Reg No:..... K24FY1309
Name :.....

First Semester FYUGP Botany Examination NOVEMBER 2024 (2024 Admission onwards) KU1DSCBOT101 (CELL : STRUCTURE AND REPRODUCTION)

(DATE OF EXAM: 2-12-2024 – KUIDSCBOT101/KU1DSCPLS101)

Time : 90 min Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. Write a short note on the cell theory? 2
2. How does cell membrane maintains its fluidity? 2
3. Describe the importance of mitochondria in cellular respiration. 2
4. What is F0 - F1 particle ? 2
5. Explain the function of ribosomes in protein synthesis. 2
6. Define glyoxysomes and mention their role in plant cells. 2
7. What is the significance of the G1 phase in the cell cycle? 2
8. Explain the difference between gametic and zygotic meiosis. 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. The discovery of cells influenced further studies in genetics and molecular biology. Comment on the statement. 6
10. B5. Investigate the structure of interphase nucleus and analyse the changes in structure during M phase of cell cycle 6
11. Draw a neat labelled comparative diagram illustrating the structure of chloroplasts and mitochondria. 6
12. Give the comparative account on the structures and roles of microbodies. 6
13. Create a diagram illustrating the stages of mitosis. 6
14. Sketch a diagram to compare the stages of mitosis and meiosis. 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. (a) Discuss the concept of the cell as the fundamental unit of structure and function in living organisms. 7
    (b) Explain the historical progress of cell biology, cell theory by writing down the major discoveries. 7
16. Describe the ultrastructure of the interphase nucleus,with the help og diagram.Add a note on nuclear pore complex. 14

SIR SYED COLLEGE CENTRAL LIBRARY