

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 09—FOOD MICROBIOLOGY—II

(2014 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A*Answer all questions.**Each question carries 1 mark.*

Multiple choices :

1. Which is the bread mold ?
 - a) *Rhizopus stolonifer*.
 - b) *Aspergillus flavus*.
 - c) *Candida albicans*.
 - d) *Penicillium notatum*.
2. Muscle food products spoiled mainly by :
 - a) Coliform bacteria.
 - b) Proteolytic bacteria.
 - c) Proteolytic virus.
 - d) Photosynthetic bacteria.
3. Which is the test generally used for analysis microbiological quality of water :
 - a) MPN test.
 - b) NPM test.
 - c) MNP test.
 - d) PMN test.
4. Micro-organism used for the production fermented food product :
 - a) Thermophilic bacteria.
 - b) Autotrophic bacteria.
 - c) Lactic acid bacteria.
 - d) Psychrotrophic.
5. Pour plate method is used for :
 - a) Enumeration.
 - b) Controlling.
 - c) Preservation.
 - d) Stocking.

Turn over

True or False :

6. *Aspergillus flavus* is the principal organism responsible for the spoilage of canned foods.
7. Heat liable materials generally sterilized by autoclaving.
8. Baird-Parker agar medium is used for the selective isolation of yeast and mold.
9. *Bacillus licheniformis* is responsible for fermentation of milk.
10. Ingestion of contaminated food with pathogenic bacteria cause food borne illness.

(10 × 1 = 10 marks)

Part B

Answer any five questions.
Each question carries 2 marks.

11. Microbial spoilage of bread.
12. Note on cheeses and its economic importance.
13. Name four chemical agents used for controlling micro-organisms.
14. What is endotoxin ? Give an example.
15. Define idli. Name of the micro-organisms involved its formation.
16. Note on methylene blue reduction test of milk.
17. Name one fermented product each from milk, vegetable, fruit and cereal.

(5 × 2 = 10 marks)

Part C

Answer any six questions.
Each question carries 5 marks.

18. Note on factors effecting contamination and spoilage of fresh milk and milk products.
19. Differentiate selective, differential and enrichment media.
20. What is Sauer Kraut ? Describe the process involved in the production of Sauer Kraut.
21. Note on the principles and protocol of investigation of food borne disease outbreak.
22. Differentiate pour plate and spread plate methods.
23. Explain in details chemical changes due to spoilage.
24. Briefly explain spoilage of fruit and vegetables.
25. Explain in details various non-thermal process for controlling of micro-organism.

(6 × 5 = 30 marks)

Part D

Answer any two questions.

Each question carries 15 marks.

26. What is food poisoning ? Explain in details food poisoning caused by bacteria and fungi.
27. Describe in details the following :
- a) Source and factors effecting microbial contamination of fresh meat.
 - b) Different microbial spoilage of fresh meat.
28. Describe briefly the methods involved in microbiological testing of water and milk.
29. Explain the following :
- a) What is a fermented food product ?
 - b) Characteristic of micro-organisms associated with production of fermented food products.
 - c) Nutritional and health benefits of fermented food products.

(2 × 15 = 30 marks)