Q.P.Code: 20CE0127

**R20** 

H.T.No.

## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

## **B.Tech III Year II Semester Regular Examinations August-2023**

## CONSTRUCTION PROJECT MANAGEMENT

(Civil Engineering)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units  $5 \times 12 = 60$  Marks)

UNIT-I

What are the different phases in construction project? Explain briefly.

**CO1** L2 12M

a Define and give examples of activity. How it represents?

CO<sub>1</sub> L1 6M L3

**6M** 

CO<sub>1</sub>

b The maintenance of project of a building consists of ten jobs. The predecessor relationships are identified by their node numbers, as indicated below:

Job	Identification	Job	Identification	
A	(1,2)	F	(4,5)	
В	(2,3)	G	(4,7)	
С	(2,4)	Н	(5,8)	
D	(3,6)	I	(6,8)	
Е	(3,5)	J	(7,8)	

Draw the network diagram for the project.

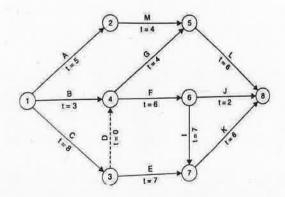
UNIT-II

a Define PERT? What are the uses of PERT

- CO<sub>2</sub> L1 **6M**
- b What are the different types of time estimates involved in PERT? **6M** Explain in detail.

OR

- The network for a certain project shown in fig, along with the estimated CO<sub>2</sub> L<sub>3</sub> 12M durations of various activities. Determine the fallowing.
  - a) Earliest event time and Latest event time
  - b) Earliest and latest start and finish times of each activity



UNIT-III

Explain briefly about project cost. Also explain components involved in CO3 L2 total cost.

Gives the information about various activities of network shown

in fig. 1	
crash	1
Cost	
Rs.)	4
500	

12M CO<sub>3</sub> L<sub>3</sub>

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

Fig-1

The project overhead costs are @ Rs. 300.0 per day. In addition to the overheadsthere is an outage loss of Rs.100 per day up to and including 11th day and Rs.200 per day thereafter, Find the total cost duration relationship.

UNIT-IV

What are the different functions of material management?

CO5 L1 **12M** 

8 Explain briefly

CO<sub>5</sub> L<sub>2</sub> **12M** 

a)Inspection

b)Quality control

C)Quality assurance in projects

UNIT-V

What are the preventive measures to be taken during accidents?

CO6 L1 12M

\*\*\* END \*\*\*

What are different types of contracts? Explain briefly.

CO6 L2 **12M**