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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (2012 to 2017) (Sem.-4)

CONSTRUCTION MACHINERY AND WORKS MANAGEMENT

Subject Code : BTCE-402

M.Code : 56084

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1) Answer briefly :**

- (a) Differentiate between Successor event and predecessor event.
- (b) Define the term "Line of Balance".
- (c) What do you understand by the work Breakdown structure?
- (d) What are characteristics of Normal Distribution?
- (e) Explain the functions of Crane.
- (f) What are essential components of belt conveyor system?
- (g) Explain Slack. What does a negative slack indicate?
- (h) How do you select the size of power shovel?
- (i) What is a milestone chart?
- (j) What is a life-cycle curve? What are its uses?

SECTION-B

- 2) Explain batching, mixing and placing of concrete.
- 3) What is a network diagram? What is the difference between PERT and CPM?
- 4) With neat sketches explain the working of a dragline.
- 5) A project takes 25 days along the critical path and has standard deviation of 5 days. What is the probability of completing the project within (i) 30 days (ii) 25 days?
- 6) Derive graphically a relationship between optimum duration time and optimum cost.

SECTION-C

- 7) Describe the basic concepts on which the accounting systems are based.
- 8) Write short notes on **any two** :
 - (a) Type of mixers
 - (b) Time grid diagram
 - (c) Planning for a house
- 9) Table shows information regarding various activities of network shown under

Activity	Normal duration (days)	Normal cost (Rs)	Crash duration (days)	Crash Cost (Rs)
1-2	9	8000	6	9500
2-3	5	5000	3	5500

The project overhead costs are @ Rs. 300 per day. Determine

- (a) Direct cost-duration relationship,
- (b) Total cost-duration relationship and the corresponding least cost plan

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.