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1 SEM TDC BOTH (CBCS) C 2

2022

(Nov/Dec)

BOTANY

(Core)

Paper : C-2

(**Biomolecules and Cell Biology**)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks of the following : 1×5=5

(a) A water molecule has _____ polar covalent bonds.

(b) The _____ bond of ATP is the highest energetic bond.

(c) Prokaryotic ribosomes are of _____S types.

P23/89

(Turn Over)

- 17. Give examples of enzymes in synthetic phase of ...
- 18. Phospholipids are ... in nature

2. Write short notes on any three of the following: 4×3=12

- (A) Saponification
- (B) Nitrogenous bases
- (C) ATP as energy currency
- (D) Membrane transport

3. With labelled sketches, describe the structure and functions of ribosomes and lysosomes. 6+6=12

Or

Write short notes on: 4×3=12

- (a) Function of chromosome
- (b) Fluid mosaic model
- (c) Function of chloroplasts

4. What is protein denaturation? Describe the biological roles of proteins. 6+6=12

(3)

Or

Write on the following :

6×2=12

- (a) Role of enzymes
- (b) Cell cycle checkpoints

5. Write short notes on any *three* of the following :

4×3=12

- (a) "Mitochondria is the powerhouse of the cell."
- (b) Function of endoplasmic reticulum
- (c) Composition of carbohydrates
- (d) Endocytosis

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