

PRACTICE: OXIDATIVE PHOSPHORYLATION

11. Almost all of the oxygen (O_2) consumed by cells is converted to:

- a. pyruvate
- b. carbon dioxide
- c. water
- d. acetyl-CoA
- e. carbon monoxide

12. Which of the following is only able to accept one electron at a time?

- a. NADH
- b. FAD
- c. Heme
- d. FMN
- e. Quinone

13. Antimycin blocks electron transfer between cytochromes –b and –c. Intact mitochondria were incubated with antimycin, NADH, and adequate O_2 , which of the following will be found to be oxidized?

- a. coenzyme Q
- b. cytochrome-a
- c. cytochrome-b
- d. cytochrome-e
- e. cytochrome-f

14. Reduced quinones are not formed by which of the following:

- a. Complex-I and NADH
- b. Complex 2 and succinate
- c. Complex 3 and cytochrome-c
- d. Fatty acid oxidation
- e. Oxidation of glycerol-3-phosphate

15. Which of the following is **not** true of the proton motive force (pmf)?

- a. One component of the pmf is the chemical gradient of protons
- b. One component of the pmf is the electrical charge gradient of protons
- c. Generation of the pmf requires succinate
- d. Pmf drives the production of ATP in the mitochondria
- e. Pmf is generated by electron transport