

SGN-6056 Introduction to Computational Systems Biology  
Examiner: Jenni Seppälä

Write on each of your answer sheet:

- course name, date, number of the sheet / total number of sheet
- surname, first name, student ID

You may answer in English or Finnish

1. Describe briefly the following concepts:

- a. protein (1p)
- b. anabolism (1p)
- c. endocytosis (1p)
- d. mRNA (1p)
- e. signal transduction(1p)
- f. prokaryote (1p)

2. Describe metabolism and a metabolic pathway. (6p)

3. Describe DNA replication. (6p)

4. Write an essay on: What are the requirements of biological measurements in order to achieve successful computational approach? (According Kitano, 2001) (6p)