

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



B.C.A. (First Semester - Regular) Examinations, January – 2026
BCA251006 – Environmental Science and Disaster Management

Time: 2 hrs

Maximum: 60 Marks

(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 Gross Primary Productivity (GPP)?	CO1	K1
b. Define Eutrophication.	CO2	K1
c. What are Ubiquitous Resources?	CO3	K2
d. What is the purpose of Screening in EIA?	CO4	K2
e. What is capacity in disaster management?	CO5	K2

PART – B**(10 x5=50 Marks)**Answer *ALL* questions

	Marks	CO #	Blooms Level
2. a. Discuss Decomposition and explain its steps: fragmentation, leaching, catabolism, humification.	5	CO1	K1
b. Describe the Nitrogen Cycles in detail.	5	CO1	K2
(OR)			
c. Discuss Biomedical Waste Management	5	CO1	K2
d. Describe Nuclear Hazards, their causes, effects, and control measures	5	CO1	K1
3.a. Describe the Rio Summit 1992 Stockholm and Conference 1972	5	CO2	K2
b. Explain the causes, chemical reactions, effects, and prevention of Acid Rain	5	CO2	K1
(OR)			
c. What is Population Explosion? Explain its effects and control measures.	5	CO2	K2
d. Explain the causes, effects, and consequences Eutrophication.	5	CO2	K1
4.a. Describe the causes, consequences, and conservation strategies of deforestation.	5	CO3	K2
b. Describe the causes of depletion of water resources and methods to conserve water.	5	CO3	K1
(OR)			
c. Discuss the types of energy resources- renewable, non-renewable, conventional, and non-conventional.	5	CO3	K1
d. Discuss soil erosion and the causes, types, and conservation measures of soil erosion.	5	CO3	K1
5.a. Write a detailed note on the significance of environmental legislation in India.	5	CO4	K1
b. Explain Environmental Impact Assessment (EIA)—definition, objectives, and origin.	5	CO4	K2

(OR)

c.	Explain the role of the public and the government in achieving all 17 Sustainable Development Goals (SDGs), with solution measures for each goal.	10	CO4	K3
6.a.	Describe hazard, risk, vulnerability, and capacity (HRVC) with examples.	5	CO5	K1
b.	Define a disaster. Explain its types.	5	CO5	K1
	(OR)			
c.	Explain the Disaster Management Cycle—mitigation, preparedness, response, and recovery.	10	CO5	K3

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