

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

00310 **Term-End Examination**  
**June, 2016**

**BCE-062 : CONSTRUCTION SUPERVISION AND  
BUILDING MAINTENANCE**

*Time : 2 hours*

*Maximum Marks : 70*

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**Note :** *Question no. 1 is compulsory. Answer any four questions from the remaining. All questions carry equal marks.*

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1. Select the most appropriate answer from the given alternatives in questions (a) to (g) below :

7×2=14

- (a) Formulation of goals and policies of an organisation is taken up by
- (i) First line management
  - (ii) Mid level management
  - (iii) Top level management
  - (iv) Workers
- (b) Size of which of the drawing sheets, given below, is the largest ?
- (i) A<sub>3</sub>
  - (ii) A<sub>2</sub>
  - (iii) A<sub>1</sub>
  - (iv) A<sub>0</sub>

- (c) Muster roll is used for keeping records related to
  - (i) Permanent workers
  - (ii) Directly employed workers
  - (iii) Materials
  - (iv) Vehicles and machines
- (d) Costs which are incurred in a project, but are not directly related to any specific item of construction work, are called
  - (i) Direct costs
  - (ii) Indirect costs
  - (iii) Petty costs
  - (iv) Important costs
- (e) POL records in a construction project are related to
  - (i) Portland cement
  - (ii) Police records
  - (iii) Fuel and lubricants, etc.
  - (iv) Political records
- (f) Defect(s) in timber due to natural forces, out of the following is/are
  - (i) Knots
  - (ii) Shakes and upsets
  - (iii) Twisted fibres
  - (iv) All of the above

(g) Chemical composition of a reinforcement bar is covered by

(i) IS : 383

(ii) IS : 499

(iii) IS : 1786

(iv) IS : 515

2. (a) Define any *two* of the following terms in brief:

$$2 \times 3 \frac{1}{2} = 7$$

(i) Plan

(ii) Elevation

(iii) Specifications

(iv) Tender

(b) Discuss the main responsibilities of a construction supervisor briefly.

7

3. (a) Explain the importance of record keeping in a construction project.

7

(b) Describe how a Bar chart is used to show the progress of a project.

7

4. (a) What are the precautions to be observed while constructing 'Raft foundations' ?

7

(b) Explain any one measure which can be taken up for control of corrosion of steel, in the form of a step-wise procedure.

7

5. (a) What do you understand by 'Cup shakes' ?  
Explain with a neat sketch. 7
- (b) Describe any one field test for structural steel. 7
6. (a) Discuss how bad workmanship of fixing may affect the functioning of sanitary fittings. 7
- (b) Enlist any seven names of tools used in the repair of sanitary fittings. 7
7. Write short notes on any *two* of the following :  $2 \times 7 = 14$
- (a) Repair of floors
- (b) Termite treatment
- (c) Water-proofing in buildings
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