

**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 weight.,)

