



K24U 1643

Reg. No.:

Name :

**Second Semester B.Sc. Degree (CBCSS – OBE-Regular/Supplementary/
Improvement) Examination, April 2024
(2019 Admission Onwards)
COMPLEMENTARY ELECTIVE COURSE IN PHYSIOLOGY
2C02PLY : Cell Biology**

Time : 3 Hours

Max. Marks : 32

Instruction : Provide labeled diagrams **wherever** necessary.

I. Essay Questions. Answer **any two**. **(2×6=12)**

- 1) Describe in detail the various membrane transport mechanisms in cells.
- 2) What are Giant Chromosomes ? Explain different types and its structure.
- 3) Write an account on different types of microtubules, its structure and functions.
- 4) Explain the ultrastructure and function of mitochondria with the help of diagrams.

II. Short Essay Questions. Answer **any two**. **(2×3=6)**

- 5) Explain polymorphism in Lysosomes and add a note on its functions.
- 6) Describe the control of Gene expression in eukaryotes.
- 7) With the help of a diagram explain Fluid Mosaic Model of plasma membrane.

III. Short Answer Questions. Answer **any six**. **(6×2=12)**

- 8) What are polyribosomes ?
- 9) What is Oxidative phosphorylation ?
- 10) Define Cell Cycle.
- 11) Write notes on intermediate filaments.
- 12) Enlist the functions of Golgi Complex.

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- 13) What is the GERL concept ?
- 14) Comment on Clathrin-coated vesicles.
- 15) Distinguish between prokaryotes and eukaryotes.

IV. Multiple Choice Questions. Answer **all**.

(4×0.5=2)

- 16) Who coined the term mitosis ?
 - a) Flemming
 - b) Balbiani
 - c) Randolph
 - d) Callan & Lloyd
- 17) The gene present in Golgi apparatus that prevent Apoptosis
 - a) Bal-1
 - b) Bcl-2
 - c) Bal-2
 - d) Bcl-1
- 18) Chemiosmotic theory was proposed by
 - a) Balbiani
 - b) Peter D. Mitchell
 - c) Carl Correns
 - d) Koller
- 19) Which among the following is a Golgi enzyme ?
 - a) ATPase
 - b) ADPase
 - c) Caspase
 - d) Thymine pyrophosphatases

