



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Technology) 2023 Admission
III Semester Final Examination –January 2025

Pafe.2112

Industrial Microbiology (2+1)

Marks: 50
Time: 2 hours

- I Define the following** **(10x1=10)**
1. Define Secondary metabolites
 2. Define Fermentation
 3. Define thermal death time
 4. Define Sterilization
 5. Define fermented foods
 6. Define Baffles
- Fill in the blanks**
7. Bacteriocins are toxins produced by bacteria
 8. is a process by which colloidal particles come out of suspension to sediment in the form of floc or flake
 9. Nisin is a polycyclic antibacterial peptide produced by the bacterium
- Answer the following**
10. Name an enzyme used in cell disruption
- II Write short notes on ANY FIVE of the following** **(5x2=10)**
1. Microbial enzymes
 2. Streak plate method
 3. Steam Sterilization of fermentor
 4. Mechanical Cell disruption
 5. Crystallization
 6. Airlift fermentor
 7. Enrichment culture technique
- III Answer ANY FIVE of the following** **(5x4=20)**
1. Give an account on preservation of microbes
 2. Explain briefly the sterilization of microbial media using heat
 3. Role of probiotics in fermented foods
 4. Primary screening of microbes
 5. Filtration techniques used in downstream processing
 6. Solid state fermentation
 7. Continuous sterilization
- IV Write an essay on ANY ONE of the following** **(1x10=10)**
1. Purification and packaging steps in downstream processing
 2. Industrially important secondary metabolites
