



GI-034020

Seat No. _____

B. Sc. (Sem. IV) Examination

March / April - 2019

Biochemistry : BSCC407A

(C-1 : Cell Biology)

Time : 3 Hours]

[Total Marks : 70

- 1 (a) Describe in detail structural organization of prokaryotic and eukaryotic cells. 7

OR

- (a) Explain : Evolution of eukaryotic cells from prokaryotes. 7
(b) Write similarities and difference between Plant and Animal cells. 7

OR

- (b) Write general features, biochemical composition and functions of cell membrane.

- 2 (a) Write short note on cilia and flagella. 7

OR

- (a) Explain : Centrioles and Basal bodies.
(b) Write structure, biochemical composition and functions of microtubules. 7

OR

- (b) Write short note on : Microfilaments.

- 3 (a) Write short note on :
(a) Nucleus 7

OR

- (a) Mitochondria
(b) Plastid 7

OR

- (b) Lysosomes

GI-034020]

1

[Contd...

- 4 Explain in detail :
- (a) Mitosis
OR
(a) Meiosis 7
- (b) Apoptosis
OR
(b) Stem cells 7
- 5 Write answer in short : (one mark each) 1×14
- (1) What is cell junctions ?
 - (2) Write function of protein present in cell membrane.
 - (3) Explain : Cell membrane is selective permeable.
 - (4) What is biochemical composition of cell wall ?
 - (5) What is intermediate filaments ?
 - (6) Write function of intermediate filaments.
 - (7) What do you mean by cytoskeleton ?
 - (8) Give reason : Nucleus is headquarter of cell.
 - (9) What is nucleolus ? Write its function.
 - (10) What is currency of our body ? Where it is synthesis ?
 - (11) Give reason : Ribosome is the protein factory.
 - (12) Write function of SER and RER.
 - (13) Write different phases of cell cycle.
 - (14) Write difference between somatic and germline cells.
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