



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 17.04.20

Duration: 40 min

Worksheet 10

Full Marks: 15

## ATOMIC STRUCTURE/CATHODE RAYS

### Choose the Correct options:

- At what pressure does a gas become conducting?  
Ans (a) 15 cm Hg (b) 10 cm Hg (c) 1 cm Hg (d) 10 mm Hg
- At what voltage does a gas become conducting?  
Ans (a) 10V (b) 100 V (c) 1000 V (d) 10000 V
- Apparatus in which a gas is made conducting is called  
Ans (a) conducting (b) charging station (c) discharge tube (d) vacuum flask tubules
- The electrode connected to the negative end of the source is called  
Ans (a) Erode (b) Anode (c) Cathode (d) Mode
- The tube on the other end of the cathode starts glowing due to the phenomenon of  
Ans (a) fluorescence (b) phosphorescence (c) spectral emission (d) Dispersion
- Scientist who discovered Cathode rays is  
Ans (a) Dalton (b) J.J. Thomson (c) Neils Bohr (d) Rutherford
- Cathode rays travel as  
Ans (a) straight lines (b) sinusoidal waves (c) pulses (d) convection currents
- Cathode rays consist of  
Ans (a) waves (b) energy (c) particle (d) All of these
- Charge of the cathode rays is  
Ans (a) negative (b) positive (c) neutral (d) None of these
- Cathode rays are deflected by  
Ans (a) Electric fields (b) Magnetic fields (c) Event horizon of black holes (d) All of these
- The function of the exhaust pump in a discharge tube is to  
Ans (a) decrease pressure (b) increase temperature (c) Harvest electrons (d) None of these
- The positively charged electrode is called  
Ans (a) Anode (b) Erode (c) Synode (d) Cathode
- The charge on an electron is  
Ans (a) -1 unit (b)  $-1.6 \times 10^{-19} \text{ C}$  (c) 1 C (d) Both (a) and (b)
- What is the ratio of mass of an electron to the mass of the Hydrogen atom  
Ans (a) 1: 1000 (b) 1: 184 (c) 1: 1840 (d) 1: 100
- The term electrons were applied to the particles of cathode ray in the year  
Ans (a) 1823 (b) 1934 (c) 1901 (d) 1897