



PJ – 357

I Semester M.Sc. Examination, January/February 2019
(CBCS)
APPLIED GENETICS
HCT – 103 : Essentials of Cytogenetics

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer *all* the Parts.
2) Draw diagrams *wherever* necessary.

PART – A

Write short notes on the following :

(4×2=8)

1. Nucleus.
2. Mitosis.
3. Nullisomy.
4. X-Chromosome.

PART – B

Write short notes on the following :

(4×8=32)

5. DNA seaffolds.

OR

Euchromatin.

6. Robertsonian translocation.

OR

Lampbrush Chromosome.

7. Polytene Chromosomes.

OR

Meiotic transmission.

8. Chromosome imprinting.

OR

Multiple sex chromosome.

P.T.O.



PART – C

Answer **two** of the following essays :

(2×15=30)

9. Write an account on chromosomal theory of inheritance.

OR

Explain supernumerary chromosome and their evolutionary significance.

10. Explain the causes and consequences of polyploidy.

OR

Describe the role of chromosomes in evolution.
