## BACHELOR OF SCIENCE (CBCS-2018 COURSE) F. Y. B. Sc. Sem-I : WINTER- 2022 SUBJECT: BOTANY: CELL BIOLOGY

Day : Friday

Time: 10:00 AM-01:00 PM

Max. Marks: 60 W-18299-2022 Date: 16-12-2022 N.B.: All questions are COMPULSORY. 1) Figures to the right indicate FULL marks. 2) Draw neat and labelled diagrams WHEREVER necessary. 3) (12)Attempt any TWO of the following: Q.1 a) Describe ultrastructure of nucleus and give its functions. b) Comment on "Lysosome are suicidal bag". c) Describe structure and function of ribosome. Attempt any TWO of the following: (12)Q.2 a) Give functions of mitochondria. b) State the functions of Golgi complex. c) Give origin and types of endoplasmic reticulum. 0.3 Attempt any **TWO** of the following: (12)a) Describe ultrastructure of chloroplast and give its function. b) Give function of plasma membrane. c) What is cell division? Describe in brief meiotic- II cell division. **Q.4** Attempt any THREE of the following: **(12)** a) Comment on glyoxysomes and perioxysomes. **b)** What is centromere? Give its functions. c) Define mitosis? Explain any two stages of mitosis. d) Describe Danielli and Danson model of plasma membrane. Q.5 Attempt any FOUR of the following: (12)a) Distinguish between exocytosis and endocytosis. b) Give origin and chemical composition of ribosome.

c) Explain structure of nuclear pore complex.

- d) Describe cell structure and its historical background
- e) Give the types of spindle fiber and their role in cell division.
- f) Define chromosome and explain different types of chromosome.

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