

B.Sc. Semester - 2 (NEP-2020) Examination**JUNE – 2024****BOT: Cell Biology (Major-4)****Time: 2:00 Hours****Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1	(1)	Difference between Prokaryotes & Eukaryotes	(05)
	(2)	Describe in brief: Stages of Mitosis	(05)
OR			
Que.1	(1)	Describe: The Endosymbiotic theory for the origin of Eukaryotic cell	(05)
	(2)	Write a short note on cell cycle checkpoints	(05)
Que.2	(1)	Write Note on: The structure of plant cell wall	(05)
	(2)	Write Note on: Fluid mosaic model of membrane	(05)
OR			
Que.2	(1)	Write Note on: The chemistry and function of plant cell wall	(05)
	(2)	Write Note on: Endocytosis and Exocytosis	(05)
Que.3	(1)	Describe the structure and function of Mitochondria	(05)
	(2)	Structure and function of Chloroplast	(05)
OR			
Que.3	(1)	Write a short note on Golgi Apparatus	(05)
	(2)	What are two main types of Endoplasmic reticulum (ER) and functions	(05)
Que.4	(1)	Discussed the mechanism of nuclear cytoplasmic transport	(05)
	(2)	Write short note on: Molecular organization of chromatin	(05)
OR			
Que.4	(1)	Write a short note on Nuclear lamina	(05)
	(2)	Discussed the Cytoskeleton: Role and structure of microtubules	(05)
Que.5	(1)	Write a short note on states of Meiosis	(05)
	(2)	Write a short note on chemical composition of membranes of cell wall	(05)
OR			
Que.5	(1)	Describe the structure and function of Chloroplast	(05)
	(2)	Write a short note on microfilaments and intermediary filament	(05)
