

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



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

25FYVA10001 – Environmental Sciences

(Common to all branches)

Time: 3 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. Differentiate between biotic and abiotic components of ecosystem. | CO1 | K1 |
| b. What are greenhouse gasses? | CO2 | K1 |
| c. Write the amendments made in the Environmental Protection Act. | CO4 | K2 |
| d. Why is labelling important for hazardous substances? | CO5 | K2 |
| e. Write any two functions of carbohydrates. | CO6 | K2 |

PART – B

(10 x 5 = 50 Marks)

Answer **ALL** the questions

- | | Marks | CO # | Blooms Level |
|---|-------|------|--------------|
| 2. a. Explain the structure of an ecosystem with suitable examples. | 5 | CO1 | K2 |
| b. Explain the sulphur cycle and describe the major sources and sinks of sulphur in the environment. | 5 | CO1 | K2 |
| (OR) | | | |
| c. Discuss the different steps of solid waste management. | 5 | CO1 | K3 |
| d. What is E-waste? Explain its sources, effects and management. | 5 | CO1 | K3 |
| 3.a. Describe the formation of acid rain with suitable chemical equations. | 5 | CO2 | K2 |
| b. What are the United Nations Sustainable Development Goals (UNSDGs)? | 5 | CO3 | K2 |
| (OR) | | | |
| c. Write the causes, effects and measures of water pollution. | 5 | CO2 | K2 |
| d. Explain the United Nations Convention to Combat Desertification. | 5 | CO3 | K2 |
| 4.a. Write notes on amendments made to the Water (Prevention and Control of Pollution) Act. | 5 | CO4 | K2 |
| b. Write the objectives and significance of Forest Act. | 5 | CO4 | K2 |
| (OR) | | | |
| c. Describe the role of public participation in EIA and its importance. | 5 | CO4 | K2 |
| d. Explain the objectives of the Wildlife Protection Act. | 5 | CO4 | K2 |
| 5.a. Describe the safety management practices that should be followed while handling hazardous chemicals. | 5 | CO5 | K2 |
| b. Describe the proper use and maintenance of PPE. | 5 | CO5 | K2 |
| (OR) | | | |
| c. Explain the measures provided under the Code (2020) for ensuring occupational safety and health. | 5 | CO5 | K2 |
| d. Explain the different types of human error with examples. | 5 | CO5 | K2 |
| 6.a. Write the classification of carbohydrates on the basis of hydrolysis. | 5 | CO6 | K2 |
| b. Write the sources and functions of lipids. | 5 | CO6 | K2 |
| (OR) | | | |
| c. Write notes on minerals. | 5 | CO6 | K2 |
| d. Explain the fat and water soluble vitamins. | 5 | CO6 | K2 |

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