

QP CODE: 24900271



Reg No:.....

Name:.....

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**  
**FIRST SEMESTER MGU-UGP (HONOURS) REGULAR**  
**EXAMINATION NOVEMBER 2024**

**First Semester**

**Discipline Specific Core Course**

**MG1DSCZIM101**

**INTRODUCTION TO MICROBIAL WORLD**

**(2024 ADMISSION ONWARDS)**

Duration: 1.5 Hours

Maximum Marks: 50

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

*Students should attempt atleast one question from each course outcome to enhance their overall  
outcome attainability.*

[Learning Domain][CO No(s)]

**Part A**

Fill In The Blanks

Answer all questions

Each question carries 1 mark

- |   |   |     |     |
|---|---|-----|-----|
| 1 | ..... is the father of Microbiology   | [K] | [1] |
| 2 | The strong belief that existed among the scientists at that time in the theory of ..... | [E] | [1] |
| 3 | The bacteriel cell wall is composed of a layer of.....                                  | [A] | [2] |
| 4 | ..... are proteins found in the outer membrane of certain bacteria and mitichondria.    | [U] | [2] |
| 5 | Bacteriophage were first discovered by.....   | [S] | [3] |
| 6 | The term Bacteriophage literally means.....   | [S] | [3] |
| 7 | Hyphae are divided into..... by septa   | [U] | [4] |

- |    |   |      |     |
|----|---|------|-----|
| 8  | Fungi reproduce through.....                    | [A]  | [4] |
| 9  | Protozoa play a crucial role in .....           | [U]  | [5] |
| 10 | Protozoa reproduce ..... through Binary fission | [An] | [5] |

(10 × 1 = 10)

### **Part B**

#### **Short Questions**

Answer any 10 questions

Each question carries 2 marks

- |    |  |     |     |
|----|--|-----|-----|
| 11 | Define Microbiology.   | [K] | [1] |
| 12 | Define golden age of Microbiology.                                       | [K] | [1] |
| 13 | Discuss Koch postulates.   | [U] | [1] |
| 14 | Describe the morphology of bacteria with diagram.                        | [U] | [2] |
| 15 | Write short note on Gram positive cell wall.                             | [A] | [2] |
| 16 | Define the features of any two internal structure of bacteria.           | [U] | [2] |
| 17 | Write the history about Bacteriophage.                                   | [U] | [3] |
| 18 | Write down the steps involved in the Lytic cycle.                        | [A] | [3] |
| 19 | Write short note on Fungi.   | [U] | [4] |
| 20 | Distinguish the characteristic features of Ascomycota.                   | [U] | [4] |
| 21 | Explain the important features of Protozoa.                              | [U] | [5] |
| 22 | Explain the significance of cilia, flagella and Pseudopodia in Protozoa. | [U] | [5] |

(10 × 2 = 20)

### **Part C**

#### **Short Essay Type Questions**

Answer 5 questions

Each question carries 4 marks

- |    |   |     |     |
|----|---|-----|-----|
| 23 | Describe the history of Microbiology.   | [U] | [1] |
| 24 | Explain the experiment which disprove the Theory of spontaneous generation.How? | [U] | [1] |
| 25 | Ilustare the ultrastructure of bacteria and their functions.                    | [A] | [2] |

- 26 Discuss the morphological feature of Bacterial cell wall. [U] [2]
- 27 Explain the detailed note on Bacteriophage. [U] [3]
- 28 Distinguish the characteristic features of Ascomycota and Basidiomycota. [U] [4]
- 29 Discuss the ecological importance of Protozoa. [U] [5]

(5 × 4 = 20)

**END OF THE QUESTION PAPER**

**\*\*\***