

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

Term-End Examination

June, 2018

00303

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

Time : 2 hours

Maximum Marks : 70

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

1. Fill in the blanks in the following parts by
taking terms from the following list : $7 \times 2 = 14$

English, Flemish, 1 : 6, 1 : 3, Frog, Plinth,
Parapet, 230 × 115 mm, Datum, Collimation,
Drawings, Site Plan, Reinforced Cement
Concrete, Plain Cement Concrete.

(a) A map showing the plan of construction is
called _____ while _____ gives the
construction details.

(b) Levels are measured vertically with
reference to _____ line while the line
joining the centers of eyepiece and object
lens is called line of _____.

- (c) Damp Proof Course (DPC) is done at _____ level while water proofing is done at _____.
- (d) The standard size of a brick is _____ and the depression in the brick is called _____.
- (e) The two very common brick bonds are _____ and _____ bonds.
- (f) Generally the external wall plaster is in _____ ratio while internal is in _____ ratio.
- (g) RCC stands for _____ while PCC stands for _____.

2. (a) List out various precautions which should be taken while placing the reinforcement.

(b) Describe the check-list of supervision for laying a concrete floor.

7+7=14

3. Differentiate between the terms in the following parts :

$$4 \times 3 \frac{1}{2} = 14$$

(a) Construction joint and Expansion joint

(b) Scaffolding and Formwork

(c) Panoramic view and Isometric view

(d) Unskilled, Semi-skilled and Skilled labour

4. (a) Explain the purpose of constructing manholes in pipelines and vent pipes.
- (b) Explain the purpose of pipe trap, waste trap and gully trap in a pipeline. $7+7=14$
5. Describe the purpose and content of the following site documents : $4 \times 3 \frac{1}{2} = 14$
- (a) Muster Roll
- (b) Site Diary
- (c) Measurement Book
- (d) Schedule of Work
6. (a) List out seven personal safety equipment with their purpose and types.
- (b) Briefly explain various types of security arrangements required while working at heights in a construction project. $7+7=14$
7. Write short notes on any *two* of the following : $2 \times 7 = 14$
- (a) Slump Test
- (b) Curing
- (c) Bill of Quantities
- (d) Phases of Construction Project