

Reg. No.:



Name:

University of Kerala

U8842

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

CHEMISTRY

UK2DSCCHE104 - BIO ORGANIC CHEMISTRY & COLLOIDS

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	Name the sweetest sugar.	RE	1
2	Define iodine value.	RE	2
3	Explain associated colloids.	UN	4
4	Cite the chemical test used for the identification of aminoacids.	UN	3
5	Give an example of steroid hormone.	UN	2
6	Give the general formula of monosaccharides.	UN	1

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	Distinguish between acid value and saponification value.	UN	2
8	Give any one method for the preparation of colloids.	UN	4
9	Explain the differences between DNA and RNA.	AP	3
10	Explain kinetic and optical properties of colloids.	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) Explain the classification and functions of vitamins in our body OR B) a) Interpret the term lipids.b) Illustrate the biological functions of phospholipids and glycolipids.	AP	2, 2

Qn No.	Question	CL	CO
12	A) Explain mutarotation and epimerization with examples. OR B) Generate a method for converting glucose into fructose and vice versa.	AN	1, 1
13	A) Evaluate how the double helical structure of DNA facilitates its biological functioning. OR B) Explain the primary, secondary, and tertiary structures of proteins.	EV	3, 3
14	A) Create a chart classifying colloids based on their molecular size and provide suitable examples for each of them. OR B) Construct a comparative study on the cleansing efficiency of soaps and detergents.	CR	4, 4