

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014

(UG—CCSS)

Core Course—Microbiology

MB 5B 12—FOOD AND AGRICULTURAL MICROBIOLOGY

Time : Three Hours

Maximum Weightage : 30

Section A

*Answer **all** the twelve questions.*

Each question carries $\frac{1}{4}$ weightage.

1. Musty or earthy odour of a freshly **ploughed** field is due to the presence of the micro-organism _____
2. **Mutualistic** association involving the exchange of nutrients between two species is called _____
3. Narrow region around the plant root, influenced by root secretions and associated soil micro-organisms is known as _____
4. Specialized cells produced by **cyanobacteria** that are sites of nitrogen fixation is called _____
5. _____ is an example for a common denitrifying bacteria.
6. Food borne pathogen which causes bacillary **dysentery** is _____
7. Crown gall disease is caused by _____
8. A species of micro-organism which produces a crystal protein used as a **bioinsecticide** is _____
9. Example for a **foodborne** viral infection is _____
10. Micro-organism responsible for the characteristic flavour and appearance of blue-veined cheese is _____
11. Full form of **HACCP**.
12. Ergotism is caused by _____

(12 x $\frac{1}{4}$ = 3 weightage)

Section B

*Answer **all** the nine questions in **one** or **two** sentences.*

Each question carries 1 weightage.

Comment on :

13. Yoghurt.
14. Methylene blue **reductase** test.
15. *Clostridium botulinum*.
16. Predation.

Turn over

17. UHT pasteurization.
18. Leghaemoglobin.
19. Starter culture.
20. Blue cheese.
21. Salting.

(9 x 1 = 9 weightage)

Section C

*Answer briefly any **five** questions.
Each question carries **2** weightage.*

Write short notes on :

22. Pasteurization.
23. Plant disease resistance.
24. **Phytophthora** diseases.
25. Chemical food preservatives.
26. Food intoxication.
27. Microbial analysis of milk.
28. Fermented vegetables.

(5 x 2 = 10 weightage)

Section D

*Answer any **two** questions.
Each question carries 4 weightage.*

29. Microbial **inoculants** and their application in agriculture.
30. Elaborate on the application of microbial enzymes in food industry.
31. Explain the different plant microbe interactions.

(2 x 4 = 8 weightage)