

M.Sc Sem.-2 Examination

P - 407

Botony

June 2022

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: All questions in Section I carry equal marks.
 Attempt any **three** questions from Section I.
 Questions in **section II** are compulsory.

SECTION I

Q.I	A	Describe the purification processes of commercial enzymes.	7
	B	Explain PCD in Plant life cycle.	7
Q. II	A	Describe the structure of receptors on the plasma membrane.	7
	B	Explain the structure of Nucleus.	7
Q.III	A	Describe the applications of Genomics study.	7
	B	Explain the functions of miRNAs in plants cells.	7
Q. IV	A	Explain the application of recombinant technology.	7
	B	Describe Operon Model for regulation of genes.	7
Q. V	A	Describe the principle of Phase Contrast microscope.	7
	B	Explain the principle of staining DNA.	7
Q.VI	A	Describe density gradient centrifugation.	7
	B	Explain the various methods used for cellular measurements.	7
Q.VII	A	Write a note on DNA isolation.	7
	B	What is the principle of Size Exclusion Chromatography?	7
Q.VIII	A	Explain the applications of Electrophoresis.	7
	B	Describe methods used for protein purification.	7

SECTION II

Q. IX			
	1	Write the full form of IEF.	8
	2	What are Cyclins?	1
	3	What is RNA splicing?	1
	4	Define Jumping genes.	1
	5	What is a Camera Lucida?	1
	6	What is the stationary phase in GLC?	1
	7	What is the full form of FISH?	1
	8	What is the difference between HPLC and HPTLC?	1