

Section-A

Multiple choice Questions (MCQ's)

Q.1: Choose the correct answer for each from the given options:

- (i) 308.00 has significant zeros:
(a) 1 (b) 2 (c) 3 (d) 5
- (ii) Empirical formula of glucose is:
(a) $C_6H_5O_3$ (b) $C_6H_{12}O$ (c) CH_2O (d) CHO
- (iii) _____ occupies of 22.4 dm³ volume at S.T.P.
(a) 62 g of O_2 (b) Polymorphism (c) Allotropy (d) Pyramidal
- (iv) Same element exists in nature in more than one crystal form by virtue of:
(a) Isomorphism (b) Polymorphism (c) Allotropy (d) Pyramidal
- (v) Shape of water molecule is:
(a) Linear (b) Bent (c) Pentagonal (d) Pyramidal
- (vi) Zero degree Celsius ($0^\circ C$) is also called:
(a) Standard temperature (b) Normal temperature
(c) Room temperature (d) Absolute temperature
- (vii) An orbital contains maximum number of electrons:
(a) 2 (b) 6 (c) 10 (d) 14
- (viii) Principal quantum number describes:
(a) Shape of orbital (b) Energy of orbital
(c) Orientation of orbital (d) Spin of electron
- (ix) Bond energy of a molecule depends upon:
(a) Bond distance and bond polarity (b) Ionization energy
(c) Lattice energy (d) Kinetic energy
- (x) Hydrated copper sulphate contains:
(a) 5 molecules of water (b) 2 molecules of water
(c) 3 molecules of water (d) None of these
- (xi) The violet region of visible spectra has the shortest wavelength of about:
(a) 7000 Å (b) 1000 Å (c) 4000 Å (d) 2000 Å
- (xii) All of the following properties of system are intensive, except:
(a) Mass (b) Viscosity (c) Boiling point (d) Refractive index
- (xiii) The reaction: $H_2 \rightarrow 2H$ represents reaction of:
(a) Endothermic (b) Exothermic (c) Both (a) & (b)
(d) None of these
- (xiv) For the reaction, $2NH_{3(g)} \rightleftharpoons N_{2(g)} + 3H_{2(g)}$:
(a) $K_p = K_c$ (b) $K_p > K_c$ (c) $K_p < K_c$ (d) All of these
- (xv) pH of blood is:
(a) 5 (b) 7.3 (c) 8 (d) 9
- (xvi) The colour of methyl orange in acidic solution is:
(a) Orange (b) Red (c) Yellow (d) Purple
- (xvii) The reaction having low value of activation energy are:
(a) Slow (b) Fast (c) Moderate (d) All of these