Name. _____ **Student Admn. No.: _____**	**Printed Pages:01**

School of Biomedical Sciences
Summer Term Examination- July - August 2024

Programme: BSc Medical Biotechnology **Semester: II** **Batch:**

Course Title: Genomics & Proteomics **Course Code: C2UH201T**	**Max Marks: 100** **Time: 3 Hrs.**

Instructions:
1. *All questions are compulsory.*
2. *Assume missing data suitably, if any.*

		K Level	COs	Marks
	SECTION-A (15 Marks) **5 Marks each**			
1.	Classify types of microarrays for transcriptomics.	KL1	CO1	5
2.	Interpret the significance of ct value in RT-PCR	KL2	CO2	5
3.	Analyse the necessity of isoelectric point in protein separation.	KL1	CO4	5
	SECTION-B (40 Marks) **10 Marks each**			
4.	Demonstrate the applications of fluoresent dyes in genomics techniques.	KL2	CO2	10
5.	Compare between FISH and RT-PCR.	KL4	CO3	10
6.	Demonstrate the principle and applications of 1D gel electrophoresis.	KL3	CO2	10
7.	Interpret the steps of western blot.	KL3	CO4	10
	SECTION-C (45 Marks) **15 Marks each**			
8.	Compare the effects of different types of mutation.	KL4	CO3	15
9.	Explain the interaction between a bait protein and a prey protein in yeast two hybrid assay.	KL5	CO4	15
10	Discuss the different types of PCR and their applications.	KL6	CO4	15