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**RAN-2203000205026004****B. Sc. (Microbiology) (Sem. - V) Examination March - 2023****Microbiology****MB - 504 : Applied Environmental Microbiology (New)****Time: 2 Hours ]****[ Total Marks: 50****સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

Fill up strictly the details of signs on your answer book

Name of the Examination:

B. Sc. (Microbiology) (Sem. - V)

Name of the Subject :

Microbiology MB - 504 : Applied Environmental Microbiology (New)

Subject Code No.: 2203000205026004

Seat No.:

Student's Signature

- (2) Figures to the right indicate full marks of the question.  
(3) Draw neat and labeled diagrams whenever necessary.

**Q. 1 Give the specific answers.****12**

- 1) Enlist any four microbial containment candidates.
- 2) Briefly describe the DBPs.
- 3) Define Bioremediation. Enlist its types.
- 4) Write the full form of PCE and TCE.
- 5) Enlist any four extremozymes.
- 6) Which microorganisms are present abundantly in Cinema Hall, Theatre, Railway station and Schools?

**Q. 2 Comment on / Explain any two of the followings.****12**

- 1) Water purification completes in multiple steps.
- 2) Various molecular level adaptations are found in acidophiles.
- 3) Different methods are employed for Air disinfection.

**Q. 3**      **Write any two of the following:** **16**

- 1) Describe Secondary Wastewater Treatment Process in detail.
- 2) Write a detail note on biochemistry and physiology of molecular adaptations in Hyperthermophiles.
- 3) Discuss bioremediation of marine oil spills in detail.

**Q. 4**      **Write short note on any two of the followings:** **10**

- 1) Measuring Treated Wastewater Quality.
  - 2) Bioremediation of hydrocarbons.
  - 3) Methods used in bioaerosol sampling.
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