

# [Microbiology 10th tortola](https://assignbuster.com/microbiology-10th-tortola/)

Unit 3 Quiz ------------------------------------------------- Top of Form 2. | Which of the following is not true about anaerobic respiration? | | A. | It involves glycolysis only. | B. | It involves the Krebs cycle. | C. | It involves the reduction of nitrate. | D. | It generates ATP. | E. | It requires cytochromes. | | 3. | What is the fate of pyruvic acid in an organism that uses aerobic respiration? | | A. | It is reduced to lactic acid. | B. | \* It is oxidized in the Krebs cycle. | C. | It is oxidized in the electron transport chain. | D. | It is catabolized in glycolysis. E. | It is reduced in the Krebs cycle. | | 4. | Fatty acids are catabolized in| | A. | The Krebs cycle. | B. | The electron transport chain. | C. | Glycolysis. | D. | The pentose phosphate pathway. | E. | The Entner Doudoroff pathway. | | 5. | Which of the following is the best definition of oxidative phosphorylation? | | A. | Electrons are passed through a series of carriers to O2. | B. | The energy released as carrier molecules are oxidized is used to generate ATP. | C. | The energy released in the reduction of carrier molecules is used to generate ATP. | D. The transfer of a high-energy phosphate group to ADP. | | 6. | All the following are true about substrate-level phosphorylation except| | A. | It involves the direct transfer of a high-energy phosphate group from an intermediate metabolic compound to ADP. | B. | No final electron acceptor is required. | C. | It occurs in glycolysis. | D. | The oxidation of intermediate metabolic compounds releases energy that is used to generate ATP. | E. | All of the above are true. | | 7. | Which of the following is the best definition of fermentation? | | A. | The reduction of glucose to pyruvic acid. B. | The oxidation of glucose with organic molecules serving as electron acceptors. | C. | The complete catabolism of glucose to CO2 and H2O. | D. | The production of energy by substrate-level phosphorylation. | E. | The production of ethyl alcohol from glucose. | | 8. | Aerobic respiration differs from anaerobic respiration in which of the following respects? | | A. | Anaerobic respiration is glycolysis. | B. | The final electron acceptors are different. | C. | Aerobic respiration requires the electron transport chain. | D. | Aerobic respiration gets electrons from the Krebs cycle. E. | Aerobic respiration produces less ATP. | | 9. | To a microbiologist, fermentation is best defined as| | A. | The state of being in high activity or commotion. | B. | Any process that produces alcoholic beverages. | C. | Any spoilage of food by microorganisms. | D. | Any large-scale microbial process. | E. | All metabolic processes that release energy from a sugar or other organic molecule, do not require oxygen or an electron transport system, and use an organic molecule as the final electron acceptor. | | Answers: 2. A 3. B 4. A 5. B 6. E 7. B 8. B 9. A Bottom of Form