

AS-1443

B.Sc. (Part—II) Semester—IV Examination
INDUSTRIAL MICROBIOLOGY
(Food, Dairy Microbiology and Biostatistics)

Time : Three Hours]

[Maximum Marks : 80

- Note :—** (1) All questions are compulsory.
 (2) Question No. 1 is objective type and has no internal choice.
 (3) Q. No. 2 to Q. No. 7 has internal alternate choice carrying equal marks.
 (4) Draw neat and labelled diagrams wherever necessary.

1. (A) Fill in the blanks :— 2
- (i) _____ is the sugar present in Milk.
 (ii) Phosphatase test is used to check the effectiveness of _____ of milk.
 (iii) In bread fermentation by yeast _____ gas is produced.
 (iv) Salmonellosis is a type of _____ borne infection.
- (B) Choose the correct alternative : 2
- (i) _____ is the protein present in milk.
 (a) Globulin (b) Casein
 (c) Keratin (d) None of the above
- (ii) Sauerkraut is made by fermentates of :
 (a) Barley (b) Waste sulfite liquor
 (c) Cabbage (d) Molassess
- (iii) The value which occures with highest frequency in a set of data is called as _____.
 (a) Mean (b) Mode
 (c) Median (d) All the above
- (iv) Idli is the most popular dish of :
 (a) Southern India (b) Northern India
 (c) Central India (d) None of the above

- (C) Answer in one sentence : 4
- (i) What is mean ?
 - (ii) What is yoghurt ?
 - (iii) What is food poisoning ?
 - (iv) Which organism is used for bread fermentation ?
2. Describe the following in brief :—
- (a) Canning. 4
 - (b) Food preservation using chemical preservative 4
 - (c) Food Intoxication. 4
- OR**
- (d) Radiations for food preservations. 4
 - (e) Use of high osmotic pressure for food preservation. 4
 - (f) Food borne infections. 4
3. Describe in detail any two methods of pasteurization of milk. 12
- OR**
- Describe in detail sources of contamination of milk. 12
4. Describe in detail the production of pickles in industry. 12
- OR**
- Describe the process of Idli fermentation in detail. 12
5. Describe in brief the method of industrial production of the following :—
- (a) Lassi. 4
 - (b) Leben. 4
 - (c) Kefir 4
- OR**
- (d) Acidophilus milk. 4
 - (e) Yoghurt. 4
 - (f) Cheddar Cheese. 4

6. Describe in detail the microorganisms involved in spoilage of following food and mention the methods of their preservation :

- (a) Fish. 4
- (b) Poultry Products. 4
- (c) Fresh meat. 4

OR

- (d) Describe in brief fermented sausage. 4
- (e) Briefly describe the microbiological quality of various sea food products. 4
- (f) Explain in brief the spoilage of processed meat. 4

7. Describe in brief the following :—

- (a) Mode. 4
- (b) Tabulation and classification of data. 4
- (c) Chi-square test. 4

OR

- (d) Mean. 4
- (e) Graphical presentation of data. 4
- (f) t-test. 4

