BCE-043

DIPLOMA IN CIVIL ENGINEERING DCLE(G) / DCLEVI
Term-End Examination
00405 **December, 2014**

BCE-043 : CONSTRUCTION TECHNOLOGY – II

Time : 2 hours   *Maximum Marks : 70*

Note : Question no. 1 is compulsory. Answer any four questions from the remaining part. All questions carry equal marks.

1. Choose the correct alternative in questions
    (a) to (g).   7×2=14

    (a) Flakiness Index is a test for

         (i)   fine aggregate

         (ii) coarse aggregate

         (iii) cement

         (iv) bricks

    (b) For planning of annual maintenance, a financial year is divided into four quarters. April to June is the

         (i)   first quarter

         (ii) second quarter

         (iii) third quarter

         (iv) fourth quarter

(c) Godowns and warehouses represent

    (i) low fire load

    (ii) medium fire load

    (iii) high fire load

    (iv) None of these

(d) Which of the following sections are also called joists or beams ?

    (i) Angle sections

    (ii) I-sections

    (iii) Plates

    (iv) Corrugated sheets

(e) Which of the following is *not* an acoustical defect ?

    (i) Echo

    (ii) Frequency

    (iii) Reverberation

    (iv) Dead spots

(f) Plenum process is an artificial ventilation system.

    (i) True

    (ii) False

(g) Output of primary crusher is fed to secondary crusher.

    (i) True

    (ii) False

2. (a) What are the aims of supervision ? Discuss briefly. 7

(b) What are the steps for planning of an annual maintenance programme ? Explain briefly. 7

3. Briefly state characteristic requirements of an ideal fire resistant material. Describe the use of a fire resistant material in a building. 14

4. Describe the steel sections commonly used as 14

(i) Compression members

(ii) Tension members

(iii) Flexural members

5. (a) Explain any two acoustical defects in a building with diagram (if necessary). 7

(b) Describe briefly the requirements of a good ventilation system of a building. 7

6. (a) Discuss any one ground improvement technique for foundation. 7

(b) Explain various special bricks. 7

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

(a) Precast Framed Construction

(b) Safety Measures during Construction

(c) Jaw Crusher

(d) Concrete Mixers

(e) Natural Ventilation System

(f) Welded Connection