

Seat No. : _____

AK-115

April-2016

B.Sc., Sem.-IV

CC-205 : Microbiology

Time : 3 Hours]

[Max. Marks : 70

Instructions : (1) Attempt **all** questions.

(2) Mention correct question number against the answer.

(3) Draw neat diagrams wherever necessary.

1. Answer any **two** : **14**
 - (a) Describe the various factors affecting microbial flora of foods.
 - (b) Explain the food borne diseases caused by Escherichia coli and Shigella.
 - (c) Write a note on the microbial flora of meat and eggs.
 - (d) Explain food poisoning by molds.

2. Describe any **two** : **14**
 - (a) Spoilage of grains, fruits and vegetables.
 - (b) Spoilage of canned foods.
 - (c) Use of high temperature in food preservation.
 - (d) Use of Osmotic pressure and radiation in food preservation.

3. Write notes on any **two** : **14**
 - (a) Spirullina as food.
 - (b) Cheese as a fermented food.
 - (c) Bread and Idli as fermented foods.
 - (d) Acidophilus milk, Kefir and Kumiss.

4. Explain any **two** : **14**
 - (a) Microbiological analysis of food by SPC.
 - (b) MPN in bacteriological analysis of food.
 - (c) Use of selective media for detection of specific pathogens in food.
 - (d) Resazurin and Phosphatase test.

5. Answer in a few lines only :

14

- (1) What is botulism ?
 - (2) Name the major sugar and protein present in milk.
 - (3) Give two examples of non-perishable foods.
 - (4) What is rancidity?
 - (5) Name the chemicals used for preservation of meat.
 - (6) What is “nisin” ?
 - (7) Name two bacteria causing discoloration of foods.
 - (8) What is Prebiotics ?
 - (9) Give two criteria for an ideal bacterial starter culture for dairy industry.
 - (10) Give two examples of soft cheese.
 - (11) What is SCP ? Name two organism used as SCP.
 - (12) What is the use of acid-fast staining?
 - (13) What is MBRT and give its use.
 - (14) Name two agencies for quality control, labelling and testing of foods.
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