

This question paper contains 2 printed pages]

GA—90—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

APRIL/MAY, 2023

(NEW PATTERN)

ZOOLOGY

Paper VIII

(Cell Biology and Genetics)

(Saturday, 6-5-2023)

Time : 2.00 p.m. to 4.00 p.m.

Time—Two Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) Illustrate your answers with suitable and labelled diagrams wherever necessary.

1. Describe the structure and functions of Plasma membrane. 15

Or

(a) Explain the Mendel's Law of Independent Assortment. 8

(b) Give an account on inhibitory factor. 7

2. What is crossing over ? Explain the mechanism of crossing over and its significance. 15

Or

(a) Explain Genic balance theory of Bridge with an example. 8

(b) Give an account of sex-linked inheritance in Drosophila. 7

P.T.O.

WT

(2)

GA—90—2023

3. Write short notes on any *two* of the following :

10

- (a) Endoplasmic Reticulum
- (b) Law of segregation
- (c) Polyploidy
- (d) Down syndrome.

GA—90—2023

2