

Microbiology [Minor]**[NEP]****B.Sc. First Semester End Examination-2024****PAPER-MCB MI-101T****[Supplementary Paper]****[Introduction and scope of Microbiology]****Full Marks: 40****Time: 02 Hrs.***The figures in the right hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.**Illustrate the answers wherever necessary.***Group A****Answer any FIVE questions of the following: 5x2= 10**

- 1) State any two roles of microorganisms in agriculture. 1+1
- 2) Write any two scopes of microbiology. 1+1
- 3) What are primary and secondary metabolites? Give examples. 1+1
- 4) State the difference between Virus and viroids. 2
- 5) What are mutualism and parasitism? 1+1
- 6) State the applications of dark field microscope. 2
- 7) State the economic importance of algae. 2
- 8) What is biogenesis? 2

(2)

Group B

Answer any FOUR questions of the following: **4x5 = 20**

- 1) Briefly describe classification of virus. 5
- 2) Describe whittaker's five kingdom concept of life. 5
- 3) Describe classification of fungi. 5
- 5What are active and passive immunity? State their difference with proper examples. 2+3
- 4) State the working mode of SEM and TEM. Write down the applications of phase contrast Microscope. 3+2

Group C

Answer any ONE question of the following: **1x10 = 10**

- 1) Write down short note on: 2.5x4
 - a) Bioremediation.
 - b) Biopesticide
 - c) Degradation of Xenobiotics
 - d) SCP
- 2) Write down short note on 2.5x4
 - a) Lovis Pasteur
 - b) Robert Koch
 - c) Joseph Listes
 - d) Edward Jenner