KERALA AGRICULTURAL UNIVERSITY BTech (Food Engineering) 2013Admission 6th Semester Midsemester Examination

Cat.No: Fdsc 3206 Marks:40 Time: 2hours Course: Fermentation Technology(1+1) **PART-A** $(6X \ 0.5=3)$ Answer all the questions 1. The number of baffles in a standard stirred tank bioreactor is-----2. ----is described as no further increase in the cell population after a maximum value. 3. Geotrichum is a ----- strain used in SCP production. 4. The fermentation of wine can be carried out using the strains of-----5. Bacterial growth curve is obtained by plotting----- versus time. 6. ----is a fermentation product from milk. PART-B $(5 \times 2 = 10)$ Write short note on any Five questions 1.) Growth factors 2. Microbial metabolites 3. Lyophilization Inducers 5. Any two enrichment techniques 6. Nutritive value of fermented foods. PART-C $(5 \times 4 = 20)$ Write detailed notes on any Five questions 1. Explain the isolation of industrially important microorganisms.

2. Explain the important techniques to preserve microorganisms.

3. Draw a labelled diagram of Industrial aerobic fermenter.

4. Differentiate between batch fermentation and continuous fermentation.

5. What are the general features of an ideal fermenter.

Importance of aeration and agitation in fermenter. Write short notes on different type of agitators and impellers.

7. Solid state fermentation

PART-D

Write any one question

 $(1 \times 7 = 7)$

- 1. Explain growth curve. Write its importance in fermentation industry.
- 2. Explain Single Cell Protein. Explain its importance and production in detail.