



**B.Sc. II Semester (NEP) Degree Examination, September/October - 2022**

**BIOTECHNOLOGY**

**(BT) : Microbiological Methods**

Time : 3 Hours

Maximum Marks : 60

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**Note :** Answer **all** Sections.

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**SECTION - A**

1. Answer the following Sub-questions. **10x1=10**
- (a) Expand SEM.
  - (b) Define Germicide.
  - (c) What is Selective media ?
  - (d) What are Acidic Stains ?
  - (e) What is Ultracentrifuge ?
  - (f) Expand XDR.
  - (g) What is HEPA ?
  - (h) Name any two Antifungal Agents.
  - (i) Mention any two chemical agents for Sterilization.
  - (j) Name the Stain used for staining the capsule.

**SECTION - B**

- Answer **any four** of the following questions. **4x5=20**
2. Briefly explain the Special Stain techniques.
3. Describe the principle and applications of moist heat Sterilization.
4. Write a short note on Antiviral Agents.
5. Give an account of Serial dilution method for Isolation of Bacteria.
6. Differentiate between Compound and Electron Microscopes.
7. Explain briefly about principle, precautions and uses of Laminar air flow.



**SECTION - C**

Answer **any three** of the following questions.

**3x10=30**

8. What is Sterilization ? Explain in detail about the methods of Sterilization.
9. Give a detailed account of Chromatography.
10. Explain the different methods of Preservation in Bacterial Culture.
11. What are Antimicrobial Agents ? Explain Antibiotics, Antiseptics and Disinfectants.
12. Describe the different methods of isolation of Bacteria and Fungi.

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