QP Code: R252B079 | Reg. No | | | | | | | | | | | AY 24

GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR

(GIET UNIVERSITY)

M.Tech. (Second Semester) Regular Examinations, July – 2025

24MCTPE12002 – Infrastructure Planning

(Construction Technology and Management)

Time: 3 hrs | Maximum: 60 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 meant by Project risks?	CO1	K1
b. What do you mean by infrastructure?	CO2	K1
c. Give two attributes of infrastructure.	CO3	K1
d. Write short notes on transport sector.	CO4	K1
e. What are the issues to be considered for success of PPPs?	CO5	K1

PART – B **(10 x 5 = 50 Marks)**

Answer ***ALL*** the questions	Marks	CO #	Blooms Level
2. a. Highlight the roles of various stakeholders in infrastructure project planning.	5	CO1	K1
b. Compare the infrastructure planning process for urban and rural development.	5	CO1	K1
(OR)			
c. Analyze the challenges involved in planning large-scale infrastructure projects in developing countries.	5	CO1	K4
d. What are the key parameters for appraising infrastructure projects? Illustrate with a case study.	5	CO1	K3
3.a. How does demand analysis influence infrastructure project planning?	5	CO2	K2
b. Write a detailed note on infrastructure development policy frameworks at the national level.	5	CO2	K3
(OR)			
c. Elaborate on the benefits and limitations of different project procurement methods.	5	CO2	K3
d. Describe the impact of technological advances on infrastructure life cycle analysis.	5	CO2	K4
4.a. Explain how public-private partnerships (PPP) influence procurement strategies.	5	CO3	K2
b. Discuss how planning tools like Primavera and MS Project are used for infrastructure project management.	5	CO3	K3
(OR)			
c. Discuss how demand curves and price elasticity affect infrastructure planning.	5	CO3	K2
d. Write about social welfare functions in evaluating infrastructure projects.	5	CO3	K4
5.a. Explain methods to incorporate risk and uncertainty in economic analysis.	5	CO4	K2
b. Describe how sensitivity analysis is performed and interpreted in public project evaluation.	5	CO4	K3

	(OR)			
c.	What are the limitations of conventional cost-benefit analysis?	5	CO4	K3
d.	Evaluate the differences between financial and economic feasibility assessments.	5	CO4	K4
6.a.	Illustrate the risk management process for a civil infrastructure project.	5	CO5	K3
b.	Explain the role of stakeholders and public participation in infrastructure planning.	5	CO5	K2
	(OR)			
c.	What is the significance of political stability and policy continuity in infrastructure projects?	5	CO5	K3
d.	Analyze a case study of an infrastructure project considering financial and social evaluation aspects.	5	CO5	K3

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