



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with an 'A++' Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – August, 2025

Semester V

Class: III UG

Major: Biochemistry and Biotechnology

23BBTDE1 – Environmental Biotechnology

Max. marks: 60

Time: 2 hours

Course Outcomes:

CO1: Understand the basic concepts of ecosystem and resources and types of waste management.

CO2: Learn the importance of bioremediation and biodegradation.

CO3: Illustrate the role of microbes as biofertilizers.

CO4: Discuss the importance of biopesticides

CO5: Relate and demonstrate the essence of waste water management.

Part – A

6 x 1 = 6

Choose the correct answer

- Which of the following is a renewable resource?
a. Coal b. Petroleum c. Natural gas d. Solar energy
CO1K3
- Non-renewable resources are those that:
a. Can be replenished quickly b. Are unlimited in supply
c. Are finite and can be depleted d. Are environmentally friendly
CO1K2
- _____ is a process of degrading the debris by using microorganism.
a. Bioremediation b. Xenobiotics c. Probiotics d. Bioaccumulation
CO2K1
- Cellulose is an example of _____ biomass.
a. Plant b. Animal c. Microbial d. Fungal
CO2K1
- Which of the following is the primary process involved in biomining?
a. Smelting b. Leaching c. Combustion d. Electrolysis
CO2K3
- What is the primary function of biofertilizers?
a. To kill pests b. To enrich the soil with nutrients
c. To increase soil pH d. To control weeds
CO3 K2

Part B

3 x 6 = 18

Answer ALL questions

Answer should not exceed 400 words or two pages

- a. Give an account of renewable resources. CO1K2
Or
- b. Explain about any two fossil fuels. CO1K2
- a. Comment on the degradation of lignin using microbes. CO2K2
Or
- b. Write a note on phyto-remediation. CO2K3
- a. Write a note on nitrogen and phosphate fertilizers. CO3K1
Or
- b. Comment on Modern fuels and their impact on the environment. CO1 K3

Part C

3 x 12 = 36

Answer ALL questions

Answer should not exceed 800 words or four pages

- a. What is biomimicking? How is it useful in energy conservation? CO1K2
Or
- b. Explain about solar energy, importance and its applications. CO1K3
- a. Comment on bioleaching. CO2K3
Or
- b. Elaborate on bioremediation and its types. CO2 K3
- a. Illustrate the ethanol production from fermentable substrates. CO1 K3
Or
- b. Explain the role of symbiotic and asymbiotic nitrogen fixing bacteria in the enrichment of soil. CO3K2