



K23U 2014

Reg. No. :

Name :

**II Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, April 2023
(2019 Admission Onwards)
COMPLEMENTARY ELECTIVE COURSE IN PHYSIOLOGY
2C02 PLY : Cell Biology**

Time : 3 Hours

Max. Marks : 32

- I. Essay questions. Answer **any two**. **(2×6=12)**
- 1) With illustration explain the molecular arrangement of the plasma membrane.
 - 2) Describe the structure, chemical composition, types, and role of Ribosomes.
 - 3) Discuss the different transmembrane transport mechanisms.
 - 4) Explain the process of Mitosis.
- II. Short essay questions. Answer **any two**. **(2×3=6)**
- 5) Write a note on intermediate filaments.
 - 6) Explain cell theory and the modern concept of cell theory.
 - 7) Describe the structure and chemical composition of Mitochondria.
- III. Short answer questions. Answer **any six**. **(6×2=12)**
- 8) Write a short note on the Endoplasmic reticulum.
 - 9) Enlist the functions of the nuclear envelope.
 - 10) Write a note on Nucleolus.
 - 11) Describe the structure and functions of cilia.
 - 12) What are the functions of Lysosomes ?

P.T.O.



- 13) Comment on Clathrin-coated vesicle.
- 14) Write a brief note on Actin filaments.
- 15) Comment on Glyoxysomes.

IV. Multiple choice questions. Answer **all**.

(4×0.5=2)

- 16) Lampbrush chromosomes were first observed by
 - a) Flemming
 - b) Balbiani
 - c) Randolph
 - d) Callan and Lloyd
 - 17) Which among the following is a Golgi enzyme ?
 - a) ADPase
 - b) ATPase
 - c) Caspase
 - d) Thymine pyrophosphatases
 - 18) Pick out the odd one related to intracellular digestion.
 - a) Phagocytic vacuoles
 - b) Autophagic vacuoles
 - c) Food vacuoles
 - d) Contractile vacuoles
 - 19) In animal cells, the outer surface of the plasma membrane is called
 - a) Peroxisomes
 - b) Chromoplast
 - c) Desmosomes
 - d) Glycocalyx
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