

CARMEL CONVENT SCHOOL

UNIT TEST II (2022-23)

CLASS IX SCIENCE

Kalyani
AC
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- Q.1 Which of the following has the same number of electrons as an oxide O^{2-}
(a) K^+ (b) Mg^{2+} (c) Ca^{2+} (d) B^{3+} 1
- Q.2 An atom with 3 protons and 4 neutrons will have a valency of :
(a) 3 (b) 7 (c) 1 (d) 4 1
- Q.3 Isotopes of an element have :
(a) Same physical property (b) Different chemical property
(c) Different Neutrons (d) Different atomic number . 1
- Q.4 Rutherford's α - particle scattering experiment showed that :
(a) Electrons have negative charge
(b) The mass and positive charge of the atom is concentrated in the nucleus.
(c) Neutron exists in the nucleus.
(d) Most of the space in a atom is empty. 1
- Q.5 An ion M^{3+} contains 10 electrons and 14 neutrons. What is the atomic number and mass number of the element M? Name the element . 2
- Q.6 Give one example each :
(a) Polyatomic molecule.
(b) Polyatomic ion. 2
- Q.7 For the symbol H,D,T tabulate three subatomic particles found in each of them 2
- Q.8 Write the chemical symbols of two elements :
(i) Which are formed from first letter of element name .
(ii) Whose name has been taken from the names of element in Latin. 2
- Q.9 Write down the formulae of : (Any two)
(a) Sodium Sulphide (b) Aluminium Sulphate (c) Potassium Nitrate 2
- Q.10 If K and L shells of an atom are full, then what would be the total number of electrons in the atom. Identify the element. Find its valency. 2
- Q.11 (a) will ^{12}C and ^{14}C have different chemical properties ? Justify.
(b) Find the %age of ^{16}X and ^{18}X if the average mass is 16.2μ 3
- Q.12 Magnesium and oxygen combine in the ratio of 3:2 by mass to form magnesium oxide. What mass of oxygen would be required to react completely with 24 g of magnesium. State the law. 3