

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2011 Admission  
VI<sup>th</sup> Semester Final Examination- July -2014

Cat. No: Fdsc.3206

Title: Fermentation Technology (1+1)

Marks: 80

Time: 3 hours

## PART - A

Answer all questions

(10 x 1 = 10.0)

1. Bacterial growth curve is obtained by plotting ..... versus time
2. The crushed grapes used for wine manufacturing are also known as .....
3. .... was the first aminoacid to be produced commercially
4. Preservation of microorganisms by liquid nitrogen is known as .....
5. Finely cut cabbage fermented by various lactic acid bacteria is known as .....
6. .... is a distilled alcoholic beverage made from sugarcane byproducts
7. .... refers to sources of mixed protein extracted from pure or mixed cultures of algae, yeast, fungi or bacteria used as a substitute for protein rich foods, in human and animal foods.
8. Vinegar contains..... percentage of acetic acid
9. The protein content in Spirulina is .....
10. The fermentation is initiated by the microorganism ..... in sauerkraut production

## PART- B

Write short note on *any Ten* questions

(10 x 3 = 30.0)

1. Write on the factors controlling fermentation
2. Comparison of batch and continuous culture
3. Fermenter and its basic functions
4. Agitators and impellers
5. What is SCP and its composition

6. Submerged culture
7. Acidophilus milk
8. Role of enzymes in food processing
9. Foaming agents
10. Nutritive value of fermented foods
11. Sausages
12. Nutritional importance of curd

### PART – C

Write detailed notes on *any six* questions

(6x5=30.0)

1. Describe the sources of media and its preparation and sterilization process
2. Fermentation of meat
3. Flow chart for the manufacture of cheese
4. Enrichment techniques using liquid culture
5. Write on the purification methods used in fermentation
6. Sterilization of paddy straw in mushroom cultivation
7. What is active dry yeast ? State its four advantages
8. Fermentation of fruits

### PART- D

Write *any one* question

(1 x 10=10.0)

- a. Explain growth curve in detail. What are the different types of culture methods and its application and use

OR

- b. What are the types of vinegar and method of manufacture of vinegar