

25900275

Reg.No : .....

Name : .....

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**MGU-UGP (HONOURS) Regular EXAMINATION October 2025 Third  
SEMESTER**

**Value Addition Course (VAC) - MG3VACBTG200, MG3VACBBT201 -  
ENVIRONMENTAL BIOTECHNOLOGY  
AND HUMAN RIGHTS  
(2024 ADMISSION ONWARDS)**

**Duration: 1.5 Hours**

**Maximum Marks: 50**

***Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest(I) and  
Appreciation(Ap)***

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

**Part A**

One word or sentence

Answer any **10** questions

Each question carries **2** marks

1. Explain the importance of the Water Act in controlling industrial pollution. [U] / [CO1]
2. Name any two main sources of wastewater. [K] / [CO2]
3. Give two examples of recyclable solid wastes. [K] / [CO3]
4. Which gas causes foul odor in wastewater? [K] / [CO2]
5. What is the main role of a sedimentation tank? [U] / [CO3]
6. Name any four sources of solid waste. [K] / [CO3]
7. Give two examples of polycyclic aromatic hydrocarbons (PAHs). [U] / [CO2]
8. Name one indicator organism of pollution. [K] / [CO2]
9. The process of using microbes to treat wastewater? [U] / [CO3]
10. Name two microorganisms involved in composting. [U] / [CO2]
11. Which treatment step follows primary treatment? [U] / [CO3]
12. Which is used as an alternative to petrol and diesel for transport vehicles? [U] / [CO1]

**[2x10 = 20]**

**Part B**

Short Essay

Answer any **5** questions

Each question carries **4** marks

13. The producers considered the most important biotic component in an ecosystem. Justify the statement. [U] / [CO1]
14. Describe the 10% law of energy transfer with an example. [K] / [CO1]
15. Describe why a climax community has high stability and low change. [K] / [CO1]
16. Define carbon cycle and its specialties. [U] / [CO1]
17. Examine the impact of human activities on the balance of an ecosystem [K] / [CO1]
18. Explain the importance of each trophic level in a food chain. [K] / [CO1]
19. Explain the main function of State Human Right Commission [U] / [CO4]
- [4x5 = 20]**

### **Part C**

Essay type questions

Answer any **1** questions

Each question carries **10** marks

20. Discuss the role of the UN Human Rights Council (UNHRC) in monitoring and addressing human rights violation? [U] / [CO4]
21. Explain the significance of French Declaration of the Rights of Man and Citizen? [U] / [CO4]
- [10x1 = 10]**