



Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2019
(Career Related First Degree Programme Under CBCSS)
Group 2(a) : Botany and Biotechnology
BB 1661.3 : FOOD AND DAIRY BIOTECHNOLOGY
(2015 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions in **a** word or **one** or **two** sentences. **Each** question carries **1** mark.

Draw diagrams only if specified in the question.

1. What are indicator organisms ? Give an example.
2. Define pasteurisation.
3. Differentiate between cheese and yogurt.
4. What are mycotoxins ?
5. Name any two Gram positive spore forming bacteria that causes food poisoning.
6. Name two traditional Indian fermented food prepared from rice flour.
7. What is appertization ?
8. Define lyophilisation.
9. Name the causative organism for amoebic dysentery.
10. Write the full form of HACCP. **(1×10=10 Marks)**



SECTION – B

Answer **any 8** questions. **Each** question carries **2** marks. Answer **not** to exceed **one** paragraph.

11. Discuss the importance of lactic acid bacteria in fermented foods.
12. Give some examples of bacteria involved in the spoilage of fresh meat.
13. Write short note on food spoilage by *Clostridium botulinum*.
14. Name two edible and two poisonous mushrooms.
15. What is the difference between pasteurization and sterilization ?
16. What are the advantages of fermentation for a food product ?
17. Explain the use of radiation as a preservative method.
18. What are the factors affecting the growth of spoilage microorganisms ?
19. Define ELISA.
20. Name two chemical preservatives and its mode of action.
21. Define bacteriocins with suitable examples.
22. What is the significance of stationary phase in a bacterial growth curve ?
(2×8=16 Marks)

SECTION – C

Answer **any six** of the following. (Answer **not** to exceed **120** words). **Each** question carries **4** marks.

23. Discuss in detail the various sources of food contamination.
24. Describe in detail the spoilage of canned foods.
25. Briefly discuss about the 'kefir' and 'koumiss'.
26. Describe in detail the molecular techniques used for the detection of contamination of foods.
27. Define the mechanism of action of sugar and salts in the preservation of foods.



28. Name two milk products and explain its manufacturing process.
29. Enumerate the various cultural methods used for identification of microbial contamination of foods.
30. Write short note on food-borne bacterial toxins.
31. Discuss in detail the role of microorganisms in food production. (4×6=24 Marks)

SECTION – D

Answer **any 2** questions (**Not** more than **three** pages). **Each** question carries **15** marks.

32. Write an essay on the cultural and direct methods used in the microbiological examination of foods.
 33. Describe in detail the various heat sterilization methods.
 34. Write an essay on the industrial process of cheese making.
 35. Describe in detail the beneficial and harmful microbes associated with milk and milk products. (15×2=30 Marks)
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