

KATHMANDU UNIVERSITY  
End Semester Examination [C]  
November/December, 2023

27 NOV 2023

Level : B.Tech.  
Year : II  
Time : 2 hrs. 30 mins.

Course : BIOT 205  
Semester : I  
F. M. : 55

SECTION "D"

(Long answer questions)

[ 3 Q. × 7 = 21 marks]

1. Describe the most popular model of plasma membrane. Give the detail account of functional activities of plasma membrane with the help of suitable diagrams.
2. What is ageing? Describe the different theories of ageing which support the ageing in animals.
3. What is cell cycle? Give the detail account of molecular control of cell cycle.

SECTION "E"

(Short answer questions)

4. Write short notes on: [6 Q. × 4 = 24 marks]
  - a. Cancer
  - b. Mitochondria
  - c. Signaling in plants
  - d. Ultrastructure of chromosome
  - e. Synaptonemal complex
  - f. Signal amplification
5. Give *TWO* major differentiates between: [2 Q. × 2 = 4 marks]
  - a. Cilia and flagella
  - b. Meiosis I and Meiosis II
6. Explain why/how for the following: [3 Q. × 2 = 6 marks]
  - a. Endocytosis is not shown by plant cell.
  - b. Multicellular organisms are evolved from unicellular organisms.
  - c. A plant cell divides by cell plate formation.

