

1058

B.A./B.Sc. (General) Fourth Semester

Industrial Microbiology

IMB-401: Food Microbiology

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- a) Define role of fungi in production of soya sauce.
 - b) Type of fermenter used in vinegar production.
 - c) Enlist factors affecting spoilage of food.
 - d) Name chemical anti fungal disinfectants.
 - e) Define the role of immunoassay in identification of food pathogens.
 - f) What is the role of indicators of human pathogens in food microbiology?
- (9x1½)

UNIT – I

II. Enlist various fermented dairy products. Discuss commercial production of any two.

(6)

- III. a) Write a note on microbiological production of red wine.
- b) What are single cell proteins? Discuss fermentation steps involved in its production.
- (3,3)

UNIT – II

- IV. a) How efficient are low temperature methods to preserve food.
- b) Discuss the mechanism of food preservation by dessication.
- (3,3)
- V. Write short notes on:-
- a) Antibiotics used as food preservative.
 - b) Controlled atmosphere food preservation.
- (3,3)

UNIT – III

VI. Explain the role of bacteria in spoilage of meats.

(6)

P.T.O.

(2)

- VII. a) How chemical and physical changes in food indicate spoilage.
b) Explain microbial spoilage of fruits. (3,3)

UNIT – IV

- VIII. Give an overview of direct methods used for the microbiological analysis of food. (6)
- IX. What are the different automated methods to detect food pathogens? Discuss any one in detail. (6)

x-x-x