

B.Sc. Sem I (Hons.) Examination, 2020

Subject: Biochemistry

Paper: CC-2

(Cell biology)

Full marks: 40

Time: 2 hrs.

Answer any eight of the following questions:

5 x 8 = 40

1. What are the differences between the nuclear membrane and the cell membrane in terms of structure and function?
2. Enlist the differences between the cellular processes of importing protein into the ER and exporting protein from ER.
3. Describe the dynamics of the microfilament polymerization.
4. Briefly explain the organization of the structure of an intermediate filament. How does the structure help the protein with its function?
5. Describe the role of pro-apoptotic and anti-apoptotic proteins in apoptosis.
6. State the differences between gap junction and tight junction.
7. Describe the role of cell cycle check points in eukaryotic cell cycle.
8. What are the differences between SEM and TEM?
9. Describe the structure and function of prokaryotic nucleoid. How does it differ from the eukaryotic nucleus?
10. State the importance of Dolichol phosphate pathway in vesicular transport.