



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Technology) 2020 Admission
III Semester Final Examination – March 2022

Pafe.2112

Industrial Microbiology (2+1)

Marks: 50
Time: 2 hours

I Fill in the blanks

(10x1=10)

1. is a fermented rice product.
2. is used to control thermophilic spoilage of canned food.

Answer the following

3. Define Thermal death time.
4. What do you understand by term Probiotics?
5. What is the principle of Ion exchange Chromatograph?
6. What are Secondary metabolites?

State True or False

7. Francisco Redi discovered enantioselective fermentation.
8. McConkey Agar medium is both selective and differential.
9. *Saccharomyces cerevisiae* prefers fermentation over aerobic respiration even if abundant oxygen is present.
10. Absolute filters are used to remove filamentous fungi.

II Write short notes on ANY FIVE of the following

(5x2=10)

1. Louis Pasteur
2. Disproving the Theory of spontaneous generation
3. Bacteriocin
4. Lactic acid fermentation
5. Cell disruption
6. Membrane filtration method
7. HEPA filters

III Answer ANY FIVE of the following

(5x4=20)

1. What are the different types of fermentations?
2. Write in brief about the types of filtration processes.
3. What are the advantages of fermentation?
4. Write briefly about commercial importance of Single Cell Protein.
5. What do you mean by primary and secondary screening of microorganisms?
6. What are the advantages of continuous sterilization?
7. Compare semisolid and submerged culture for production of microbial enzymes.

IV Write an essay on ANY ONE of the following

(1x10=10)

1. What is chromatography? Explain any four types of chromatography techniques in detail.
2. Write in detail about various methods of preservation of microorganisms.
