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**NA—69—2023**

**FACULTY OF SCIENCE & TECHNOLOGY**

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

**NOVEMBER/DECEMBER, 2023**

**(New Pattern)**

**ZOOLOGY**

**Paper-VIII**

**(Cell Biology and Genetics)**

**(Thursday, 14-12-2023)**

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

*Time—2 Hours*

*Maximum Marks—40*

*N.B. :—* (1) Attempt *all* questions.

(2) Illustrate your answers with suitable labelled diagrams, wherever necessary.

1. Describe the structure of Prokaryotic cell. 15

*Or*

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

(b) Give an account on Supplementary factor. 7

2. What is Linkage ? Describe the types and significance of Linkage. 15

*Or*

(a) Give an account on Bridge ratio theory of Genic Balance. 8

(b) Give an account on Human Pedigree analysis with symbols. 7

P.T.O.

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

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- (a) Golgi Complex
- (b) Duplicate gene
- (c) Erythroblastosis foetalis
- (d) Haemophilia.

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