15P230

Name.....................

Reg. No....................

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2016
(CUCSS - PG)
(Botany)
CC 15P BO2 C06- CYTOGENETICS, GENETICS, BIOSTATISTICS, PLANT BREEDING AND EVOLUTION
(2015Admission)

Time: Three Hours

Maximum: 36 Weightage

I Answer *all* questions briefly:

1. Aneuploidy

2. Hardy-Wienberg principle

3. What are the uses of trinomics?

4. Write short note on microdissection.

5. standard error.

6. Polytene chromosomes.

7. ANOVA

8. Explain binomial distribution.

9. How mean, median and mode are linked?

10. Structural heterozygotes

11. Hybrid vigour

12. Reproductive isolation

13. Speciation.

14. Write a note on transgenic plants.

(14 x 1 = 14 weightage)

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

15. Describe Somatic cell hybridization

16. Karyotype concept and its importance.

17. Explain Ac,DSand MU elements in maize.

18. Evaluate mendelism in the light of modern gene concept.

19. Explain tetrad analysis.

20. Define coefficient of variation.

21. Explain central tendencies.

22 Ogive .

23. Evaluate the significance of heterosis and inbreeding depression .

24. Write a note on Oparin concept.

<div align="right">(7 x 2 = 14 weightage)</div>

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

25. Write an essay on measures of dispresion.

26. Describe with examples cytoplasmic inheritance.

27. What is mutation breeding? Explain briefly on the methodology and achievements of mutation breeding.

28. Explain briefly retro-transposons and its significance in development and evolution.

<div align="right">(2 x 4 = 8 weightage)</div>

<div align="center">*******</div>