



KERALA AGRICULTURAL UNIVERSITY  
B.Tech. (Food Engg. & Tech.) 2019 Admission

III Semester - Final Examination-February 2021

Fdqu.2105

Food Microbiology (1+1)

Marks: 50  
Time: 2 hours

**I Fill in the blanks**

(10x1=10)

1. Cold-tolerant bacteria or archaea that have the ability to grow at low temperatures, but have optimal and maximal growth temperature above 15°C and 20°C are called as \_\_\_\_\_.
2. Botulism is caused by the bacterium \_\_\_\_\_.
3.  $a_w$  of pure water is \_\_\_\_\_.
4. Cold sterilization of food refers to sterilization of food by \_\_\_\_\_.
5. Name the fungi responsible for characteristic flavor and appearance of blue cheeses.
6. *Pseudomonas fluorescens* causes \_\_\_\_\_ rot of egg.
7. The organism responsible for wine fermentation is \_\_\_\_\_.
8. \_\_\_\_\_ bacteria are considered to be indicators for fecal contamination in water.

**Answer the following**

9. Name a polycyclic antibacterial peptide produced by the bacterium *Lactococcus lactis* that is used as a food preservative.
10. SCP stands for:

**II Write Short notes on ANY FIVE of the following**

(5x2=10)

1. Class I preservatives
2. *Listeria monocytogenes*
3. Assessment of microbial quality of milk by Dye reduction method.
4. TA spoilage
5. Salting
6. Aflatoxin
7. Factors affecting heat resistance of cells and spores.

**III Answer ANY FIVE of the following.**

(5x4=20)

1. What do you mean by SCP? What are the advantages and disadvantages of SCP?
2. Explain the different types of microbial spoilage of milk.
3. Discuss about the primary sources of microorganisms in food.
4. Give an account of low temperature preservation methods.
5. Define pasteurization. What are the different methods of pasteurization?
6. Write a short essay on Botulism.
7. Explain microbial spoilage of egg.

**IV Write an essay on ANY ONE of the following**

(1x10=10)

1. Give a brief account of principles of food preservation.
2. What is HACCP? Explain the main principle of HACCP.

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