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**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)**



B. Tech (Eighth Semester - Regular) Examinations, April - 2026

22BCVPE48011 - Construction Management

(Civil Engineering)

Time: 3 hrs

Maximum: 70 Marks

**Answer ALL questions
(The figures in the right hand margin indicate marks)**

PART – A

(2 x 5 = 10 Marks)

Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. What is resource leveling and why is it required?	CO1	K1
b. Mention the different types of construction contracts.	CO2	K1
c. Explain the importance of quality management in construction.	CO3	K1
d. What is Lean Construction?	CO4	K1
e. Discuss the advantages of BIM in project management.	CO5	K1

PART – B

(15 x 4 = 60 Marks)

Answer **ALL** the questions

	Marks	CO #	Blooms Level
2. a. Explain the stages of the construction project life cycle with relevant examples.	8	CO1	K2
b. Compare different organizational structures used in construction projects.	7	CO1	K2
(OR)			
c. Describe communication and coordination requirements among project stakeholders.	8	CO1	K2
d. Illustrate the typical flow of project information and decision-making in construction.	7	CO1	K3
3.a. Describe the process of resource planning and allocation.	8	CO2	K2
b. Explain the steps involved in project monitoring and control.	7	CO2	K2
(OR)			
c. Analyze the advantages and limitations of resource leveling and smoothing.	8	CO2	K4
d. Illustrate the concept of Earned Value Management with suitable examples.	7	CO2	K3
4.a. Explain quality assurance (QA) and quality control (QC) measures in projects.	8	CO3	K2
b. Discuss project safety management practices and accident prevention measures.	7	CO3	K2
(OR)			
c. Analyze the causes and effects of cost and time overruns in construction projects.	8	CO3	K3
d. Describe the steps involved in risk analysis and mitigation in construction.	7	CO3	K2
5.a. Explain the use of BIM for design coordination and schedule optimization.	8	CO4	K2
b. Discuss the role of digital tools like IoT and AI in modern construction project management.	7	CO4	K2
(OR)			
c. Analyze the use of BIM-4D for construction sequence visualization.	8	CO4	K3
d. Analyze sustainability performance using the life-cycle assessment approach.	7	CO4	K3

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