

**Avinashilingam Institute for Home Science and Higher Education for Women,
Coimbatore – 641043
Continuous Internal Assessment Test – II April 2025
Semester II**

Class: I M.Sc.

Time : 2 hrs

Major: Biochemistry/ Bioinformatics/Chemistry

Max. Marks :60

23MBTI01– Prospects of Biotechnology- Inter Disciplinary Course

Course Outcomes:

After completing this course, the student will

CO1. Perform basic tools/ techniques of biotechnology applied in healthcare.

CO2. Comprehend the role of biotechnology in textiles.

CO3. Understand the biotechnological aspects of nutrition.

CO4. Recognize the significance of biotechnology in plant and animal products.

CO5. Establish the role of biotechnology in achieving sustainable environment.

Part – A

Choose the correct answer

6X1=6

1. Which of the following functional foods is rich in prebiotics? CO3K1
a. Milk b. Garlic c. Cheese d. Red meat

2. Which of the following is an example of a fortified functional food? CO3K1
a. Milk with added vitamin D b. Fresh apples
c. Natural honey d. Organic rice

3. Which of the following drug is derived from the bark of the Cinchona tree? CO4K1
a. Morphine b. Quinine c. Atropine d. Reserpine

4. The main goal of transgenic tomatoes is to: CO4K2
a. Enhance vitamin C content
b. Provide immunity against diarrheal infections
c. Improve the taste of tomatoes
d. Increase the shelf life of tomatoes

5. What is the advantage of bioremediation over traditional chemical methods of pollution control? CO5K2
a. It is more expensive and complex
b. It generates more toxic byproducts
c. It is eco-friendly and cost-effective
d. It requires extensive use of fossil fuels

6. Which of the following is an example of a biodegradable polymer? CO5K2
a. Polyethylene (PE) b. Polyvinyl chloride (PVC)
c. Polylactic acid (PLA) d. Polystyrene (PS)

Part - B

3x 6 = 18

Answer the following

Answer should not exceed 400 words or two pages

7. a. Explain probiotics and prebiotics with suitable examples. CO3K2
Or
7. b. What is meant by Biofortification? How it is done in food crops? CO3K3

8. a. What are edible vaccines? State its advantages. CO4K2
Or
8. b. Discuss bioplastics and biopolymer CO4K3

9. a. Analyse the bioremediation of air pollutants CO5 K2
Or
9. b. Brief about vermicomposting CO5K2

