BCE-051

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

00130

BCE-051 : CONSTRUCTION MANAGEMENT

Time : 2 hours   Maximum Marks : 70

Note : Answer any **five** questions. Give neat and labelled sketches. Use of scientific calculator is permitted.

1. In a project execution, there are various stakeholders. Explain the responsibilities of the following : $4 \times 3\frac{1}{2} = 14$

    (a)   Owner (Client)

    (b)   Contractor

    (c)   Project Manager (Engineer)

    (d)   Architect

2. What do you understand by Disputes arising out of the contract ? Explain Claims versus Disputes. $7 + 3\frac{1}{2} + 3\frac{1}{2} = 14$

3. (a)   What do you understand by Resources Productivity Control ? Explain Productivity Performance Index.

(b) If a given 1200 m^3 of masonry work has been planned to be done by 8 masons over a period of 15 days, then calculate the Performance Efficiency Index for the same number of masons, if the work is being actually performed in 18 days. *7+7=14*

4. (a) What is slack time ? Explain positive and negative slack time.

(b) The 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_i and t_p marked on them. Compute the expected time for each activity and for the series of activities.

$$\boxed{10} \xrightarrow{\ 5\text{-}7\text{-}9\ } \boxed{20} \xrightarrow{\ 6\text{-}8\text{-}12\ } \boxed{30} \xrightarrow{\ 5\text{-}11\text{-}13\ } \boxed{40}$$
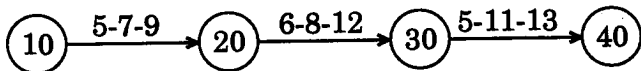
5+9=14

5. What are the steps involved in Budget Cost Analysis ? Explain the commonly used budget monitoring parameters with the help of neat diagram and charts. *5+9=14*

6. Labour welfare at project sites is becoming more and more important day-by-day. In view of this, explain the following : $4 \times 3\frac{1}{2} = 14$

   (a) Important points while setting up a labour camp

   (b) Facilities to be provided in the labour camp

   (c) Induction and job-oriented training for workmen

   (d) Display chart for safety at site

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

   (a) Earliest and Latest Start time

   (b) Project Life Cycle

   (c) Productivity and Quality at Construction Site

   (d) Prevailing Training and Certification System of Tradesmen

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