**3. MATTER AND MATERIALS**

**ATOMS,ELEMENTS AND THE PERIODIC TABLE**

**Question 1**

1. ATOM
2. ELECTRON
3. NUCLEON
4. NUCLEUS
5. ELECTRON

**Question 2**

1. PERIODS
2. GROUPS
3. LEFT SIDE
4. 18 GROUPS
5. INERT GASES
6. HYDROGEN
7. BERYLLIUM
8. SEMI-METALS
9. SULPHUR
10. DMITRI MENDELEEV

**Question 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ELEMENT | SYMBOL | ATOMIC NUMBER | No. OF PROTONS | No OF ELECTRONS |
| Oxygen | O | 8 | 8 | 8 |
| Carbon | C | 6 | 6 | 6 |
| Helium | He | 2 | 2 | 2 |
| Magnesium | Mg | 12 | 12 | 12 |
| Sulphur | S | 16 | 16 | 16 |
| Nitrogen | N | 7 | 7 | 7 |
| chlorine | Cl | 17 | 17 | 17 |

**Question 4**

1. Non-metal
2. Metal
3. Non-metal
4. Metal
5. Metal

**Question 5**

1. Gas
2. Solid
3. Solid
4. Metal
5. Metal

**Question 6**

1. Is a combination of two or more atoms
2. Hydrogen; nitrogen; oxygen
3. A compound is a combination of two or more elements in a fixed ratio.
4. NaCl2 ; MgO ; H2O
5. Chemical bond

**Question 7**

Water Methane Carbon dioxide

**Question 8**

1. Thermal decomposition and electrolysis
2. a) Potassium [k]; Manganese [Mn] ; Oxygen [O2]

b) oxygen

c) hold a glowing splint at the mouth of the test tube. If it bursts into a flame, oxygen is

present since oxygen supports combustion.

**Question 9**

1. A: anode B: cathode
2. C: oxygen D: hydrogen
3. Compound. Made up of 2 elements in a fixed ratio and ca be broken down into simpler substances using electricity.