



Q.No.1

You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

S.#	Questions	A	B	C	D
1	Splitting of spectral lines of hydrogen atoms under magnetic field is called:	Stark effect	Zeeman effect	Compton effect	Splitting effect
2	When up to 6d orbitals are filled with electrons, next entering electron goes to:	7s	7p	7d	7f
3	Ammonia (NH ₃) shows maximum boiling point among hydrides of group 5A, it is due to:	Very small size of N atom	Least electronegative character of N atom	Most electronegative character of N atom	Pyramidal structure of NH ₃ molecule
4	In order to mention the boiling point of water at 110°C, the external pressure should be:	Between 200 torr & 760 torr	Between 760 torr & 1200 torr	765 torr	760 torr
5	The molar volume of O ₂ gas is maximum at:	STP	127°C and 1 atm	0.00°C and 2 atm	273°C and 2 atm
6	Considering van der Waals constant "a" and "b", a real gas behaves as ideal if:	Both "a" and "b" are large	Both "a" and "b" are small	"a" is large but "b" is small	"a" is small but "b" is large
7	The comparative rate at which solute travels on chromatographic paper depends upon:	R _f value	The size of paper	Mobile phase	Temperature
8	During combustion analysis CO ₂ produced is absorbed by:	Mg(ClO ₄) ₂	KOH(50%)	CaCl ₂	P ₂ O ₅
9	Fractional atomic mass is mainly due to:	Mass of atom is in fraction	Atomic mass is average mass of isobars	Elements mostly consist of isotopes having different fractional abundances	Atomic mass is average masses of isotopes
10	The rate law of a reaction is rate = k [A] ² [B], if "A" is in large excess then order of reaction is:	2		3	4
11	Oxidation number of Cr in K ₂ Cr ₂ O ₇ is:	-2	+3	+6	+7
12	Molarity of pure water is:	1.00	6.00	18.0	55.5
13	An azeotropic mixture of two liquids boils at lower temperature than either liquid when:	It shows negative deviation from Raoult's law	It shows positive deviation from Raoult's law	It is metastable	It is saturated
14	The pH of 1.0 × 10 ⁻³ M H ₂ SO ₄ solution is:	1.5	2.0	2.7	3.0
15	While q _p is heat at constant pressure, q _v is heat at constant volume then the relationship most probably correct is:	q _p = q _v	q _p + q _v = 0	q _p < q _v	q _p > q _v
16	Which species has unpaired electrons in its molecular orbitals	B ₂	F ₂	N ₂ ⁺	O ₂ ²⁺
17	Which molecule has zero dipole moment	BF ₃	CHCl ₃	H ₂ O	NH ₃