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NY—92—2023

FACULTY OF SCIENCE AND TECHNOLOGY

M.Sc. (Second Year) (Third Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(New/CBCS Pattern)

ZOOLOGY

Paper Zool-XII

(Molecular Cell Biology)

(Thursday, 7-12-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

- N.B. :-*
- (i) Attempt *All* questions.
 - (ii) *All* questions carry equal marks.
 - (iii) Illustrate your answers with suitable labelled diagrams wherever necessary.

1. Discuss the fluid mosaic model of plasma membrane structure. 15

Or

Describe in detail composition and functions of cytoskeleton.

2. Elaborate about replication of DNA in eukaryotes. 15

Or

Explain in detail the coding, non-coding and satellite DNA in eukaryotes.

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3. Describe the process of RNA processing in eukaryotes. 15

Or

Discuss in detail different types of ribonucleoproteins.

4. Explain about types and characteristics of cancer. 15

Or

Elaborate about signaling by insulin receptor.

5. Write short notes on any *three* of the following (5 marks each) : 15

(a) Di-Acyl Glycerol (DAG)

(b) Heterochromatization

(c) DNA amplification

(d) Active transport.

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