

Reg. No.:



Name:

University of Kerala

U9080

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

FOOD TECHNOLOGY

UK2DSCFDT100 - Introduction to Food Biomolecules

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	Tabulated the difference between hydrophilic and hydrophobic molecules	RE	2
2	Indicate whether cholesterol is a saturated or unsaturated fatty acid	RE	3
3	Tabulate the difference between alpha-helix and beta-pleated sheet secondary structures	UN	2
4	Give one example of disaccharide	UN	1
5	Convert the following DNA sequence from its complementary strand to its templates strand: 5'-ATCG-3'	UN	4
6	Express the importance of phospholipids	UN	3

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	Generalize the difference between a nucleoside and a nucleotide	UN	4
8	Give examples of different types of amino acids	UN	2
9	Develop and explanation of how amino acids are linked together to form proteins	AP	2
10	Compare t-RNA and m-RNA	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	2, 3

Qn No.	Question	CL	CO
	Apply the concept of protein structure and function to understand their role in living organism OR B) Summarize the importance of phospholipids in living organisms		
12	A) Explain the biological significance of disaccharide and polysaccharide OR B) Examine the importance of hydrogen bonding in maintaining protein structure	AN	1, 5
13	A) Describe the structure and function of messenger RNA OR B) Analyze the differences between essential and nonessential amino acids in terms of their nutritional importance	EV	5, 2
14	A) Create a model showing the structure of a specific type of RNA (example t-RNA) OR B) Compare the structures and functions of starch and cellulose.	CR	4, 1