BCEE-052

DIPLOMA IN CIVIL ENGINEERING
DCLE(G) / DCLEVI
Term-End Examination
☐☐☐☐☐☐ June, 2016

BCEE-052 : CONSTRUCTION EQUIPMENT

Time : 2 hours   *Maximum Marks : 70*

Note : *Question no. 1 is* **compulsory.** *Answer any* **four** *more questions from the remaining.*

1. Select the correct answer for the following :   *7×2=14*

    (a) Which equipment will you suggest for handling loose materials such as sand, gravel, etc. ?

        (i)   Clam shell

        (ii) Power shovel

        (iii) Drag line

        (iv) Back hoe

    (b) Bulldozers are mainly used for

        (i)   Speeding earth fill and clearing work

        (ii) Excavation work

        (iii) Removing wet soil

        (iv) None of these

(c) The most suitable equipment for close range of work is

(i) Back hoe

(ii) Clam shell

(iii) Power shovel

(iv) Drag line

(d) Salvage value of an equipment is

(i) initial cost

(ii) cost of end of life

(iii) equal to depreciation

(iv) None of these

(e) Which of the following is a part of a construction equipment ?

(i) Boom

(ii) Loam

(iii) Clay

(iv) Silt

(f) For placing concrete in remote and inaccessible places, we can use

(i) Tilting mixer

(ii) Truck mixer

(iii) Pan type mixer

(iv) Pneumatic concrete placer

(g) This mixer is used for large works.

    (i) Hand-fed tilting mixers

    (ii) Reverse drum non-tilting mixers

    (iii) Roller pan mixers

    (iv) None of these

2. (a) Enlist any seven precautions to be taken at construction sites.   7

  (b) Explain the operations of a drag line with a neat sketch of drag line.   7

3. (a) Discuss the use of crane in a construction work.   7

  (b) Enlist different types of crushers used for production of aggregate. Explain any one.   7

4. Discuss any two types of earth moving equipment with sketches.   *14*

5. Describe the 'straight line method' of calculating yearly depreciation for an equipment with an example.   *14*

6. What are the various types of concrete mixers ? Explain the working of Non-tilting Reverse drum mixer.   *14*

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

   (a) Preventive Maintenance

   (b) Vibrating Compactors

   (c) Tunneling in Rocks

   (d) Log Books

   (e) Cable Ways