

## Home Assignment # 2- 06.05.2024

Deadline of submission: by 5 pm of 06.13.2024

### Questions:

- 1) Mitochondria and Chloroplasts are important organelles for plants. Answer the following questions about them:
  - a) What are the functions of Mitochondria and Chloroplasts?
  - b) Why are these organelles called semiautonomous organelles?
  - c) What are the origins of these organelles in terms of evolution?
- 2) Draw the steps of the cell cycle and describe them.
- 3) Actin and microtubules show dynamic instability. Explain the concept.
- 4) Nucleus contains all the genetic information inside DNA. How the DNA is packaged inside the nucleus. Describe it with illustrations.

### Instructions to students:

Answer question 1 and choose another two questions from questions 2-4. Answer them in your own words. Don't copy and paste from anywhere. Submit the assignment within the deadline. Late submitting or copied assignments will not be graded. Submit the assignment in word file or pdf file using I-Assistant mail system.