No. of Printed Pages : 4 **BCE-062**

DIPLOMA IN CIVIL ENGINEERING

DCLE(G)

Term-End Examination

June, 2019

BCE-062 : CONSTRUCTION SUPERVISION AND BUILDING MAINTENANCE

Time : 2 Hours *Maximum Marks : 70*

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

1. Fill in the blanks after choosing from options given after each sentence : 2×7=14

    (a) Plumb Bob is used to check the .... of the wall while spirit level is used for checking .... (slope, verticality, angle)

(b) Vicat apparatus is used to determine ....
of cement and normal size of needle used
is ....

(10 mm, consistency, strength, 20 mm)

(c) When a building is viewed from top it is
called .... and when viewed from side *or*
front it is called .... ,

(3D view, elevation, plan, section)

(d) The two axes of Bar chart are .... and
....   (Task, time, velocity, energy)

(e) Plan and Elevation are .... views while
isometric is .... view.

(one-dimensional, two-dimensional, three-
dimensional)

(f) Bricks should be soaked in water for
.... before use and the gap between two
bricks for mortar should be of ....

(24 hours, 10 days, 10 mm, 10 cm)

(g) Two constituents of concrete are .... and
..........:.. .   (cement, brick, aggregate, glass)

2. Enlist any *four* types of flooring and explain the laying of JPC flooring.   6+8=14

3. What are various reasons of corrosion in steel ? Explain the remedial measures to avoid corrosion.   6+8=14

4. Explain any *two* methods of making a building waterproof. How do you ensure to avoid dampness in walls and seepages in underground structures ? Write briefly.   6+8=14

5. (a) Explain the precautions to be taken while fixing sanitary fittings and laying plumbing lines.   6

    (b) How is the slope of the floor checked ? Write methodology of repairing the floor steps briefly.   8

6. (a) List out various items required for form work shuttering. Explain their use and function.   6

    (b) Write any *five* reasons for hazards in staging and explain them briefly.   8

7.   Write short notes on any *four* of the following :

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

(a)   Top level management

(b)   Types of cements and their uses

(c)   Responsibilities of construction supervisor

(d)   Precautions while working at heights

(e)   Safety equipments and their uses

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