



DCBT – 201

**II Semester B.Sc. Examination, August/September 2023**  
**(NEP – Freshers and Repeaters)**  
**BIOTECHNOLOGY (Paper – II)**  
**Microbiological Methods**

Time : 2½ Hours

Max. Marks : 60

*Instruction : Draw neat labelled diagram wherever necessary.*

**SECTION – A**

I. Write short answers on the following.

**(5×2=10)**

- 1) Resolving power
- 2) Sanitizer
- 3) Non-ionizing radiation
- 4) Chemically defined media
- 5) Microdilution.



**SECTION – B**

II. Answer **any four** of the following.

**(4×5=20)**

- 6) Explain the working principle and application of dark field microscope.
- 7) Give an account on Incineration process.
- 8) Write a note on selective and differential media.
- 9) Describe the cultivation of anaerobic bacteria.
- 10) Discuss on the challenges in antimicrobial therapy.

**SECTION – C**

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

**(3×10=30)**

- 11) Enumerate the principle and application of centrifugation.
  - 12) Explain the physical method of sterilization.
  - 13) Write a note on :
    - a) Plating method
    - b) Stocking of pure culture.
  - 14) Write the principle and procedure involved in staining techniques.
  - 15) Explain any two methods to assess antimicrobial activity.
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