

SUCCESS KEY TEST SERIES

WORKSHEET

Std: 11th Science

Subject: Chemistry

Time: 1Hrs

Date :

1. Some Basic Concepts of Chemistry

Max Marks: 35

Q.1 Select and write the most appropriate answers from given alternatives: 5

- 1) A sample of pure water, whatever the source always contains by mass of oxygen and 11.1 % by mass of hydrogen.
(a) 88.8 (b) 18 (c) 80 (d) 16
- 2) _____ are the pure substances which cannot be broken down into simpler substances.
(a) Compounds (b) Metals (c) Non-metals (d) Elements
- 3) Which one of the following is NOT an example of metalloid?
(a) Germanium (b) Arsenic (c) Silicon (d) Graphite
- 4) Avogadro proposed that equal volumes of all gases at the same temperature and pressure contain _____.
(a) equal number of atoms
(b) equal number of molecules
(c) equal number of elements
(d) equal number of particles
- 5) Which of the following reaction is not true?
(a) Hydrogen + Oxygen \rightarrow Hydrogen peroxide
(b) Hydrogen + Oxygen \rightarrow Water
(c) Nitrogen + Oxygen \rightarrow Nitrogen dioxide
(d) Nitrogen + Hydrogen \rightarrow Water

Q.2 Answer the following very short questions: 5

- 1) What do you mean by molecular mass of a substance?
- 2) Define atomic mass.
- 3) How density of a substance is calculated?
- 4) What is law of conservation of mass?
- 5) Who proposed law of multiple proportions?

Q.3 Answer the following Questions: 10

- 1) Explain: The need of the term average atomic mass
- 2) Calculate the number of moles of magnesium oxide, MgO in (i) 80 g and (ii) 10 g of the compound.
(Average atomic masses of Mg = 24 and O = 16)
- 3) Explain: Molar mass.
- 4) Explain: Formula mass with an example.
- 5) Explain: Mole concept.

Q.4 Solve the following: 15

- 1) Calculate the number of moles and molecules of acetic acid present in 22 g of it.
- 2) A student used a carbon pencil to write his homework. The mass of this was found to be 5 mg. With the help of this calculate.
(a) The number of moles of carbon in his homework writing.
(b) The number of carbon atoms in 12 mg of his homework writing

- 3) The mass of an atom of hydrogen is 1.008 u. What is the mass of 18 atoms of hydrogen?
- 4) 24 g of carbon reacts with some oxygen to make 88 grams of carbon dioxide. Find out how much oxygen must have been used.
- 5) Calculate number of moles of hydrogen in 0.448 litre of hydrogen gas at STP

----- All the Best -----