| TV153600A | Reg. No: |
|---------------------------------------------------|------------------------------|
| | Name: |
| B. VOC. DEGREE (C.B.C.S. | S.) EXAMINAION, OCTOBER 2016 |
| SEMESTER III – COMPLEMENTA | RY COURSE (FOOD PROCESSING |
| | OLOGY) |
| | · |
| | OD MICROBIOLOGY |
| Time: Three Hours | Maximum Marks: 80 |
| | PART A |
| I. Answer all questions. Each question carries | 1 mark. |
| 1. What are bacteriophages? | |
| 2.Comment on probiotics. | |
| 3.Define putrefaction. | |
| 4.Differeniate HTST and UHT methods. | |
| 5. What is meant by proteolysis? | |
| 6.Comment on pin spot molding | |
| | $(6 \times 1 = 6)$ |
| PAI | RT B |
| II. Answer any seven questions. Each question | n carries 2 marks. |
| 7. Write a note on biopreservatives. | |
| 8. Explain the types of spoilage seen in canned | foods. |
| 9. Comment on bacterial capsule. | |
| 10. Explain the different types of rancidity. | |
| 11. Discuss on SCP. | |
| 12. Elaborate on the structure of bacteriophage. | |
| 13. Discuss the pysical changes in food caused b | |
| 14. Comment on the concept of water activity in | |
| 15. Which are the different phases of bacterial g | rowh curve? |
| 16. Explain the typs of spoilge of fishes. | |
| | $(7 \times 2 = 14)$ |
| PAI | RT C |
| III. Answer any five questions. Each question | carries 6 marks |

- 17. Discuss the different sources of contamination of food.
- 18. Explain the physical and chemical methods to control microbial growth in foods.
- 19. What is the use of temprature in food preservation?
- 20. Which are the different types of spoilage seen in breads?
- 21. Explain the types of spoilages of meat.
- 22. Explain the reproductive methods of mould.
- 23. Discuss the importance of personal hygiene during food handling and precessing?

1

24. Write a note on food ingredients of microbial origin.

 $(5 \times 6 = 30)$

P.T.O

PART D

IV. Answer any two questions. Each question carries 15 marks

- 25. Briefly explain the beneficial effects of microorganisms in food industry.
- 26. Explain the intrinsic and extrinsic factors that influence growth of microorganisms.
- 27. Elaborate on sources of contamination, types of spoilages and prevention of spoilage of milk.
- 28. Differentiate between food infection and food intoxication with suitable examples.

 $(2 \times 15 = 30)$