

**18P235**

(Pages: 2)

Name:.....

Reg. No:.....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019**

(Regular/Supplementary/Improvement)

(CUCSS - PG)

**CC15P BO2 C06 / CC18P BO2 C06 - CYTOGENETICS, GENETICS,  
BIOSTATISTICS, PLANT BREEDING AND EVOLUTION**

(Botany)

(2015 Admission onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions briefly:

1. Robertsonian translocation.
2. Tetrad analysis.
3. Pericentric inversion.
4. Molecular cytogenetics.
5. F – test.
6. SPAR
7. Write notes on Lampbrush chromosomes.
8. Define Correlation and Regression.
9. What are the conventional methods of plant breeding?
10. Polygenic inheritance.
11. Deforestation.
12. National park.
13. Cytoplasmic male sterility.
14. Inbreeding depression.

**(14×1= 14 weightage)**

II. Answer any *seven* questions each in not more than 100 words.

15. Explain floral biology and its significance in plant breeding.
16. Write notes on the biometrical techniques in plant breeding.
17. Give the objectives techniques and consequences of Hybridization.
18. Describe the transposable elements in Bacteria.
19. Write notes on FISH and GISH.
20. Differentiate between *insitu* and *exsitu* conservation.
21. Briefly explain ANOVA
22. Explain Hardy – Weinberg Principle.

23. Write short notes on karyotype analysis.

24. Write notes on experimental designs.

**(7 × 2 = 14 Weightage)**

III. Answer *any two* questions in 300 words.

25. Explain chromosomal aberrations.

26. Briefly explain genetic recombination in Bacteria.

27. Define probability. Write notes on theorems of probability.

28. Write an essay on polyploidy breeding including their merits, demerits and achievements.

**(2 × 4 = 8 Weightage)**

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