## DIPLOMA IN CIVIL ENGINEERING DCLE(G)

## **Term-End Examination**

00495

December, 2014

## BCE-062 : CONSTRUCTION SUPERVISION AND BUILDING MAINTENANCE

Time: 2 hours

Maximum Marks: 70

**Note:** Question number 1 is **compulsory**. Answer any **four** questions from the remaining questions.

- 1. Select the most appropriate answer from the given alternatives in the following:  $7\times2=14$ 
  - (i) Formulation of goals and policies of an organisation is primarily done by
    - (a) Top level management
    - (b) Mid level management
    - (c) First line management
    - (d) Workers' union
  - (ii) The drawing sheet size 297 mm  $\times$  420 mm refers to
    - (a) A0 sheet
    - (b) A1 sheet
    - (c) A2 sheet
    - (d) A3 sheet

(iii)		regate, most of which is retained on mm IS sieve is known as coarse regate.
	(a)	5.50
	(b)	4.75
	<b>(c)</b>	6.25
	(d)	8.75

- (iv) Which defect in timber occurs in the seasoning process of wood?
  - (a) Bow
  - (b) Knots
  - (c) Dry rot
  - (d) Chip mark
- (v) When a revision of an existing drawing arrives at site, it is a good practice to stamp the earlier drawings as
  - (a) Superseded
  - (b) Cancelled
  - (c) Rejected
  - (d) Abandoned
- (vi) In POL records, POL stands for
  - (a) Petrol, oil and lubricants
  - (b) Petrol, oil and lime
  - (c) Payroll, officer and labour
  - (d) Persons, organisation and leader

(vii)	The work awarded to a contractor on the basis of measurement of items refers to	
	(a) Lumpsum contract	
	(b) Piece rate contract	
	(c) Item rate contract	
	(d) Special contract	
<b>2.</b> (a)	Describe the responsibilities of a construction supervisor.	7
(b)	Why are specifications necessary? What are the requirements of good specifications?	7
<b>3.</b> (a)	Explain the difference between a Muster Roll and an Attendance Register with respect to their use and maintenance.	7
(b)	Enlist different types of site registers.  Explain the use and procedure of maintenance of any one type of site register.	7
<b>4.</b> (a)	Describe the check-list for supervising a masonry construction.	7
(b)	Describe in brief the defects in timber caused by natural forces.	7
<b>5.</b> (a)	Describe the qualities and requirements of a good preservative for timber.	7
(b)	Describe briefly the different types of coatings provided for steel.	7
<b>6.</b> (a)	Discuss the various causes of dampness in buildings.	7
(b)	Discuss the surface treatments for water-proofing of buildings.	7
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- 7. Write short notes on any **two** of the following:  $2 \times 7 = 14$ 
  - (a) Efflorescence in masonry walls
  - (b) Qualifications and training requirement of a construction supervisor
  - (c) Bill of Quantities
  - (d) Anti-termite treatment of masonry foundations