VIDYA BHARATI SCHOOL

Science Olympiad Class IX (January 2017)

Q1: Proton was discovered by: (a) Rutherford (b) Goldstein (c) Chadwick (d) J.J. Thomson

Q2: Canal rays are _____

(a) -ve charged particles (b) +ve charged particles (c) beam of neutrons (d) gamma radiation

Q3: α-particles are _____

(a) -ve charged particles (b) +ve charged particles (c) beam of neutrons (d) gamma radiation

Q4: An α-particle is

(a) Hydrogen nucleus (b) Helium nucleus (c) Proton (d) Electron

Q5: Rutherford's gold foil experiment showed that most of the α-particles passed through the gold foil without any deflection. It indicates that

(a) the nucleus is concentrated at the center
(b) the nucleus carries positive charge
(c) there is lot of empty space in atom
(d) the nucleus carries the most of the mass

Q6: Two elements X and Y have the same atomic mass but their atomic numbers are 20 and 21 respectively. X and Y are:

(a) isobars (b) isotones (c) isomers (d) isotopes

Q7: In an atom, the mass number of an atom is equal to the number of _____.

(a) nucleons (b) protons (c) electrons (d) neutrons

Q8: Number of neutrons present in Hydrogen atom is

(a) 0 (b) 1 (c) 2 (d) 3

Q9: Protium, Deutrium and Tritium are isotopes of _____.

(a) Rhodium (b) Sodium (c) Hydrogen (d) Helium

Q10: If Z represents the atomic number and A represents mass number, then the number of neutrons in an atom can be computed as

(a) A + Z (b) A – Z (c) Z – A (d) Z

Q11: If Z represents the atomic number and A represents mass number, then the number of electrons in an atom can be computed as

(a) A + Z (b) A – Z (c) Z – A (d) Z

Q12: The electronic configuration of an atom is 2,8,3. Number of valence electrons in the atom is

(a) 13 (b) 10 (c) 3 (d) 8

Q13: The number of electrons in the outermost shell in the atom of an inert element is

(a) 0 (b) 1 (c) 2 (d) 8

Q14: Which one of the following will have the maximum charge/mass ratio?

(a) electron (b) proton (c) neutron (d) α-particle

Q15: Maximum number of electrons that can be accommodated in M shell is:

(a) 2 (b) 8 (c) 18 (d) 32

Q16: Cathode Rays are:

(a)+vely charged (b) Neutral (c) –vely Charged (d) None of these

Q17: JJ Thompson discovered:

(a) α-scattering experiment (b) Bohr Model (c) Apple Pie Model (d) Both A & B

Q18: Forms of elements having similar Atomic number but different atomic mass are called:

(a) isobars (b) isotones (c) isomers (d) isotopes

Q19: Goitre can be cured by:

(a) Uranium (b) Iodine (c) Iron (d) Calcium

Q20: Valency of Phosphorous is:

(a) 3 (b) 5 (c) 3 & 5 (d) 2

*For more practice material please click:**www.brilliant.org;www.sofolympiadtrainer.com; www.olympiadhelper.com**