

## Sample questions

The migration of a protein on an SDS polyacrylamide gel is best described as inversely proportional to the

- a. Negative charge
- b. Isoelectric point
- c. Log of carbohydrate content
- d. Log of molecular weight

Which of the following metabolic processes occurs in the mitochondria?

- a. Fatty acid synthesis
- b. Glycolysis
- c. Fatty acid  $\beta$ -oxidation
- d. Pentose phosphate pathway

Isoelectric point of amino acids is used for

- a. Crystallization
- b. Precipitation
- c. Solubility
- d. Reactivity

All of the following are events representing stationary phase of bacteria except:

- a. Endogenous metabolism
- b. Cryptic growth
- c. Secondary metabolite production
- d. Exponential growth

Which of the following molecular genetic techniques is used to identify protein-protein interactions?

- a. Southern hybridization analysis
- b. Yeast two- hybrid system
- c. Polymerase chain reaction
- d. Northern hybridization analysis

The direction of the conduction of food through phloem is-

- a. From below upwards
- b. From top to bottom
- c. From leaves to roots
- d. Phloem never conducts food

How much agarose (in grams) is needed to make 0.5% agarose gel of 50 ml?

- a. 5g
- b. 1g
- c. 0.5g
- d. 0.25g

The development of sperm from spermatid is termed as

- a. spermatogenesis
- b. spermiogenesis
- c. spermiolysis
- d. meiosis