(v) Solid State Fermentation

5. Specify the substrates and microorganisms used in making following food products **(any 6)**: (2x6=12)

(a) Kefir

(b) Soy sauce

(c) Beer

(d) Dosa

(e) Tempeh

(f) Kanji

(g) Vinegar

(h) Roquefort Cheese

6. (a) Classify food products on the basis of their ease of spoilage. (4)

(b) Discuss various types of cheeses based on their perishability. (4)

(c) Enlist the various methods of food preservation. (4)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 3379 **I**

Unique Paper Code : 2534001001

Name of the Paper : Food fermentation and preservation techniques (GE5)

Name of the Course : **B.Sc. (Hons.) Microbiology**

Semester : V (UGCF)

Duration : 2 Hours Maximum Marks : 60

Instructions for Candidates

1. Write your Roll. No. on the top immediately on receipt of this question paper.

2. Attempt **any five** questions.

3. **All** questions carry equal marks.

4. Attempt **all** parts of a single question together.

1. (a) Discuss **any 2** intrinsic factors affecting microbial growth. (6)

   (b) Define the following terms **(any 6)**. (1×6=6)

   (i) GRAS

   (ii) Scalding

   (iii) Kimchi

   (iv) Relative humidity

   (v) Indigenous fermented foods

   (vi) Desiccation

   (vii) Kefir

   (viii) Sun drying

2. Differentiate between the following **(any 4):** (3x4=12)

   (a) Probiotics and Prebiotics

   (b) Slow Freezing and Quick Freezing

   (c) Dahi and Yogurt

   (d) Pasteurization and Appertization

   (e) Lactic acid bacteria and Acetic acid bacteria

   (f) Oriental and Indigenous fermented foods

3. (a) Write of mode of action of following preservatives along with the food items these are used with **(any 4)**: (2×4=8)

   (i) Benzoic acid

   (ii) Salt

   (iii) Nitrites and Nitrates

   (iv) Nisin

   (v) Wood smoke

   (vi) UV rays

   (b) Discuss the morphological, cultural and physiological characteristics of bread mold OR baker's yeast. (4)

4. Write short notes on **(any 3)**: (4×3=12)

   (i) Sources of food contamination

   (ii) Production of Sauerkraut

   (iii) Importance of LAB in food industry

   (iv) Modified atmosphere packaging

P.T.O.