

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

**Term-End Examination**

00682

**December, 2017**

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

*Time : 2 hours*

*Maximum Marks : 70*

*Note : Question no. 1 is compulsory. Attempt any four  
out of the remaining questions.*

1. Fill in the blanks in the following parts by using the terms taken from the given list :  $7 \times 2 = 14$
- men, material, elevation, plan, sq m, kg/m, heart rot, knot, 150 mm, sq m, reduced level, benchmark, 115 mm, 230 mm
- (a) The side view of an object is called \_\_\_\_\_ while view from the top is \_\_\_\_\_.
- (b) In a standard brick the dimensions of stretcher side is \_\_\_\_\_ and header side is \_\_\_\_\_.

- (c) In survey, the point above or below the datum lines is known as \_\_\_\_\_ while the fixed point of known reduced level is known as \_\_\_\_\_ .
- (d) The unit measurement of formwork or shuttering is in \_\_\_\_\_ and that of reinforcement is in \_\_\_\_\_ .
- (e) Surface dressing of natural ground should not exceed \_\_\_\_\_ depth and is measured in \_\_\_\_\_ .
- (f) The two defects in timber are \_\_\_\_\_ and \_\_\_\_\_ .
- (g) The two major resources of construction are \_\_\_\_\_ and \_\_\_\_\_ .
2. (a) Explain the difference between PCC and RCC and describe their use in construction.
- (b) How would you check the quality of cement before using it at site for plastering? Discuss briefly. 7+7=14
3. List out any four site documents which a site supervisor should maintain and monitor. Explain their purposes, writing two sentences for each document. 2×7=14

4. Differentiate between any *four* of the terms in the following parts :  $4 \times 3 \frac{1}{2} = 14$

- (a) A3 and A4 sheets
- (b) Service drawing and GA drawing
- (c) Bottle trap and Gully trap
- (d) Potable water and Saline water
- (e) 53 grade and 43 grade of cement
- (f) Brick-work and Block work
- (g) Formwork and Shuttering

5. Why is slump test conducted ? Explain with the help of a neat diagram, the method to conduct this test.  $4+10=14$

6. (a) Explain any two types of commonly used flooring.
- (b) Briefly discuss how quality and quantity of mixing water may affect quality of concrete.

$$7+7=14$$

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

- (a) Method of Plastering above 12 mm thickness
  - (b) Personal Protective Equipment (PPE)
  - (c) Rules for Fitting Doors and Windows
  - (d) Manholes in Pipelines
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