## F.Y.B.Sc. SEM – I (CBCS 2018 COURSE) : SUMMER - 2019 SUBJECT: BOTANY: CELL BIOLOGY

Time: 03.00 PM TO 06.00 PM Day: Saturday Date: 27/04/2019 S-2019-0775 Max Marks. 60 N.B. All questions are **COMPULSORY**. 1) 2) Figures to the right indicate FULL marks. Draw neat and labelled diagrams WHEREVER necessary. 3) Attempt any TWO of the following **Q.1** (12)Describe Danielli and Dawson model of plasma membrane. a) Give types and functions of ribosomes. b) Comment on "Mitochondria as power house of cell". c) Attempt any TWO of the following (12)**Q.2** Explain structure and functions of endoplasmic reticulum. a) Describe anaphase I and metaphase I in meiosis. b) Explain pigments with its functions in plant cell. c) (12)Q.3 Attempt any TWO of the following Give types of mitosis in plant cell. a) b) Describe ultrastructure of nucleus and give its functions. State functions of golgi complex. c) (12)Attempt any THREE of the following **Q.4** What is telomere and give its functions. a) Comment on resting cell and dividing cell. b) Explain organization of cellulose in cell wall. c) Describe apoptosis with suitable example. d) (12)Attempt any FOUR of the following **Q.5** State the functions of Lysosomes. a) Describe peroxysomes and its importance. b) Explain role of ion channels and pumps in cell. c) Describe nucleolus in plant cell. d) Sketch and label structure of DNA. e)

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