

Reg. No.:



Name:

University of Kerala

U9321

Second Semester FYUGP Degree Examination, April 2025

Multi-Disciplinary course

MICROBIOLOGY

UK2MDCMBY101 - Basic Food Microbiology

Academic Level: 100-199

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	Surface slime in meat is observed incondition	RE	3
2	Cinnamon contains _____, which have a bacteriostatic activity.	RE	4
3	Name the milk with highest fat content	UN	2
4	The optimal temperature for most spoilage microorganisms is _____ degrees Celsius	UN	3
5	Advantage of using SCP?	UN	1
6	_____ is known as the father of canning	UN	4

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Outline the production of Kefir	UN	2
8	Describe the role of fungi in the spoilage of vegetables	UN	3
9	Vineyard owner wants to improve the aroma of their wine. What stage of wine production should they focus on and why?	AP	1
10	Execute the classification of chemical preservatives by categorizing them based on their function and providing examples.	AP	4

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer.7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A)	AP	1, 1

Qn No.	Question	CL	CO
	Demonstrate how probiotics contribute to gut health and overall wellbeing, and explain their effects based on current scientific understanding. OR B) Apply your knowledge of fermentation to explain the steps involved in beer production and describe the role of hops in enhancing the final product.		
12	A) Analyze the principles behind freezing, drying and canning? OR B) Examine the low temperature methods used in food preservation.	AN	4, 4
13	A) Evaluate the intrinsic factors of food spoilage and how these factors influence the growth of microorganisms. OR B) Evaluate the various causes of food spoilage	EV	3, 3
14	A) Design a new cheese product with a unique flavor profile and texture using innovative fermentation and aging techniques. Describe the fermentation cultures, enzymes, and aging processes. OR B) Design a new yogurt product with a smooth, soft texture and appealing flavor using innovative fermentation techniques.	CR	2, 2