

SECTION—C

9. Short answer type questions :

- (i) Allelic inheritance
- (ii) Pseudogene
- (iii) Pleiotropic gene
- (iv) Multiple alleles
- (v) Migration
- (vi) Conjugation
- (vii) Adaptation
- (viii) Transduction.

Roll No.

Total No. of Pages : 2

PC 11481-NH

CS/2111

GENETICS-ZOO-302

Semester—V

Time Allowed : Three Hours]

[Maximum Marks : 40

Note :- Sections A and B consist of 8 questions (4 questions in each section) of 6 marks each and candidates should answer *two* questions from each Section. Section C is compulsory having 8 questions of 2 marks each.

SECTION—A

1. Discuss gene modifications due to incomplete dominance with suitable examples.
2. Calculate 9:6:1 F₂ ratio based on Mendelian inheritance.
3. Explain multiple alleles with suitable examples.
4. Discuss inheritance of skin colour in man.

SECTION—B

5. Discuss extranuclear inheritance of Kappa particles in *Paramecium*.
6. Explain role of Hardy Weinberg law in evolution.
7. Write about recombinant DNA technology and its applications.
8. Discuss genetic cloning and its applications in medicine.