

Roll No.

Total No. of Pages : 02

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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 migration
- 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.