

9TH CHEMISTRY WORKSHEET- CHAPTER 3, 4, 5

Q1. What is law of conservation of Mass?

Q2. What is law of constant proportion? Explain with example.

Q3. What is an atom? Give its importance.

Q4. What do you mean by atomicity of an atom?

Q5. Define atomic mass and molecular mass.

Q6. State the postulates of Dalton's atomic theory.

Q7. What is Avogadro's number? How many moles of calcium carbonate are present in 10g of this substance?

Q8. Calculate the number of molecules in

i. 84.0 g of NaOH

ii. 3.32 g of H₂

Q9. Calculate number of molecules of sodium atoms in

i. 92 a.m.u of Na

ii. 92 mole of Na

Q10. Write down the formulae of

i. Aluminium Chloride

ii. Magnesium Hydroxide

iii. Aluminium Sulphate

iv. Potassium Carbonate

Q11. What are the properties of canal rays?

Q12. Define atomic number and atomic mass of an element. Atomic number of an element X is 12 and atomic mass is 24. Represent its one atom

Q13. What was Rutherford's alpha particles scattering experiment. What were the conclusions drawn from it. What were the drawbacks of Rutherford's model of atomic structure?

Q14. Name the three sub atomic particles of an atom. What are the charges on them?

Q15. What are isotopes? What are their applications?

Q16. The average atomic mass of a sample of an element X is 16.2u. What are the percentages of isotopes

$^{16}_{\text{g}}\text{X}$ and $^{18}_{\text{g}}\text{X}$ in the sample.

Q17. Describe Bohr's model of an atom with the help of a diagram of a three shelled atom.

Q18. What is the electronic configuration of an atom of an element with atomic number 19.

Q19. What are the components of Biosphere?

Q20. How are clouds formed?

Q21. List any three human activities that lead to air pollution.

Q22. Why do organism need water?

Q23. What is humus? How does humus decide the structure of soil?

Q24. What is soil? How is soil formed?

Q25. What is soil erosion? What causes soil erosion?