Avinashilingam Institute for Home science and Higher education for women,
Coimbatore - 641043
Continuous Internal Assessment Test I – February 2025
Semester II

Class: I PG **Time: 2 hours**
Major: Bio-Textiles **Max.marks: 60**

23MBXC10 Textile Microbiology

Course Outcomes:

- Understand the basics of microbiology and microbial applications in textile field
- Describe the assay of fermentation products and downstream processing
- Differentiate Prokaryotic and eukaryotic cell structure and Outline the different methodsof culturing microorganisms
- Identify the nutrient requirements for microbial growth
- Apply microbial pigments and impart antimicrobial finish on textiles

Part – A **6 x 1= 6**
Choose the correct answer

1. Transmission electron microscope uses _____ to produce the image. CO1 K2
a. Reflected Electronsb. Transmitted Electrons
c. Electron beam and light waves d. Electron beam and glass lenses
2. Which of the following organelle is called as suicidal bag of the cell? CO3 K1
a. Lysosome b. Mitochondria c. Nucleus d. Ribosome
3. Organic nutrients contain CO4 K1
a. Oxygen b. Carbon c. Sulfur d. Phosphorus
4. Identify the phase in growth curve, that is characterized by cell doubling CO4 K2
a. Exponential b. Death c. Lag d. Stationary
5. Which of the following component allows for the formation of solid media CO3 K2
a. Spread plate b. Streak plate c. Pour plate d. Colony plate
6. The media used to identify and isolate specific type of microorganism is CO3 K1
a. Functional b. Physical c. Chemical d. Semisolid

Part-B **3 X 6 = 18**
Answer ALL the following questions.
Answer should not exceed 400 words or two pages

7. a. Explain in brief the Eukaryotic cell structure and function. (OR) CO3 K2
b. Describe the principle and working of light microscope CO1 K2
8. a. Give an account on microbial growth curve. (OR) CO4 K2
b. Explain the methods of microbial control. CO4 K2
9. a. Differentiate batch culture from continuous culture (OR) CO3 K2
b. How will you isolate bacterial cultures using streak plate technique. CO4 K2

Part – C **3 x 12 = 36**
Answer ALL the following questions.
Answer should not exceed 800 words or four pages

10. a. Give a detailed account on Prokaryotic cell structure and function. (OR) CO3 K2
b. Describe the principle and working of Scanning Electron microscope. CO1 K2
11. a. Discuss the different types of culture media. (OR) CO4 K2
b. Explain in detail the common nutrient requirements and media composition for the growth of microorganisms. CO2 K2
12. a. Discuss the isolation of pure cultures using spread plate method. (OR) CO3 K2
b. Outline the isolation of pure cultures using pour plate technique. CO4 K2

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