

## **Biology | second exam**

Doctor 2021

- 1. in cellular respiration, the process that generates almost 90% of the ATP is.
- A. de-phosphorylation
- B. re-phosphorylation
- C. substrate-level phosphorylation
- D. phosphorylation
- E. oxidative phosphorylation
- 2. What is ATP made from?
  - A. adenosine + high energy electrons
  - B. AMP + ALP
  - C. ADP + phosphate
  - D. Deoxy ribose and 3 phosphate groups
  - E. None of choices are correct
- 3. The process oxidation of pyruvate to Acetyl Co-A, takes place... the citric acid cycle
- A. While
- B. After
- C. All given choices are incorrect
- D. All given choices are correct
- E. Before
- 4. Coenzymes are nonorganic enzyme cofactors
- A. True
- B. False
- 5. In alcohol fermentation, NAD+ is regenerated from NADH by
  - A. reduction of pyruvate to form lactate
  - B. reduction of acetaldehyde to form ethanol
  - C. reduction of ethanol to form pyruvate
  - D. oxidation of pyruvate to form acetyl COA
  - E. oxidation of acetaldehyde to form ethanol
- 6. Which of the following is FALSE about the using of proteins as fuel?
  - A. Firstly, they must be digested to their building blocks amino acids
  - B. Many of the amino acids are used by the organism to build new proteins
  - C. The nitrogenous waste is excreted from the animal in the form of ammonia (NH3). urea, or other waste products
  - D. After amino acids can feed into glycolysis or the citric acid cycle, their amino groups must be removed, a process called deamination
  - E. All of the options are false

- 7. Glycolysis has...... steps, while citric acid cycle has ...... steps
- A. Ten, eight
- B. Eight, ten
- C. Ten,two
- D. Two, ten
- E. Ten,eight
- 8. In citric acid cycle, the Acetyl Co-A enters the cycle by reacting with
- A. Citrate
- B. Malonate
- C. Succinate
- D. Oxaloacetate
- E. Alpha Keto-glutarate
- 9. In lactic acid fermentation, the final electron acceptor is
  - A. Oxygen
  - B. CO2
  - C. Alcohol
  - D. Sugar
  - E. Pyruvate
- 10. What term is used to describe the transfer of free energy from exergonic reactions to endergonic pathways?
- A. Feedback regulation
- B. energy coupling
- C. entropy
- D. bioenergetics
- E. cooperativity
- 11. Allosteric enzyme regulation is usually associated with
  - A. The need for cofactors
  - B. an enzyme with more than one subunit
  - C. feeaback inhibition
  - D. lack of cooperativity
  - E. activating activity

1	
2	
3	
4	В
5	D
6	А
7	А
8	D
9	E
10	В
11	В