

Test Prep for Lecture Test 2

1. State the different types of Hydrocarbons and describe them.
 - a.
 - b.
 - c.
2. _____ are organic compounds with the same molecular formula, but different structural formulas.
3. What is a polymer?
4. What is an aromatic Hydrocarbon?
5. What is the longest chain of Hydrocarbons called?
6. _____ Is the substance that is acted on by an enzyme.
7. What are the types of carbohydrates, please describe them.
 - a.
 - b.
 - c.

8. What is the primary protein structure?

a.

9. What is an active site when discussing enzymes?

10. What is a codon?

11. How many carbon atoms are in a triose sugar?

12. What are the different parts of a nucleotide?

13. _____ is a sequence of codons within a DNA molecule that codes for a single protein.

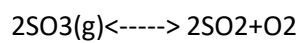
14. Describe transcription:

15. There are _____ amino acids, and _____ possible codons.

16. What is Bio-Chemistry?

17. In which direction would a reaction with a K_c value of 4.4×10^4 proceed?

18. Given the following, what is the concentration of O_2 ?



$$K_c = 7.63 \times 10^{-2}$$

$$[SO_3] = 0.187M$$

$$[SO_2] = 0.126M$$

19. Illustrate a 4 ethyl 2 hexene

20. Illustrate a 1,4 diiodobenzene:

21. _____ is when a neutron changes into a proton.

22. What is a glycosidic linkage?

23. What is ionization energy?

24. _____ are the weakest intermolecular forces.

25. Describe and draw the molecular shapes:

26. What is solubility?

27. A cylinder contains 188ml of N gas at a pressure of 1.75atm, and a temperature of 300K. What is the final volume of the gas if the final pressure is 1.98 atm at 365k?

28. What is the molarity of a solution made by dissolving 1.32 moles of LiNO_3 in 6.0 L of solution?

29. Draw and label the pH scale:

30. What is the percent by mass of ethanol ($\text{C}_2\text{H}_5\text{OH}$) in a 1.5m solution?