



Seat No. : _____

TA-130

April-2013

B.Sc. SEM. IV

MICROBIOLOGY (205)

(Food & Dairy Microbiology)

Time : 3 Hours

[Max. Marks : 70]

- Instructions :**
- (1) Figures on right indicate marks.
 - (2) All questions carry equal marks.
 - (3) Draw neat diagrams wherever necessary.
 - (4) Write the number of question & subquestion very clearly.

- | | | |
|----|---|----|
| 1. | Describe the following : (any two) | 14 |
| | (a) Food as a substrate for microorganisms. | |
| | (b) Intrinsic factors affecting the kind and number of organisms in food. | |
| | (c) Food borne infections. | |
| | (d) Food poisoning caused by bacteria. | |
| 2. | Explain the following : (any two) | 14 |
| | (a) Biochemical changes caused by microbes in food. | |
| | (b) Spoilage of canned food. | |
| | (c) Food preservation by use of low temperature. | |
| | (d) Food preservation by use of radiations. | |
| 3. | Describe the following : (any two) | 14 |
| | (a) Process of cheese making. | |
| | (b) Probiotics. | |
| | (c) Bread as a fermented food product. | |
| | (d) Mushrooms as a human food. | |

4. Explain the following : (any two) 14

- (a) Direct microscopic observation of food sample.
- (b) Methods for identifying an unknown organism in food sample.
- (c) Resazurin test for gradation of milk.
- (d) Phosphatase test for checking efficiency of pasteurization.

5. Answer in 1-2 sentences : 14

- (1) Name one mold that causes food poisoning.
 - (2) Name one milk borne disease.
 - (3) Name the type of toxin produced by S. aureus.
 - (4) Name one organism causing spoilage of canned food.
 - (5) What is pasteurization ?
 - (6) Name one chemical preservative of food.
 - (7) What is plasmoptysis ?
 - (8) What is starter culture ?
 - (9) Name the yeast that is used as feed.
 - (10) Which organism is involved in production of yoghurt ?
 - (11) What is kefir ?
 - (12) What is cfu ?
 - (13) Name acid fast organism likely to be present in milk.
 - (14) What is MPN ?
-