



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 27.03.21

Duration: 40 min

Worksheet 21

Full Marks: 15

ATOMIC STRUCTURE/CATHODE RAYS

Choose the Correct options:

1. 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
2. At what voltage does a gas become conducting?
Ans (a) 10V (b) 100 V (c) 1000 V (d) 10000 V
3. Apparatus in which a gas is made conducting is called
Ans (a) conducting (b) charging station (c) discharge tube (d) vacuum flask tubules
4. The electrode connected to the negative end of the source is called
Ans (a) Erode (b) Anode (c) Cathode (d) Mode
5. 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
6. Scientist who discovered Cathode rays is
Ans (a) Dalton (b) J.J. Thomson (c) Neils Bohr (d) Rutherford
7. Cathode rays travel as
Ans (a) straight lines (b) sinusoidal waves (c) pulses (d) convection currents
8. Cathode rays consist of
Ans (a) waves (b) energy (c) particle (d) All of these
9. Charge of the cathode rays is
Ans (a) negative (b) positive (c) neutral (d) None of these
10. Cathode rays are deflected by
Ans (a) Electric fields (b) Magnetic fields (c) Gravitational fields (d) All of these
11. 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
12. The positively charged electrode is called
Ans (a) Anode (b) Erode (c) Synode (d) Cathode
13. 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)
14. 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
15. The term electrons were applied to the particles of cathode ray in the year
Ans (a) 1823 (b) 1934 (c) 1901 (d) 1897