DIPLOMA IN CIVIL ENGINEERING
DCLE(G)

00390   **Term-End Examination**

June, 2014
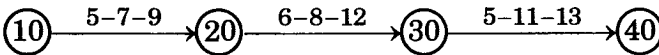
BCE-051 : CONSTRUCTION MANAGEMENT

Time : 2 hours   *Maximum Marks : 70*

Note : *Question no. 1 is **compulsory**. Attempt any **four** questions out of remaining six questions.*

1. (a) What do you understand by 'Forward Pass' in calculating earliest expected time and 'Backward Pass' in calculating latest allowable time ? Explain.

   (b) Three activities 10 – 20, 20 – 30 and 30 – 40 of a network are shown in the figure below with their individual time estimates t_O, t_L and t_P marked on them. Compute the expected time for each activity and for the series of activities.   *5+9=14*

   (10)——5–7–9——►(20)——6–8–12——►(30)——5–11–13——►(40)

2. Explain the activities in detail during the following phases of a project : $3\frac{1}{2} \times 4 = 14$

   (a) Project initiation phase

   (b) Project planning and designing phase

   (c) Project execution and control phase

   (d) Project closing phase

3. What are the essential features of a Construction Contract ? Explain and differentiate between 'Lump Sum Contract' and 'Item Rate Contract'. $7+3\frac{1}{2}+3\frac{1}{2}=14$

4. Differentiate between the following : $3\frac{1}{2} \times 4=14$

   (a) Site Investigation v/s Soil Investigation

   (b) CPM v/s PERT

   (c) Structural Drawing v/s Construction Drawing

   (d) Contract v/s Agreement

5. How are the following organised at a Construction Site of a Flyover ? $3\frac{1}{2} \times 4=14$

   (a) Safety and security of material

   (b) Labour accommodation and Sanitation

   (c) Training of Labour

   (d) Traffic Control and Marking of routes

6. (a) What are the three categories in which labour has to be classified for payment of wages ? Explain how you will screen the labour for these categories.

   (b) Explain the induction process of labour at any site, giving the details of activities and events required for the same. $7+7=14$

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

   (a) Milestone Chart

   (b) Types of Contract

   (c) Safety Induction process at site

   (d) Personnel Protective Equipment

   (e) Earnest Money

   (f) Materials Management

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