

**S.No. 5078**

**16 SCCBT 1**

(For candidates admitted from 2016-2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022.

Part III — Biotechnology — Major

**CELL BIOLOGY**

Time : Three hours

Maximum : 75 marks

**PART A — (10 × 2 = 20)**

Answer ALL questions.

1. Eukaryotic cell
2. Binary fission
3. Cell membrane
4. Fluidity of cell membrane
5. Glyoxisomes
6. Golgi complex
7. Nucleic acids
8. Mitochondria

9. Confocal microscope

10. Electron microscope.

PART B — (5 × 5 = 25)

Answer ALL questions, Choosing either (a) or (b)..

11. (a) Draw and describe the structure of eukaryotic cell.

Or

(b) Comment on basic properties of cell.

12. (a) Describe about chemical composition of cell membrane.

Or

(b) Describe about diffusion and its importance in living organisms.

13. (a) Write a short note on endoplasmic reticulum.

Or

(b) Comment on plant cell vacuole.

14. (a) Write a short note on nuclear membrane.

Or

(b) Comment on structure and function of nucleolus.

15. (a) Difference between light field and dark field microscope.

Or

(b) Comment on capsule staining.

PART C — (3 × 10 = 30)

Answer any THREE questions.

16. Write a brief note on discovery of cells

17. Comment on extracellular matrix

18. Short note on ribosomes and its functions

19. Describe about chromatin and its three level of organization

20. Comment on Gram's staining method