

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE-2011 Batch) (Sem.-4<sup>th</sup>)

**CONSTRUCTION MACHINERY & WORKS  
MANAGEMENT**

Subject Code : BTCE-402

Paper ID : [A1172]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

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

**SECTION-A**

I. Write briefly :

- What is a bar chart and its drawbacks?
- Define the term total float, free float and share float.
- What are characteristics of Normal Distribution?
- What is a milestone chart?
- Differentiate between an activity & an Event.
- Define the term "Line of Balance".
- What does ITS and FS stand for?
- How do you select the size of a power shovel?
- Explain the Variance and Standard Deviation.
- Explain compaction of concrete.

**SECTION - B**

- Explain batching, mixing and placing of concrete.
- What is a network diagram? What is the difference between PERT and CPM?
- Describe the basic rules for construction of network diagram.
- Derive graphically a relationship between optimum duration time and optimum cost.
- Explain the working of a Dragline.

**SECTION - C**

- A project has the following schedule. Construct the PERT network and compute the earliest start time for each activity.

Activity	Time (weeks)	Predecessors
A	3	None
B	2	A
C	4	A
D	5	B
E	3	C
F	6	D

- Write the functions & operating principles of :
  - Hoe
  - Bull Dozer.
- Describe the basic concepts on which the accounting systems are based.