22	P331 (Pages: 2)	Name:
		Reg.No:
THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2023		
	(CBCSS - PG)	
(Regular/Supplementary/Improvement)		
CC19P BOT3 C09 - BIOTECHNOLOGY AND BIOINFORMATICS (Botany)		
(2019 Admission onwards)		
Tim	e: 3 Hours	Maximum: 30 Weightage
Part-A		
Answer any <i>four</i> questions. Each question carries 2 weightage.		
1.	Describe Micronutrients.	
2.	Explain Growth profile of callus culture.	
	Express RT- PCR and its applications.	
	Make a brief description of functional genomics.	
5.	Make a note on TIGR.	
6.	Prepare a note on the scope and prospects of computer in biology.	
7.	Make a note on free software movement.	
		$(4 \times 2 = 8 \text{ Weightage})$
Part-B Answer any <i>four</i> questions. Each question carries 3 weightage.		
0		eightage.
8.	Illustrate Types of bioreactors.	
9.	Make a note on Clonal propagation and somaclones.	
10.	Explain construction and screening of cDNA libraries.	
11.	Analyse ethics of cloning.	
12.	Make a short note on scope of bioinformatics.	
13.	Prepare the importance of RasMol in protein studies.	
14.	Design HTTP with neat diagram.	

Part-C

 $(4 \times 3 = 12 \text{ Weightage})$

Answer any two questions. Each question carries 5 weightage.

15. Summarize organ culture.

- 16. Describe Human Genome Project. Discuss its methodology and significance.
- 17. Explain any Vectorless method of gene transfer technique.
- 18. Prepare an essay on Emerging areas of Bioinformatics and application of bioinformatics in biology.

 $(2 \times 5 = 10 \text{ Weightage})$
