

Name of Faculty:- Neeru Rani
 Discipline: - Food Technology
 Semester: - 3rd
 Subject: - Food fermentation technology (Theory and Practical)

Lesson Plan Duration: - 16 weeks (Aug 2025 to Nov-2025)

Work load (Theory / Practical) per week (in hours): Theory-02, Practical-04

Week	Lecture Day	Topic
1 st	1. 2. 3. 4.	Introduction to Syllabus and Evaluation Scheme. Definition & classification of fermentation Demonstration and study of fermenter (Practical) Functioning of fermenter (Practical)
2 nd	5. 6. 7. 8.	Advantages and limitations of fermentation. Nutritive value of fermentation. Preparation of wine (Practical) Preparation of wine (Practical)
3 rd	9. 10. 11. 12.	Substrates for fermentation process. Growth media and its types (Natural and synthetic) Preparation of beer (Practical) Preparation of beer (Practical)
4 th	13. 14. 15. 16.	advantages and limitation Composition of media (molasses, corn steep liquor, precursors, buffer, antifoaming agent Preparation of vinegar (Practical) Preparation of vinegar (Practical)
5 th	17. 18. 19. 20.	Design of a fermenter Body construction: construction material. Preparation of Baker's yeast(Practical) Preparation of Baker's yeast (Practical)
6 th	21. 22. 23. 24.	Main Parts of fermenter (agitator, sparger and baffles) Main Parts of fermenter (agitator, sparger and baffles) Preparation of curd. (Practical) Preparation of curd. (Practical)
7 th	25. 26. 27. 28.	SESSIONAL-I Functions and maintenance of fermenter. Preparation of yoghurt (Practical) Preparation of yoghurt (Practical)
8 th	29. 30. 31. 32.	Introduction to alcoholic beverages Definition, types (wine and beer) Preparation of tempeh (Practical) Preparation of tempeh (Practical)
9 th	33. 34. 35.	Process for production of wine Process for production of beer Preparation of sauerkraut (Practical)

	36.	Preparation of sauerkraut (Practical)
10th	37. 38. 39. 40.	Distillation process Types of distilled spirits (whisky, brandy and rum) Preparation of gingerale.(Practical) Preparation of gingerale.(Practical)
11th	41. 42. 43. 44.	SESSIONAL-II Process for production of whisky, brandy and rum. To determine alcohol content in alcoholic beverages (Practical) To determine alcohol content in alcoholic beverages (Practical)
12th	45. 46. 47. 48.	Production technology of curd, yogurt. Production technology of curd, yogurt. Visit to beverages and distillery. Preparation of gingerale.(Practical)
13th	49. 50. 51. 52.	Production technology of tempeh, miso Production technology of tofu Preparation of wine (Practical) Preparation of wine (Practical)
14th	53. 54. 55. 56.	Production technology of natto, vinegar, Production technology of baker's yeast, sauerkraut Preparation of Beer (Practical) Preparation of Beer (Practical)
15th	57. 58. 59. 60.	Single cell protein Sources, micro-organism, process of SCP Preparation of Vinegar.(Practical) Preparation of Vinegar.(Practical)
16th	61. 62. 63. 64.	SESSIONAL-III Nutritive value, advantages and limitations of SCP Preparation of Baker's yeast(Practical) Preparation of Baker's yeast (Practical)