PRACTICE: GLYCOLYSIS

19. Converting 1 mole of fructose-1,6-bis phosphate to 2 moles of pyruvate by glycolysis results in:
    a. 1 mole of NAD^+ + 2 mole ATP
    b. 1 mole NADH + 1 mole ATP
    c. 2 moles of NAD^+ + 4 moles ATP
    d. 2 moles NADH + 2 moles ATP
    e. 2 moles of NADH + 4 moles ATP

20. Glucose labeled with ^{14}C in C-1 and C-6 gives rise to pyruvate labeled in:
    a. all three carbons
    b. its carboxyl carbon
    c. its carbonyl carbon
    d. its alcohol carbon
    e. its methyl carbon

21. If glucose was labeled with ^{14}C in C-1 and fed to yeast carrying out the ethanol fermentation, where would the ^{14}C label be in the products?
    a. C-1 of ethanol and CO_2
    b. C-1 of ethanol only
    c. C-2 (methyl) of ethanol only
    d. C-2 of ethanol and CO_2
    e. CO_2 only

22. The purpose of fermentation in cells is
    a. to regenerate NAD+
    b. to generate ATP
    c. to generate NADH
    d. to produce glucogenic compounds
    e. to fully oxidize pyruvate

23. Which of the following reactions in glycolysis requires ATP as a substrate?
    a. aldolase
    b. hexokinase
    c. pyruvate kinase
    d. glyceraldehyde-3-P dehydrogenase
    e. protein kinase A

24. Which of the following reactions in glycolysis produces ATP as a product?
    a. aldolase
    b. hexokinase
    c. pyruvate kinase
    d. glyceraldehyde-3-P dehydrogenase
    e. protein kinase A

25. Which of the following is a ketose to aldose isomerization?
    a. hexokinase
    b. phosphoglycerate mutase
    c. enolase
    d. aldolase
    e. triose phosphate isomera se