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**3-06-2017**

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**B.Sc., Botany - VI Semester**

**SPECIAL SUPPLEMENTARY EXAMINATION: MAY 2017**

**BO 6212: Cytology, Genetics and Plant Breeding**

Time**: 3 hours** Max.Marks**:100**

***This question paper has one printed page and three parts***

***Draw diagrams and write examples wherever necessary***

ATTACH THE QUESTION PAPER WITH THE ANSWER SCRIPT

1. Write on any **TEN** of the following:  **10x2**=**20**
2. Euchromatin
3. Co-dominance
4. Compound Layering
5. Offset
6. Differentiate between Dominance and Epistasis
7. Law of segregation
8. Histone Proteins associated with DNA
9. Test cross and its significance
10. Exons and Introns
11. Allopolyploid
12. Plasma Genes
13. Contributions of Dr. M S Swaminathan
14. Write on any **FIVE** of the following:  **7x5=35**
15. Multiple Gene Inheritance with one plant example
16. Aneuploidy
17. Pachytene and Diakinesis
18. Overlapping Genes
19. Mitochondrial inheritance in Maize
20. Polymeric Genes
21. Heterosis
22. Give a comprehensive account of any **THREE** of the following:  **15x3=45**
23. Genetic Mapping in Maize using Three Point Test Cross
24. Deletions and Duplications as chromosomal aberrations
25. Methods and Techniques of Hybridization
26. Grafting techniques (any five)
27. Crossing over and its significance