

Seat No. : \_\_\_\_\_

# ME-110

May-2018

B.Sc., Sem.-IV

## CC-205 : Microbiology (Food & Dairy Microbiology)

Time : 3 Hours]

[Max. Marks : 70

- Instructions :**
- (1) Answer **all** questions.
  - (2) Draw neat and labelled diagrams wherever necessary.
  - (3) Write clearly Answer number and mention option.

1. Describe the following : (any **two**) **14**
  - (a) Microbial flora of fruits and vegetables.
  - (b) Three milk borne diseases.
  - (c) Food poisoning by bacteria.
  - (d) Mycotoxins
  
2. Answer the following : (any **two**) **14**
  - (a) Microbial spoilage of milk and milk products.
  - (b) Food preservation by chemicals.
  - (c) Food preservation by Pasteurization and Sterilization.
  - (d) Spoilage of canned foods.
  
3. Write a note on the following : (any **two**) **14**
  - (a) Algae as food.
  - (b) Probiotics and Synbiotics.
  - (c) Cheese production with flow-sheet diagram.
  - (d) Idli, Kefir and Kumiss.
  
4. Describe the following : (any **two**) **14**
  - (a) Grading of milk and Phosphatase test.
  - (b) MPN of food.
  - (c) Microbiological criteria for food safety.
  - (d) Methods for detection and identification of any three pathogens in food.

5. Answer the following in a few lines :

14

- (1) What is ergot poisoning ?
- (2) What is the importance of *E. coli* O157:H7 ?
- (3) Enlist the intrinsic factors affecting microbial growth in foods.
- (4) What is putrefaction ?
- (5) Name the organism that causes “whiskers” on meat.
- (6) What is Canning process ?
- (7) Name the organism that causes “red discoloration” in salted meat and fish.
- (8) What is nisin ?
- (9) Name two bacteria used in production of Yogurt.
- (10) What is the role of Baker's yeast in bread making ?
- (11) Give the use of *Candida lipolytica*.
- (12) Give the formula for calculating SPC.
- (13) Give the name of an AFB and give its importance.
- (14) What is the full form of FDA and give its role.