

B. Sc GENETICS I YEARSEMESTER -IDSC-PAPER-I: TRANSMISSION GENETICSPAPER IQUESTION BANK FOR PRACTICALSDURATION: 3 HOURSTOTAL-50MARKSI.MAJOR PRACTICALS

1X20=20MARKS

1. Identification of normal and mutant stocks of Drosophila
2. Problems on Mendelian segregations
3. Problems on Linkage and Mapping of genes
4. Problems on Tetrad analysis in Neurospora
5. Demonstrate the different stages of Mitosis using Onion root tips
6. Demonstrate the different stages of Meiosis using Maize / Grass hopper
7. Preparation of Drosophila Salivary gland chromosome - Polytene chromosomes

II.MINOR PRACTICALS

1X10=10MARKS

1. Problems on Monohybrid cross
2. Problems on Di hybrid cross
3. Problems on Tri hybrid cross
4. Problems on Multiple allelism
5. Chromosome structural aberrations-Deletions, Duplications, Inversions & Translocations
6. Chromosome numerical aberrations- Euploidy & Auto-polyploidy and Allo-polyploidy

III.SPOTTERS/ EXHIBITS

5X2=10MARKS

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| 1. Drosophila eye mutants | 11. Solenoids |
| 2. Male and Female Drosophila's | 12. Phases of Cell cycle |
| 3. Incomplete Dominance | 13. Apoptosis |
| 4. Co-Dominance | 14. Senescence |
| 5. Pleiotropism | 15. Necrosis |
| 6. Polytene chromosomes | 16. Any numerical aberration syndrome |
| 7. Any stage of Mitosis | 17. Any Pedigree diagram of Genetic disorder, identify the mode of inheritance |
| 8. Any stage of Meiosis | |
| 9. Chromosome structural morphology | |
| 10. Histone proteins | |

IV.RECORD AND VIVA

10MARKS