

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Sc - Honours (Food Technology) (Sem.-3)**

# INTRODUCTION TO BIOLOGY

**Subject Code : BSCGE-201-21**

**M.Code : 92933**

**Date of Examination : 19-12-22**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** contains **SIX** questions carrying **TWO** marks each and students has to attempt **ALL** questions.
2. **SECTIONS-B** consists of **FOUR** Subsections : Units-I, II, III & IV. Each Subsection contains **TWO** questions each carrying **TWELVE** marks each and student has to attempt any **ONE** question from each Subsection.

## SECTION-A

1. **Define following :**
  - a. Prokaryotes
  - b. Phylogeny
  - c. Genotype
  - d. H-Bond
  - e. Covalent Bond
  - f. DNA Transcription.

## SECTION-A

## UNIT-I

2. What are Species? Discuss in details the mechanism of Speciation.
3. What is Oparin and Haldane theory of origin of life? Discuss the experiments of Miller & Urey in support of Oparin & Haldane Theory.

## **UNIT-II**

4. What do you understand by Central Dogma? Discuss in brief the mechanism of DNA Replication in Eukaryotes.
5. Discuss various Mendel's Laws of Inheritance in details with Monohybrid or Dihybrid Cross.

## **UNIT-III**

6. Elaborate on the various properties of Water which makes it ideal for origin of life.
7. Discuss various types of bonds which are essential for formation of biomolecules and their stability.

## **UNIT-IV**

8. What are Proteins? Discuss the Secondary & Tertiary structure of proteins.
9. What are Carbohydrates? Discuss types, structure and properties of Carbohydrates in brief.

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