

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

**Term-End Examination**

**December, 2016**

**BCEE-052 : CONSTRUCTION EQUIPMENT**

*Time : 2 hours*

*Maximum Marks : 70*

**Note : Answer five questions in all. Question no. 1 is compulsory.**

**1. Choose the correct answer for the following :  $7 \times 2 = 14$**

(a) Which of the following is *not* the name of a construction equipment ?

- (i) Scraper
- (ii) Dozer
- (iii) Shovel
- (iv) Inspection

(b) Which of the following is a hoisting equipment ?

- (i) Dump truck
- (ii) Bulldozer
- (iii) Dragline
- (iv) Crane

- (c) Ratio of compact volume to bank volume is called
- (i) Swell factor
  - (ii) Shrinkage factor
  - (iii) Bulk density
  - (iv) None of these
- (d) Which of the following is *not* an excavating equipment ?
- (i) Power shovel
  - (ii) Bulldozer
  - (iii) Drill
  - (iv) Dragline
- (e) For supplying freshly mixed concrete to places away from the place of mixing, the equipment used is
- (i) Pan type mixer
  - (ii) Truck mixer
  - (iii) Tilting mixer
  - (iv) None of these
- (f) Which of the following may be associated with the value of a construction equipment ?
- (i) Elevated
  - (ii) Salvage
  - (iii) Drilling
  - (iv) Dumpers

- (g) In mountainous regions, the conveyor system best suited for covering long distance is
- (i) Belt conveyor
  - (ii) Bucket conveyor
  - (iii) Ropeway
  - (iv) Cableway
2. What do you mean by hauling and what are the different types of equipments used as hauling equipments ? Describe briefly. 14
3. Describe the role of construction equipments in the speedy and economical completion of large construction projects. 14
4. Describe in detail the operation and application of (i) Power shovel, and (ii) Back hoe with diagrams. 14
5. What are the different types of dumpers used in construction ? How are dumpers different from trucks ? 14
6. What are the various operations which may be conducted by Bulldozers ? Compare crawler mounted and wheel mounted bulldozers. 14

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

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

- (a) Scrapers
  - (b) Periodical Maintenance
  - (c) Power Crane
  - (d) Concrete Vibrators
  - (e) Rolling Equipment
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