

SAI TUTORIALS**General Science****Marks: 40****Std.: 8 (English)****SEM-1 PAULS****Time: 1.45****Date: 14-10-23****Chapter: 1 TO 8**

- Q.1 Fill in the blank and rewrite the completed statements** **5**
- The SI unit of pressure is
a. N/m^3 b. N/m^2 c. Kg/m^2 d. Pa/m^2
 - The electronic configuration of magnesium is 2,8,2. From this it is understood that the valence shell of Magnesium is
 - Valency of carbon is 4 and that of oxygen is 2. From this, we understand that there are chemical bond/bonds between the carbon atom and one oxygen atom in the compound-carbon dioxide.
a. 1 b. 2 c. 3 d. 4
 - Water, mercury and bromine are similar to each other, because three are
a. liquids b. compounds c. nonmetals d. elements
 - An electron carries a charge.
- Q.2 Find the odd one out** **3**
- Brass, Bronze, Iron, Steel
 - Water, Mercury, Bromine, Petrol
 - Plague, AIDS, Cholera, T.B.
- Q.3 State True or False** **2**
- Water does not get polluted by washing the clothes in running water of river.
 - Organ of locomotion in amoeba is pseudopodia.
- Q.4 Solve Numerical problems:(Any One)** **2**
- Volume of an object is $20cm^3$ and the mass is 50g. Density of water is $1 gcm^{-3}$. Will the object float or sink in water?
 - The density of a metal is $10.8 \times 10^3 kg/m^3$. Find the relative density of the metal.
- Q.5 Write Short Notes (Any Two)** **4**
- What is done to prevent corrosion of metals?
 - Physical exercise / Yogasanas
 - Plants synthesize glucose in sunlight with the help of chlorophyll from carbon dioxide and water and give away oxygen. Identify the four compounds in this process and name their types.
- Q.6 Complete the given flow chart / table / diagram** **2**
- | Name of matter | Chemical composition | Main type of matter |
|--------------------------|----------------------|---------------------|
| Lime stone | $CaCO_3$ | |
| Dilute hydrochloric acid | $HCl + H_2O$ | |
- Q.7 Distinguish between** **2**
- Infectious and Non-Infectious Disease
- Q.8 Give scientific reasons (Any Three)** **6**
- Fruits can easily be cut with a sharp knife.
 - The stainless steel vessels in kitchen have copper coating on the bottom.

- 3 Atom is electrically neutral.
- 4 A solid matter has the properties of definite shape and volume.

Q.9 Answer the following (Any Three)**9**

- 1 What are the adverse effects of corrosion?
- 2 Classify the following pollutants into natural and manmade categories.
(Sewage, dust, pollen grains, chemical fertilizers, vehicular smoke, algae, pesticides, waste of animals and birds)
- 3 Which living organisms are included in the kingdom monera?
- 4 Write proper words from the following group of words in the blanks.
(magnetism, 4.5V, 3.0V, gravitational attraction, potential difference, potential, higher, lower, 0V)
 1. Water in the waterfall flows from a higher level to the lower level because of
 2. In an electric circuit, electrons flow from a point of potential to the point of potential.
 3. The difference between the electrostatic potential of the positive end and the negative end of an electric cell is the of the cell.
 4. Three electric cells of potential difference 1.5 V each have been connected as a battery. The potential difference of the battery will be V.
 5. An electric current flowing in a wire creates around the wire.

Q.10 Answer the following in detail (Any One)**5**

- 1 Match the pairs from 'A' and 'B' columns and explain the effect of pollution on human health.

Column - A	Column - B
i. Water containing cobalt	a. Mental retardedness
ii. Methane gas	b. Paralysis
iii. Water containing lead	c. Inflammation of lungs
iv. Sulphur dioxide	d. Skin cancer
v. Nitrogen dioxide	e. Irritation of eyes

- 2 What is meant by valency of an element? What is the relationship between the number of valence electrons and valency?