

**DIPLOMA IN CIVIL ENGINEERING  
(DCLEVI / DELVI)**

**Term-End Examination**

**00482**

**December, 2017**

**BICEE-005 : CONSTRUCTION SUPERVISION AND  
BUILDING MAINTENANCE**

*Time : 2 hours*

*Maximum Marks : 70*

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***Note :** Question no. 1 is compulsory. Attempt four more questions from the remaining questions no. 2 to 8. All questions carry equal marks.*

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1. Choose the correct answer for the following questions from the four alternatives :  $7 \times 2 = 14$

- (a) The age of a tree can be known by examining
- (i) Cambium layer
  - (ii) Annual rings
  - (iii) Medullary rays
  - (iv) Heartwood

- (b) The property of ingredients to separate from each other while placing of concrete is called
- (i) Segregation
  - (ii) Compaction
  - (iii) Shrinkage
  - (iv) Bulking
- (c) Snowcem is a
- (i) Distemper
  - (ii) Synthetic enamel paint
  - (iii) Primer
  - (iv) Waterproof cement paint
- (d) The amount deposited with the department as a guarantee of the tender is known as
- (i) Bank guarantee
  - (ii) Earnest money
  - (iii) Security deposit
  - (iv) Caution money
- (e) The purest form of iron is
- (i) Mild steel
  - (ii) Cast iron
  - (iii) High carbon steel
  - (iv) Wrought iron

- (f) The age of a tree can be estimated by the
- (i) Height of the tree
  - (ii) Diameter of bark
  - (iii) Number of rings on the bark section
  - (iv) Number of heartwood rings
- (g) Workability of concrete is directly proportional to
- (i) Aggregate cement ratio
  - (ii) Time of transit
  - (iii) Grading of aggregate
  - (iv) All of the above
2. (a) Why is there a need for inspection and quality control in a project ? Explain in detail. 7
- (b) Explain interpolation of drawings. 7
3. (a) What do you mean by Measurement Book ? Show a page of a measurement book to support your answer. 7
- (b) What do you mean by Labour Report ? Sketch out a page of a labour report to support your answer. 7

4. Write down the significance of maintaining different site registers. Discuss any two in detail. 14
5. (a) What do you mean by termite-proof buildings ? Write down the various chemicals used to make a building termite proof. 7
- (b) What do you mean by pointing and plastering ? Also write down the defects in plastering. 7
6. (a) How can we detect various defects in a sewer line ? 7
- (b) Write down the various defects in timber. 7
7. Write notes on the following :  $2 \times 7 = 14$
- (a) Pre-cast Concrete
- (b) Formwork
8. What do you mean by seasoning of timber ? Explain various methods of seasoning of timber. 14
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