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1 SEM TDC BOTH (CBCS) C 2

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(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.

- (d) DNA synthesis occurs in synthetic phase of ____.
- (e) 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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