



School of Marvel-Asella



Subject: Chemistry

2019/2020

Work Sheet

Time Allotted 30 Min

Choose the best answer from the given alternatives and write the letter of your answer in Capital letters on the blank space provided.

1. What will be the order of the reaction with respect to A in the above reaction
A 0 B 1 C -1 D 2
2. If we doubled the concentration of reaction the rate increase by eight times the reaction is ?
A. first-order C. third-order
B. zero-order D. second-order
3. Which of the following compound is more covalent
A. NaF B MgF_2 C CF_4 D KF_7
4. How many lone pair of electrons are found on the central atom of PCl_3 ?
A. 1 B 0 C 2 D 3
5. Which of the following represents the correct electron-set geometry and molecular geometry respectively for PCl_3
A. tetrahedral pyramidal C. tetrahedral bent
B. trigonal planar T-shaped D. tetrahedral, tetrahedral
6. Which of the following has the shortest bond length?
A. O_2 B N_2 C H_2 D F_2
7. The bond formed when ammonia reacts with aluminum chloride is
A. Ionic bond C coordinate covalent bond
B. covalent bond D. metallic bond

8. Which one of the following molecules has the same electron-set geometry and molecular geometry

- A. NH_3 B. H_2O C. Cl_2O D. CH_4

9. Which of the following molecules is not paramagnetic?

- A. O_2^+ B. O_2 C. O_2^- D. O_2^{2-}

10. Which of the following molecules has the shortest bond length?

- A. O_2 B. Cl_2 C. N_2 D. Br_2

11. Which molecule has the largest bond angle?

- A. CF_4 B. NF_3 C. BF_3 D. OF_2

12. Which one of the following is NOT true of metallic bonding?

- A. It gives rise to excellent electrical conductivity
- B. Electrons are free to move throughout the structure
- C. The strength of metallic bonds increases down a group
- D. The strength of metallic bonding affects the boiling points of metals

13. According to the molecular orbital theory, which one of the following is paramagnetic? A. F_2 B. H_2 C. NO^+ D. NO

14. Which of the following crystals possess high electrical and thermal conductivities? A. Ionic crystals C. Molecular crystals

- B. Metallic crystals D. Covalent network crystals

Define the following terms briefly

15. Ant bonding molecular orbital
