

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2012 Admission

VI<sup>th</sup> Semester Final Examination- June/July -2015

Cat. No: Fdsc.3206

Marks: 80

Title: Fermentation Technology (1+1)

Time: 3 hours

## Part A

Answer the following

(10 x 1.0 =10.0)

### Fill up the blanks

1. During fermentation yeast converts sugars into \_\_\_\_\_.
2. Carbon di oxide is used for \_\_\_\_\_ bread.
3. \_\_\_\_\_ protein animal feed can be produced using bacteria.
4. In the submerged process, the substrate used for fermentation is in \_\_\_\_\_ state.
5. Most nutrient media are presently sterilized in the bioreactor at \_\_\_\_\_.

### State following statement True (or) False

6. SCP can be produced throughout the year.
7. Submerged fermentation utilizes free flowing liquid substrates.
8. In the process using heat exchangers, 90% of the energy input is recovered.
9. Fermentation increases cooking time
10. Fermentation makes food less digestible.

## Part B

Answer any TEN questions

(10 x 3=30.0)

Define/Explain

1. SCP
2. Buffering agents
3. Microbial biomass
4. Microbial metabolites
5. inoculums
6. Sausages
7. Batch filtration
8. Ethonolic fermentation
9. Solid state fermentation
10. Aerobic fermentation
11. Butter milk
12. Brandy

### Part C

Answer any SIX questions

(6 x 5.0 =30.0)

1. Explain benefit of fermentation.
2. Write a note on microbial kinetics.
3. Discuss sterilization of fermentation media
4. Explain functions of fermentor.
5. Write a note on purifications of food products.
6. Explain production of sausages.
7. Briefly explain production of Vinegar.
8. Discuss production of Dhokla.

### Part D

Answer any ONE question

(1 x 10.0 =10.0)

1. Discuss in detail about types of fermentor.
2. Write a detailed note on modern fermented products.

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