

22170

II SEMESTER B.Sc. EXAMINATION, JULY/AUGUST 2023

SCHEME: SEMESTER (NEP)

025

BIOTECHNOLOGY

MICROBIOLOGICAL METHODS

Time: 2 ½ Hours

Max Marks: 60

Instructions to Candidate: Draw neat and labelled diagrams wherever necessary.

- I. Answer any SIX questions. 6x2=12
1. Write the contributions of Ivanovsky. CO1 LL1
 2. Write two applications of compound microscope. CO1 LL1
 3. What are microbiostatic agents? Give examples. CO2 LL1
 4. Name two gases used as antimicrobial agents. CO2 LL1
 5. What are indicators? Give an example. CO3 LL1
 6. Name the types of stains with an example. CO3 LL1
 7. What are antiviral agents? CO4 LL1
 8. Name two inhibitors of cell membrane function. CO4 LL1
- II. Answer any ONE question. 1x12 =12
1. Explain the principle of phase contrast microscope and ion exchange chromatography. CO1 LL2
 2. Explain the methods of reproduction in virus. CO1 LL2
- III. Answer any ONE question. 1x12 =12
1. Give an account on tyndallization and filtration. CO2 LL2
 2. Write an account on chemical sterilization. CO2 LL2
- IV. Answer any ONE question. 1x12 =12
1. Write an account on synthetic and complex media. CO3 LL2
 2. Give an account on pure culture techniques. CO3 LL2
- V. Answer any ONE question. 1x12 =12
1. Explain the mode of action of inhibitors of DNA and protein synthesis. CO4 LL2
 2. Explain the mechanism of action of amphotericin-B and amantadine. CO4 LL2

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