


RAN-2403000503026001

S.Y.B.Sc. (Sem. - III) Examination March - 2026
Microbiology - MB-MJ-302 : Control of Microorganisms

Time: 1 Hour]
[Total Marks: 25

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book.	Seat No.: <table border="1" style="width: 100%; height: 30px; border-collapse: collapse;"> <tr> <td style="width: 16.6%;"></td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;"></td> </tr> </table> Student's Signature						

- Q. 1. Short question (Any 5 out 6) (05)**
- Define: Ionizing radiations
 - What happens to cell when placed in hypotonic solution.
 - What type of effect is observed when organisms are exposed to high temperature?
 - Give an application of organic mercury compound in control of microorganisms.
 - Name any one phenolic compound used in disinfection.
 - State the primary application of formalin as disinfectant.
- Q. 2. Comment/Explain (Any 2) of the following (10)**
- Comment on: Various mechanisms are employed by antimicrobial agents to kill microbes.
 - Discuss in detail about lyophilisation and filtration as physical method of microbial growth control.
 - How dry heat and freezing act as physical agents in the control of microbial growth, and mention their applications.
- Q. 3. Answer in short/short note (Any 2) of the following (10)**
- Discuss desirable qualities of chemical agent used to control microbes.
 - Explain the role of alcohols as chemical agents of disinfection, including their mechanism of action and applications.
 - Enlist the gases used for disinfection process? Explain them in detail.