



**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:  $\alpha$ -particles are \_\_\_\_\_**

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

**Q4: An  $\alpha$ -particle is**

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

**Q5: Rutherford's gold foil experiment showed that most of the  $\alpha$ -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, Deuterium 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)  $\alpha$ -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)  $\alpha$ -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](http://www.brilliant.org);[www.sofolympiadtrainer.com](http://www.sofolympiadtrainer.com);  
[www.olympiadhelper.com](http://www.olympiadhelper.com)