Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Voc. (Agriculture) (Sem.–2)

INTRODUCTION TO GENETICS

Subject Code : BVAG-202-18

M.Code : 79596

Date of Examination : 05-07-22

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) Okazaki fragments

b) Down syndrome

c) Nucleic acid

d) Lamp brush chromosomes

e) Z-DNA

f) Equational division

g) Color blindness

h) Pseudo allele

i) Point migation

j) XXY condition.

SECTION-B

Differentiate between :

2. Nucleotide and Nucleoside

3. Sex linked and Sex influenced Traits

4. Positive and Negative control of gene regulation

5. Physical mutagens and Chemical mutagens

6. Translocation and Inversion.

SECTION-C

7. Discuss in detail the process of translation (draw neat and well labeled diagram). Also discuss the characteristic features of genetic code.

8. a) Prove that DNA is a genetic material by citing suitable experimental evidence.

   b) Explain cytoplasmic inheritance with suitable examples **(any two).**

9. a) Discuss the evolutionary history of cotton.

   b) Explain the mechanisms **(any two)** of crossing over.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.