



RAN - 2203000205026004

**RAN-2203000205026004**

**B.Sc. (Sem. V) Examination November - 2023**

**Microbiology : MB - 504**

**Applied Environmental Microbiology**

**Time: 2 Hours ]**

**[ Total Marks: 50**

**सूचना : / Instructions**

(१)

नीचे दशविवेक निशानीवाणी विगतो उत्तरवली पर अवश्य लपववी.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

B.Sc. (Sem. V)

Name of the Subject :

Microbiology : MB - 504 Applied Environmental Microbiology

Subject Code No.: 2203000205026004

Seat No.:

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Student's Signature

**Q. 1 Give specific answers.**

**(08)**

1. What is droplet nuclei?
2. State the causative agent of systemic mycoses.
3. State the optimum temperature requirement of thermophiles.
4. What is the composition of coal refuse?
5. Define Co-metabolism.
6. Give the full form of DDE.
7. Write down any two criteria for indicator microorganism.
8. State an advantage of anaerobic digester.

**Q. 2 Comment/Justify (any 2)**

**(14)**

1. "Wide varieties of bioaerosol samplers are commercially available"-  
Comment.
2. Explain plants facilitate soil phytoremediation of contaminants using various strategies.
3. Hyperthermophiles have been isolated from a range of natural geothermally heated environments - Justify.

**Q. 3 Explain in brief. (any 2) (14)**

1. Explain the methods employed for air sanitation
2. Explain the secondary and tertiary treatment of waste water in detail.
3. Describe in brief biodegradation of waste

**Q. 4 Write Short notes. (any 2) (14)**

1. BOD, COD and TOC
  2. Microbes assisted Phytoremediation
  3. Compatible solutes and membrane of Halophiles
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