Time: 2 Hours

## DIPLOMA IN CIVIL ENGINEERING DCLE(G)

## Term-End Examination

## December, 2013

## **BCE-051: CONSTRUCTION MANAGEMENT**

Maximum Marks: 70 Note: Question No.1 is compulsory. Attempt any four questions from the remaining. All questions carrry equal marks.

- 1. State whether the given statements are TRUE or FALSE: 7x2 = 14
  - The time between the start to the end of a (a) project is termed as the project life span.
  - (b) In work breakdown structure (WBS), all the bigger jobs are broken into smaller jobs.
  - In 'Milestone chart', we consider activities (c) instead of events.
  - In PERT, we focus on events. (d)
  - (e) Total float for an activity = Latest start time + Earliest start time.
  - Inventory cost = ordering cost cost of (f) transportation.
  - Line of Balance method is applied to those (g) jobs which are repetitive in nature.
- What are the different types of an 2. (a) 7 organisational structure? Discuss their salient features.
  - Describe three types of authority in a (b) 7 line-and-staff organisation.

- 3. Describe different methods of determining progress of a project.
- 4. Draw the network showing earliest occurance time (EOT) and latest occurance time (LOT) for all the events and give critical path and duration of a project having the following set of activities:

tivity	Predecessors	Duration (weeks)
A	-	<sup>7</sup> 4+4+4+2=14
В	-	3
C	-	9
D	А, В	4
E	C, D	6
F	C, D	8
G	E, F	2
Н	G	6

- 5. (a) What do you understand by 7 pre-qualification of contractors? Give it's advantages and disadvantages.
  - (b) Describe the following while organising a construction site for a large project:
    - (i) site access and site roads
    - (ii) site protection
- 6. Describe in brief the different means of resolving 14 a dispute.
- 7. Describe the following in brief:  $4x3\frac{1}{2}=14$ 
  - (a) Lump sum contract
  - (b) Lump sum and schedule contract
  - (c) Labour contract
  - (d) Build Operate Transfer (BOT) contract

- **8.** Write short note on *any four* of the following :
  - (a) Latest start time and latest finish time  $4x3\frac{1}{2}=14$
  - (b) Free float
  - (c) Classification of construction project
  - (d) Stakeholders in a construction project
  - (e) Resource management in a construction project
  - (f) Importance of construction planning
  - (g) Formal and informal organisation