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BCE-042

DIPLOMA IN CIVIL ENGINEERING DCLE(G) / DCLEVI

Term-End Examination

00495 **December, 2014**

BCE-042 : ESTIMATING AND QUANTITY SURVEYING – II

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt **five** questions in all. Use of calculator is allowed. Assume suitable data wherever necessary.*

1. Select the correct answer from the given choices : *7×2=14*

(a) Unit of measurement for shuttering and form work is

(i) kg

(ii) cu. m

(iii) sq. m

(iv) nos.

(b) When any item neither exists in SSR nor can the rate be derived, a special rate is prepared, which is called as

(i) Prorata Rate

(ii) Missing Rate

(iii) Non SSR Rate

(iv) Star Rate

(c) MES SSR Part II deals with

(i) Structural Drawings

(ii) Construction Drawings

(iii) Specifications

(iv) Rates

(d) 'Welder' is a category of labour :

(i) Semi-skilled

(ii) Skilled

(iii) Unskilled

(iv) Construction Labour

(e) Lean cement concrete ratio for using in foundation is

(i) 1 : 2 : 4

(ii) 1 : 3 : 6

(iii) 1 : 4 : 8

(iv) $1 : 1\frac{1}{2} : 3$

(f) Building Cost Index is added on SSR items for

(i) Describing specifications

(ii) Updating cost index

(iii) Covering cost enhancement

(iv) Changing cost lower

(g) Honeycomb brick work is measured by

(i) Cu. m

(ii) Running meter

(iii) Sq. m

(iv) Cu. m Quantity/2

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 basic principles for Abstracting and Billing ? Explain. *2×7=14*

3. A hospital building is proposed to be constructed for a 60-bed capacity. If cost of similar building is ₹ 42,150 per bed + 5% building cost index, calculate the cost of the project. *14*

4. An RCC column of cross-section 250 mm × 450 mm is having height = 3·20 m. It has main bars 20 mm ϕ 4 Nos. and 16 mm ϕ 2 Nos. Calculate the following quantities :

(i) Form work for column.

(ii) Vertical reinforcement neglecting top and bottom covers. *2×7=14*

5. Prepare the Analysis of Rate for the following items : *2×7=14*

(i) RCC 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) in the roof of a building.

(ii) Brick work in well burnt old size bricks in super structure, straight or curved on plan exceeding 6 m radius built in cement mortar 1 : 6.

6. Calculate the painting area for the following types of doors, windows and ventilators : *14*

(a) Flush door 1000 × 2100 mm — 03 nos.

(b) Panelled door 900 × 2100 mm — 02 nos.

(c) Rolling shutter 2600 × 2100 mm — 01 no.

(d) Glazed window/ventilator 600 × 900 mm — 05 nos.

7. Write short notes on any ***four*** of the following : $4 \times 3\frac{1}{2} = 14$

(i) Overhead Charges

(ii) Labour Constants

(iii) Prorata Analysis

(iv) Abstracting

(v) Standard Schedule of Rates

(vi) Ordinary Requisitions

(vii) Procedure to take off