23	23P229 (Pages: 2) Name:	
	Reg.No:	
SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024		
(CBCSS - PG)		
(Regular/Supplementary/Improvement)		
CC19P BOT2 C05 - CYTOGENETICS, GENETICS, BIOSTATISTICS, PLANT BREEDING AND EVOLUTION		
(Botany)		
(2019 Admission onwards)		
Time: 3 Hours		0 Weightage
Part-A		
Answer any four questions. Each question carries 2 weightage.		
1.	1. What is a shift translocation?	
2.	2. Define Deletion.	
3.	3. Explain conjugation and interrupted mapping technique in bacteria.	
4.	4. Differentiate between CRD and RBD.	
5.	5. Explain SPAR.	
6.	6. Explain the different types of plant introduction techniques used in plant breeding.	
7.	7. Explain anatomical and embryological evidences of evolution.	
	$(4\times 2=8$	Weightage)
Part-B		
Answer any <i>four</i> questions. Each question carries 3 weightage.		
8.	8. Explain multigene families and their evolution.	
9.	9. What are B-chromosomes? Mention their significance.	
10.	0. Explain Ac,Ds and Mu elements in maize.	
11.	1. Explain Quantitative inheritance with an example.	
12.	2. Explain account of different forms of graphical representation.	
13.	3. Write a note on organisations involved in plant breeding.	

14. Make a detailed account on molecular marker marker technology in plant breeding.

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

## Part-C

Answer any two questions. Each question carries 5 weightage.

- 15. Discuss Hardy Weinberg law. What are the factors affecting Hardy Weinberg equilibrium.
- 16. Describe in detail central tendencies.
- 17. Explain different types of resistance breeding. Give examples.
- 18. Explain Darwinian and Post Darwinian theories of evolution.

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

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