

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

**B.Tech. III Year II Semester Regular & Supplementary Examinations June-2025**  
**CONSTRUCTION PROJECT MANAGEMENT**

(Civil Engineering)

**Time: 3 Hours**

**Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

**UNIT-I**

- 1 a Explain briefly about project plans and its types. CO1 L2 6M  
b Explain about the construction of a bar chart with sketch and its uses. CO2 L2 6M

**OR**

- 2 The Activity Breakdown for a certain project is as under. CO2 L3 12M  
Activity 2&3 can be done concurrently and both must follow activity 1.  
Activity 2 must precede activity 4. activity 5 cannot begin until both  
activities 2&3 are complete. Activity 6 can be started only after  
activities 4&5 complete. Activity 7 is the last activity which can be  
started only after completion of activity 5. Prepare the bar chart.

Activity	1	2	3	4	5	6	7
Duration (Weeks)	1	2	4	3	1	2	4

**UNIT-II**

- 3 What do you understand by the frequency distribution? How do you CO3 L2 12M  
determine (i) Most likely time (ii) Variance and (iii) Standard  
deviation

**OR**

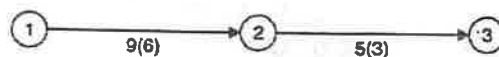
- 4 a Explain about CPM Network analysis with any one example. CO3 L2 6M  
b What do you understand by critical path? How is it determined? CO3 L2 6M

**UNIT-III**

- 5 Gives the information about various activities of network shown in CO4 L3 12M  
figure.

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. 300.0 per day. In addition to the overheads there 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.



**OR**

- 6 Discuss about CO4 L2 12M  
i. Resources smoothing ii. Resources Levelling

**UNIT-IV**

- 7 Explain briefly **CO5 L2 12M**  
i) Inspection      ii) Quality control   iii) Quality assurance in projects

**OR**

- 8 a Define Audit. Explain different types of Audits. **CO5 L2 6M**  
b What is the purpose of an audit, and why is internal auditing necessary? **CO5 L2 6M**

**UNIT-V**

- 9 a What is cost of accidents? **CO6 L1 6M**  
b Explain briefly about direct and indirect expense. **CO6 L2 6M**

**OR**

- 10 Briefly explain about **CO6 L2 12M**  
i) Lump-sum contract   ii) Item rate contract   iii) Turnkey contract

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