

**BACHELOR OF SCIENCE (CBCS-2018 COURSE)**

**F. Y. B. Sc. Sem-I :SUMMER- 2022**

**SUBJECT : BOTANY : CELL BIOLOGY**

Day : Thursday  
Date : 14-07-2022

**S-18299-2022**

Time : 11:00 AM-02:00 PM  
Max. Marks : 60

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate **FULL** marks.
  - 3) Draw neat diagrams **WHEREVER** necessary.
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**Q.1** Attempt **ANY TWO** of the following. (12)

- a) Explain nucleolus in plant cell.
- b) Give the functions of Lysosomes.
- c) What is telomere? Give its functions.

**Q.2** Attempt **ANY TWO** of the following. (12)

- a) Explain stages of Mitosis.
- b) Define Meiosis? Explain stages in prophase I of Meiosis.
- c) Describe nuclear envelope and nuclear pre complex.

**Q.3** Attempt **ANY TWO** of the following. (12)

- a) Explain organization of cellulose in cell wall.
- b) Describe Peroxysomes and Glyoxysomes.
- c) Give types of Ribosomes and give its functions.

**Q.4** Attempt **ANY THREE** of the following. (12)

- a) Explain structure of endoplasmic reticulum and its functions.
- b) What is centromere? Give its functions.
- c) Comment on 'Mitochondria as powerhouse of cell.'
- d) Describe ultrastructure of chloroplast.

**Q.5** Attempt **ANY FOUR** of the following. (12)

- a) Give the function of plasma membrane.
- b) Distinguish between endocytosis and exocytosis.
- c) Give the functions of nucleus.
- d) Comment on resting cell and dividing cell.
- e) Give differences between euchromatin and hetero chromatin.
- f) Comment on ,apoptosis.'

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