## KERALA AGRICULTURAL UNIVERSITY

B.Tech. Food Engg. 2014 Admission Vth Semester Final Examination-February 2017.

Cat. No: Fdsc. 3105 Marks: 50 Title: Fermentation Technology (1+1) Time: 2 hours I. Fill up the blanks/ True or False:  $(10 \times 1=10)$ 1. Heat sterilization is normally performed using pressurized steam to attain a temperature of ----- for 15 min. 2. In ----- fermentation, a provision for aeration is usually not needed. 3. -----is a food produced by bacterial fermentation of milk. 4. ----- is made with a fermented batter derived from rice and chickpea splits. 5. ----- is produced by fermenting soybeans with salt and the fungus. 6. Mushroom cultivation is an example of submerged state fermentation. 7. Srikand is an alcoholic beverage made from fermented grapes. 8. Vinegar is a liquid consisting mainly of acetic acid and water. 9. Sauerkrauts are made from fermented cabbage. 10. Fermentor requires adequate mixing and aeration for optimum growth. II. Write short notes/answers on ANY FIVE: (5x 2=10)1. Foaming agents. 2. Microbial enzyme. 3. Sterilization. 4. Yoghurt. 5. Recombinant products. Submerged fermentation. 7. Wine. III Write answers on ANY FIVE:  $(5 \times 4 = 20)$ 1. Discuss nutritive value of fermented products. 2. Explain the application of fed batch cultures. 3. Write a note on aseptic inoculation. 4. Explain maintenance of fermentor. 5. Write a note on fermentor accessories. Write a note on production of Beer. 7. Discuss production of Baker's yeast. IV. Write essay on any ONE  $(1 \times 10 = 10)$ 1. Discuss in detail about development of fermentation industry. 2. Explain factors to be considered in design of fermentor.

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