

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food . Engg) Degree Programme 2013 Admission

VI<sup>th</sup> Semester Final Examination- June - 2016

Cat. No: Fdsc . 3206

Marks: 50.00

Title: Fermentation Technology (1+1)

Time: 2 hours

## I Fill up the blanks

(10 x 1 =10)

1. The protein content in Spirulina is \_\_\_\_\_.
2. Whey is an example of \_\_\_\_\_ source of energy.
3. Continuous culture is an open process in which microbial cultures grow continuous in \_\_\_\_\_ phase.
4. The fermenting microorganism in the manufacture of wine is \_\_\_\_\_.
5. The fermentation is initiated by the microorganism \_\_\_\_\_ in sauerkraut production.
6. Vinegar contains \_\_\_\_\_ percentage of acetic acid.
7. \_\_\_\_\_ is defined as the use of highly selected procedures to allow the detection and isolation of microorganisms of interest.
8. The alcohol content in whisky is \_\_\_\_\_.
9. Commercial dried yeast has \_\_\_\_\_ percentage moisture and compressed yeast has about \_\_\_\_\_ percentage moisture.
10. The crushed grapes used for wine manufacturing are also known as \_\_\_\_\_.

## II Write short notes ANY FIVE

(5 x 2 =10)

1. Batch culture
2. Types of fermentation.
3. Write on the principles of sterilization.
4. Sauerkraut.
5. Dhokla.
6. Lyophilization.
7. Types of yeast used in baking.

## III. Explain ANY FIVE of the following

(5 x 4 =20)

1. Describe the different sources of nutrients required by the microorganisms.
2. Write on the different types of microbial cultures.
3. Different parts of a fermenter.
4. Write on the mechanism of nutrient recycling.
5. Write in brief how the inoculums are developed for bacterial process.
6. Briefly describe the isolation of industrially important organisms.
7. Describe the process of downstream processing of yea

## IV. Write essay on ANY ONE

(1 x 10=10)

1. Write on the importance of fermentation in dairy industry.

OR

2. Write on the production of SCP and its benefits.

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