

## Topics

1. Model organisms in Genetics
2. Broad knowledge of discoveries of Watson & Crick, Mendel, Gilbert & Sanger, Morgan and Sutton
3. Allele frequency of a population
4. Sub-disciplines of genetics
5. Errors in chromosome separation
6. Chromosome type classification based on the position of centromere
7. Significance of G1/S, G2/M phase
8. Practice Punnett squares for all types of Genetic inheritances
9. Mono and Di hybrid crosses and phenotypic ratios of various non Mendelian patterns of inheritance
10. Significance of SRY in humans
11. Aneuploidy of sex chromosomes
12. Environmental effect on gender determination
13. ZZ & ZW and XX & XY sex chromosomes
14. X and Y linked genetic disorders and their inheritance pattern
15. Blood group inheritance pattern

## Definitions

Transmission genetics, Genome, phenotype, genotype, mutations, allele, centromere, telomere, Double fertilization, test cross, genomic imprinting, anticipation, consanguinity, hemizygous, monoecious and dioecious