

This question paper contains **2** printed pages]

**VA—21—2024**

**FACULTY OF SCIENCE**

**B.Sc. (Third Year) (Fifth Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2024**

**(CBCS/New Pattern)**

**BOTANY**

**Paper-XII**

**(Cell and Molecular Biology)**

**(Wednesday, 4-12-2024)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

- N.B. :**— (i) Attempt *all* questions.  
(ii) Illustrate your answers with labelled diagrams.
1. Define Mitosis. Describe the phases of mitosis and add a note on its significance. 15

*Or*

- Describe in brief :  
(a) Ultra structure of prokaryotic cell. 8  
(a) Types of ribosomes 7
2. What are nucleic acids ? Describe structure of DNA. 15

P.T.O.

*Or***Describe in brief :****(a) Fine structure of gene****8****(b) Amniocentesis****7****3. Write short notes on (any two) :****10****(a) Zygotene****(b) Peroxisomes****(c) r-RNA****(d) Mutagens.**