

2022-26

Full Marks : 60

Time : 3 Hours

Candidates are required to give their answer in their own words as far as practicable. Their figures in the margin indicate full marks.

Group-A is compulsory. Answer any **three** question from **Group-B**.

Group - A

(Compulsory)

1. Choose the correct answer : **5×1=5**

(i) The power house of the cell is :

(a) Ribosome

(b) Mitochondria

(c) Nucleus

(d) Golgi body

- (ii) The law of independent assortment can be explained with the help of :
- (a) Test cross
 - (b) Monohybrid cross
 - (c) Back cross
 - (d) Dihybrid cross
- (iii) The term ecology was coined by :
- (a) Reiter
 - (b) C.B. Knight
 - (c) Ernest Haeckel
 - (d) H. D. Thoreau
- (iv) Founder binomial nomenclature was :
- (a) Linnaeus
 - (b) Darwin
 - (c) Mendel
 - (d) Lamarck
- (v) First step in Taxonomy is :
- (a) Naming
 - (b) Classification
 - (c) Identification
 - (d) Description

2. Write short note on any **one** : 5
(a) Nucleus
(b) Mitochondria
3. Write any **one** in short : 5
(a) Differences between Prokaryotic and Eukaryotic cell
(b) Food web

Group - B

Attempt any **three** questions : $15 \times 3 = 45$

4. Give an account of the Mendel's law of inheritance and discuss their importance in genetics.
5. What do you understand by ecosystem ? Describe the various components of an ecosystem giving suitable examples.
6. Describe the structure of DNA with the help of labelled diagram.
7. Give an account of Darwin's Natural selection, Theory.

8. What is the need of classification ? Write in brief about Nomenclature.
