

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY GURAJADA VIZIANAGARAM
III B. Tech I Semester Regular/Supplementary Examinations, April/May -2025
CONSTRUCTION TECHNOLOGY & MANAGEMENT
(CIVIL ENGINEERING)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**

All Questions Carry Equal Marks

UNIT-I			
1.	a)	Discuss the importance of project planning in construction management.	[7M]
	b)	Explain the work breakdown structure (WBS) and its role in project scheduling.	[7M]
		(OR)	
2.	a)	Describe the critical path method (CPM) and its application in construction projects.	[7M]
	b)	Explain the concept of total float and free float in network scheduling.	[7M]
UNIT-II			
3.	a)	Differentiate between resource leveling and resource smoothing.	[7M]
	b)	Explain the process of resource allocation and optimization in construction management.	[7M]
		(OR)	
4.	a)	Discuss the features and applications of project management software like MS Project.	[7M]
	b)	Explain the importance of progress monitoring and control in project management.	[7M]
UNIT-III			
5.	a)	Describe the types of equipment used for excavation in construction.	[7M]
	b)	Discuss the factors affecting the selection of earthmoving equipment.	[7M]
		(OR)	
6.	a)	Explain the operational characteristics of different types of bulldozers and excavators.	[7M]
	b)	Write short notes on: i) Compaction equipment ii) Graders iii) Dredging equipment	[7M]
UNIT-IV			
7.	a)	Explain the process of quality control in concrete construction.	[7M]
	b)	Describe the working principles of various types of concrete batching plants.	[7M]
		(OR)	
8.	a)	Discuss the equipment used for transporting and placing concrete.	[7M]
	b)	Explain the different methods of concrete mixing and their suitability.	[7M]
UNIT-V			
9.	a)	Describe the methods used for concreting in underwater construction.	[7M]
	b)	Explain the different types of foundations used in building construction.	[7M]
		(OR)	
10.	a)	Discuss the construction methods for high-rise buildings.	[7M]
	b)	Explain the importance of safety management in construction projects.	[7M]
