

D (Printed Pages 3)
(20321) Roll No.:
M.Sc. (Bio-tech.) - I Sem.

NP-3330

M.Sc. (Biotech.) Examination,

Dec. - 2020

Fundamental of Genetics

(H-101)

[M.Sc. (Bio-Tech.)]

Time : Three Hours [Maximum Marks : 50]

Note : Attempt questions from **all** sections as per instructions.

Section-A

(Very Short Answer Questions)

Note : Attempt questions from **all** parts of this section. Each part carries 2 marks. Very short answer is required not exceeding 100 words. $5 \times 2 = 10$

1. Abbreviated genotypic ratio.

2. 3-point test cross
3. Gynandromorph.
4. Physical mutagens.
5. iojap

Section-B

(Short Answer Questions)

Note : This section contains four questions, attempt any **two** questions. Each question carries 5 marks. Short answer is required not exceeding 250 words. $2 \times 5 = 10$

6. Explain Gene Interaction with suitable examples.
7. Explain Apomixis.
8. Discuss Pseudoallelism.
9. Explain male sterility in plants.

Section-C

(Detailed Answer Questions)

Note : This section contains five questions,

NP-3330/2

P.T.O.

attempt any **three** questions. Each question carries 10 marks. Answer is required in detail. $3 \times 10 = 30$

10. Explain Benzer's concept of Cistron.
11. Discuss application of molecular markers in heterosis breeding.
12. Describe inborn errors of metabolism in man.
13. Explain the relation between linkage & crossing over.
14. What are lethal genes? Explain giving suitable examples.