



U7846

Reg. No.:



Name:.....

University of Kerala

First Semester Degree Examination, November 2024

Four Year Under Graduate Programme

Discipline Specific Core Course

Biochemistry**UK1DSCBCH101 FOUNDATIONS OF BIOCHEMISTRY****Academic Level: 100 - 199****Time:1½ Hours****Max.Marks:42****Part A.****Answer All Questions Objective Type. 1 Mark Each.****(Cognitive Level: Remember/Understand)****6 Marks. Time: 6 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
1.	Who coined the term “ cell”?	Remember	CO1
2.	List any two examples for prokaryotes.	Remember	CO1
3.	Name the organelle which is known as suicide bag in a cell.	Understand	CO1
4.	Indicate the function of the objective lens in a light microscope?	Understand	CO4
5.	Name the basic structural unit of DNA.	Understand	CO3
6.	Indicate the function of cytoskeleton in the cell.	Understand	CO1

Part B.**Answer All Questions, Short Answer. 2 Marks Each.****(Cognitive Level: Understand/Apply)****8 Marks. Time: 24 Minutes**

Qn No.	Question	Cognitive Level	Course Outcome (CO)
7	Describe the function of the golgi apparatus in eukaryotic cells	Understand	CO 1

8	Describe the difference between ionic bonds and van der waal's bonds	Understand	CO 2
9	Explain the central dogma of life	Understand	CO 3
10	Outline the properties of RNA	Understand	CO 3

Part C.

Answer all 4 Questions, choosing among options within each question
Long Answer. 7 marks each. (Cognitive Level: Apply/Analyse/Evaluate/Create)
28 Marks. Time: 60 Minutes

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
11	A) Explain the role of cells as the structural unit of cell. OR	Understand	CO 1
	B) Compare prokaryotic & eukaryotic cells.	Understand	CO 1
12	A) Define a chemical bond. Detail the characteristics of ester, hydrogen, ionic and van der Waals bonds. OR	Understand	CO2
	B) Explain the various roles played by major elements (carbon, nitrogen, oxygen and sulphur) as a constituent of matter including living beings.	Understand	CO2
13	A) Enumerate the properties and types of DNA & RNA. OR	Understand	CO3
	B) Describe the transformation of R-strain pneumococcus to S-strain observed in Griffith's Experiment. How did Hershey-Chase experiment demonstrate DNA's role in genetic inheritance?	Understand	CO3
14	A) Mention about instruments used in biochemistry laboratories. OR	Understand	CO4
	B) Give a brief description on the different types of glassware used in biochemistry.	Understand	CO4