notes on **any four** of the following :  $4 \times 3\frac{1}{2} = 14$
- Star rates
  - Work orders
  - MES SSR
  - Different forms of measurement
  - Specifications
  - Labour constant