

This question paper contains 2 printed pages]

NB—08—2023

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2023

(New Course)

BIOTECHNOLOGY

(Advanced Cell Biology)

(Friday, 1-12-2023)

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

Time—3 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) All questions carry equal marks.

(iii) Draw neat diagram wherever necessary.

1. Describe in detail structural organization of eukaryotes. 15

Or

(a) Cell Theory 8

(b) Bacteria. 7

2. Explain in detail structural organization of plasma membrane. 15

P.T.O.

WT

(2)

NB—08—2023

Or

- (a) Nucleus 8
- (b) Endoplasmic Reticulum. 7
3. Describe in detail passive diffusion. 15
- Or
- (a) Na/K ion channel. 8
- (b) Phagocytosis. 7
4. Explain in brief mitosis. 15
- Or
- (a) G-protein coupled receptor 8
- (b) Prophase-I. 7
5. Write short notes on (any *three*) : 3×5=15
- (a) Diversity of cell size and shape
- (b) Lysosomes
- (c) Pinocytosis
- (d) Tight Junction
- (e) Apoptosis.

NB—08—2023

2