Roll No......................

Total No. of Units   : 04
Total No. of Printed Pages : 03

Code No. : 03/307

Third Semester Examination, Dec. 2018

M.Sc. MICROBIOLOGY

Paper - III

FOOD AND DAIRY MICROBIOLOGY

Time : 3 Hrs.   **Max. Marks : 80**

- Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences.
  Part C (Short answer type) of each question will be answered in 200-250 words.
- Part D (Long answer type) of each question should be answered within the word limit 400-450.

Unit - I

Q.1 A. Define Canning. **(2)**

Q.1 B. What is meant by food additives? **(2)**

Q.1 C. Explain food preservation by drying. **(4)**

OR

Define D, Z and F values.

Q.1 D. General characteristics and importance of bacteria in food microbiology. **(12)**

OR

Describe factors influencing microbial growth in food.

P.T.O.

Unit - II

Q.2 A. Define contamination.   **(2)**

Q.2 B. What is meant by food borne infections?   **(2)**

Q.2 C. Describe general types of microbial spoilage.   **(4)**

OR

Describe poultry spoilage of canned foods.

Q.2 D. Describe food control agencies and its regulations.   **(12)**

OR

Describe bacterial food borne infections and intoxications.

OR

Explain detection of spoilage and characterization.

Unit - III

Q.3 A. What are fermented dairy products? Name any four of them.   **(2)**

Q.3 B. Define oriental fermented foods.   **(2)**

Q.3 C. Write quality standards and control of oriental fermented foods.   **(4)**

OR

Write a note on fermented vegetables.

Q.3 D. Describe experimental and industrial production methods of bread and cheese.   **(12)**

OR

Describe spoilage and defects of fermented dairy products.

Unit - IV

Q.4 A. What do you mean by steroid conversions?   **(2)**

Q.4 B. Define genetically modified foods.   **(2)**

Q.4 C. Explain microbial cells as food.   **(4)**

OR

Write note on Bioconversions.

Q.4 D. Give an account of fermented beverages.   **(12)**

OR

Define Mushroom and explain its cultivation methods in detail.

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