

XI - STD
ONE MARK
TEST NO : 1

2018 - 2019
XI-Std] CHEMISTRY [TIME : 1.00 Hr.

Unit 1. Basic Concepts of Chemistry and Chemical Calculations
2. Quantum Mechanical Model of Atom
3. Periodic Classification Of Elements

Choose the correct answer :

$$50 \times 1 = 50$$

1. The equivalent mass of trivalent metal element is 9 g eq⁻¹, the total mass of its anhydrous oxide is
(a) 102 g (b) 27 g (c) 270 g (d) 78 g
2. The total no. of electrons present in 1.7 g of NH₃ is
(a) 6.022×10^{23} (b) $\frac{6.022 \times 10^{23}}{1.7}$ (c) $\frac{6.022 \times 10^{24}}{1.7}$ (d) $\frac{6.022 \times 10^{23}}{1.7}$
3. The equivalent mass of KMNO₄ in alkaline medium is
(a) 31.6 (b) 52.7 (c) 79 (d) none
4. Which one is the 180 of H₂O ?
(a) 5 moles of H₂O (b) 90 moles of H₂O
(c) $\frac{6.022 \times 10^{23}}{180}$ molecules of H₂O (d) 6.022×10^{24} moleculs of H₂O
5. Molar mass of acetone is
(a) 60 g mol⁻¹ (b) 62 g mol⁻¹ (c) 58 g mol⁻¹ (d) 98 g mol⁻¹
6. No. of moles of oxygen in H₂O
(a) 2 (b) 3 (c) 1 (d) 4
7. 1 amu is
(a) 1.6605×10^{-25} kg (b) 1.6605×10^{-26} kg
(c) 1.6605×10^{-27} kg (d) 1.6605×10^{-28} kg
8. The volume occupied by any gas at STP is
(a) 24.4 l (b) 2.24 l (c) 224 l (d) 0.224 l
9. 12 g of carbon-12 contains carbon atoms.
(a) 6 (b) 6.022×10^{23} (c) 12 (d) 12.022×10^{23}
10. Calculate the percentage of N in NH₃ is
(a) 121.42 % (b) 28.35 % (c) 82.35 % (d) 28.53 %
11. The compound in which mass percentage of 'C' is 75% 'H' is 25 % is (a) C₂H₆ (b) C₂H₂ (c) CH₄ (d) C₂H₄

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12. The oxidation number of 'H' in LiH is
(a) H (b) - 1 (c) + 2 (d) - 2
13. Cu²⁺ + e⁻ → Cu⁺ is reaction.
(a) Redox (b) Reduction (c) Oxidation (d) Decomposition
14. The increasing order of oxidation state of sulphur in anions
SO₄²⁻, SO₃²⁻, S₂O₄²⁻, S₂O₆²⁻.
(a) SO₃²⁻ < SO₄²⁻ < S₂O₄²⁻ < S₂O₆²⁻
(b) SO₄²⁻ < S₂O₄²⁻ < S₂O₆²⁻ < SO₃²⁻
(c) S₂O₄²⁻ < SO₃²⁻ < S₂O₆²⁻ < SO₄²⁻
(d) S₂O₆²⁻ < S₂O₄²⁻ < SO₄²⁻ < SO₃²⁻
15. Which one of the following is used as standard for atomic mass
(a) ⁶C¹² (b) ⁷C¹² (c) ⁶C¹³ (d) ⁶C¹⁴
16. The energy of eight of wave length 45 nm is
(a) 0.67×10^{-15} J (b) 6.67×10^{-11} J (c) 4.42×10^{-18} J (d) 4.42×10^{-15} J
17. Splitting of spectral lines in electric field is called
(a) Zeeman effect (b) Shelding effect (c) Compton effect (d) Stark effect
18. Which of the following pairs of d-orbitals will have electron density along the axes ?
(a) dz², d_{xx} (b) d_{xy}, d_{yz} (c) d_x², d_{x²-y²} (d) d_{xy}, d_{x²-y²}
19. The maximum no. of electrons in a sub shell is given by
(a) Zn² (b) 2l + 1 (c) 4l + 2 (d) none
20. The total no. of orbitals associated with the principal Quantum number n = 3 is (a) 9 (b) 8 (c) 5 (d) 7
21. Electron density in Yz plane of 3d_{x²-y²} orbital is
(a) 0 (b) 0.50 (c) 0.75 (d) 0.90
22. What is the debroglie wavelength (in cm) of a 160 g cricket ball travelling at 140 km hr⁻¹
(a) 10.65×10^{-35} m (b) 0.165×10^{28} cm
(c) 1.065×10^{-34} m (d) 100.6×10^{-32} m

[PTO]

23. s, p, d, f notations for $n = 2, l = 1$ is (a) $2s$ (b) $1s$ (c) $2p$ (d) $1p$
24. No. of electrons in $l = 3, n = 4$ is (a) 10 (b) 12 (c) 14 (d) 16
25. Neutrons was discovered by
26. Which of the following parts is isolelectronic?
- (a) Ruthergford (b) Chadwick (c) Bohr (d) Thomson
27. The fixed circular paths around the nucleus are
- (a) Orbits (b) Orbitals (c) Molecules (d) Mesons
28. de broglie equation is
- (a) $\lambda = \frac{mv}{h}$ (b) $\lambda = hmv$ (c) $\lambda = \frac{m}{hv}$ (d) $\lambda = \frac{h}{mv}$
29. The wavelength associated with an electron moving with velocity 10^{10} ms^{-1} is
30. How many notes possible for $4s$ orbital
 (a) $6.62 \times 10^{-10} \text{ m}$ (b) $7.28 \times 10^{-11} \text{ m}$ (c) $3.69 \times 10^{-12} \text{ m}$ (d) $4.92 \times 10^{-11} \text{ m}$
31. $n = 5, l = 2$ what is the sub energy level
- (a) 1 (b) 2 (c) 0 (d) 3
32. The no. of nodes in 's' orbital of any energy level is equal to
- (a) n (b) $2n^2$ (c) $n - 1$ (d) $n - 2$
33. Arrange the orbital in increasing order of energy
- (a) $4p > 4d > 5s > 5p$ (b) $4p < 4d < 5s < 5p$
 (c) $4d < 4p < 5s > 5p$ (d) $4p < 5s < 4d < 5p$
34. Which one of the following orbital is spherical shape?
- (a) $4s$ (b) $3p$ (c) $3d$ (d) $4f$
35. IUPAC name for atomic number 222?
- (a) $titanium$ (b) $bismuthum$ (c) $didiuum$ (d) $bititium$
36. Which of the following having highest electron negativity?
- (a) Cl (b) N (c) Ce (d) F
37. The element with +ve electron gain enthalpy?
- (a) H (b) Na (c) Al (d) Be
38. In a given shell the order of screening effect is
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39. Which of the following Doherty's trial?
- (a) Ruthergford (b) Chadwick (c) Bohr (d) Thomson
40. Modern periodic law proposed by
- (a) Moseley (b) Mendeleev (c) Newland (d) Dobratiner
41. There are periods in periodic table.
- (a) 18 (b) 7 (c) 6 (d) 5
42. is the highest metal known.
- (a) Na (b) Li (c) Mg (d) Al
43. Halogens belongs to
- (a) S-block (b) P-block (c) d-block (d) zero group
44. The metal which is in liquid form
- (a) Ga (b) Hg (c) Ge (d) Te
45. Which of the following having largest atomic radius
- (a) Na (b) Mg (c) Al (d) Te
46. Which of the following has highest ionisation energy?
- (a) Ne (b) Na (c) K (d) Si
47. Ionisation enthalpy is an process.
48. Arrange the radii of ions F, F^-, O, O^-
- (a) Exothermic (b) Endothermic (c) Reversible (d) Both a, b
49. Which set of elements shows +ve electron gain enthalpy?
- (a) $O^- > F^- > O > F$ (b) $O^- > O^- > F^- > O$
 (c) $O^- > F^- > O > F$ (d) $O^- > F^- > O^- > O$
50. Which of the following exhibit diagonal relationship?
- (a) He, N, O (b) Ne, N, Cl (c) O, F, Cl (d) N, Br, Ne
- (a) Be, Mg (b) Li, Mg (c) Be, B (d) Be, Al

XI - STD	2018 - 2019
ONE MARK	CHEMISTRY [TIME : 1.00 Hr.]
TEST NO : 2	(Maximum Marks : 50)

Unit. 4. Hydrogen 5. Alkali and Alkaline Earth Metals
6. Gaseous State

Choose the correct answer :

50 x 1 = 50

- Water gas is
 - Ionic hydrides are formed by
 - Tritium contains
 - The cause of permanent hardness of water is due to
 - Volume strength of 1.5 N H_2O_2 is
 - The no. of neutrons in Hydrogen atom is
 - is known as heavy hydrogen.
 - The half life period of ${}^{+3}$ is
 - $\text{CO}_{(g)} + \text{H}_2\text{O}_{(l)} \xrightarrow[X]{400^\circ\text{C}} \text{CO}_{2(g)} + \text{H}_{2(l)}$
 - Hydrogen can be obtained from water by reaction
 - Hydrogen burns in air with a flame
 - Ortho/ para hydrogen differ in
- (a) $\text{H}_2\text{O}_{(l)}$ (b) $\text{CO} + \text{H}_2\text{O}$ (c) $\text{CO} + \text{H}_2$ (d) $\text{CO} + \text{N}_2$
- (a) Halogens (b) Chalcogens (c) Inert gas (d) Group- 1 elements
- (a) $1p + on$ (b) $2p + 1n$ (c) $1p + 2n$ (d) none
- (a) $\text{Ca}(\text{HCO}_3)_2$ (b) $\text{Mg}(\text{HCO}_3)_2$ (c) CaCl_2 (d) MgCO_3
- (a) 1.5 (b) 4.5 (c) 16.8 (d) 8.4
- (a) 3 (b) 2 (c) 1 (d) 0
- (a) Protium (b) Deutrium (c) Tritium (d) Both a, b
- (a) 12.33 secs (b) 12.33 mins (c) 12.33 hrs (d) 12.33 years
- (a) Ni (b) Fe (c) Iron oxide (d) V_2O_5
- (a) Metal oxides (b) Non metal oxides (c) Metals (d) Metal hydrides
- (a) Light bluish (b) Yellow (c) Green (d) None
- (a) Proton spin (b) Electron spin (c) Nuclear charge (d) Both b, c

- Which of the following compounds hydrogen has an oxidation state of - 1 ?
 - The structure of H_2O is
 - FeSO_4 contains molecules of water of hydration.
 - The H- O- H angle in H_2O is
 - The maximum density of H_2O is
 - Among LiH, NaH, KH, RbH, CSH. The correct order of increasing ionic character is
 - H_2O_2 acts as reagent.
 - Example for covalent hydride is
 - Hf has H-bond.
 - Sodium stored in
 - Lithium shows diagonal relationship with
- (a) CH_4 (b) NH_3 (c) HCl (d) CaH_2
- (a) Bent (b) Tetrahedral
- (c) Distorted octahedral (d) Trigonal bipyramidal
- (a) 5 (b) 7 (c) 10 (d) 12
- (a) 90° (b) 104.5° (c) $109^\circ 28'$ (d) 180°
- (a) 0°C (b) 4°C (c) 11.6°C (d) 273°C
- (a) $\text{LiH} > \text{NaH} > \text{CSH} > \text{KH} > \text{RbH}$
- (b) $\text{LiH} < \text{NaH} < \text{KH} < \text{RbH} < \text{CSH}$
- (c) $\text{RbH} > \text{CSH} > \text{NaH} > \text{KH} > \text{LiH}$
- (d) $\text{NaH} > \text{CSH} > \text{RbH} > \text{LiH} > \text{KH}$
- (a) Oxidizing (b) Reducing (c) Both reducing and oxidizing
- (d) Neither reducing nor oxidizing
- (a) CaH_2 (b) CH_4 (c) LiH (d) All the above
- (a) Intramolecular (b) Inter molecular
- (c) Intrastellar (d) Interstellar
- (a) Alcohol (b) Water (c) Kerosene (d) None
- (a) Na (b) Mg (c) Ca (d) Al

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24. In case of alkali metal halides the ionic character increases in the order (a) $MF < MCl < MBr < MI$ (b) $MI < MBr < MCl < MF$
 (c) $MI < MBr < MF < MCl$ (d) None
25. Which of the following has highest hydration energy
 (a) $MgCl_2$ (b) $CaCl_2$ (c) $BaCl_2$ (d) $SrCl_2$
26. Formula for Gypsum is
 (a) $CaSO_4 \cdot 2H_2O$ (b) $CaSO_4 \cdot \frac{1}{2}H_2O$ (c) $3CaSO_4 \cdot H_2O$ (d) $2CaSO_4 \cdot 2H_2O$
27. Among the following the least thermally stable is
 (a) K_2CO_3 (b) Na_2CO_3 (c) $BaCO_3$ (d) Li_2CO_3
28. Rubidium belongs to group.
 (a) Transition (b) inner transition (c) Alkali (d) Alkaline earth
29. $t_{\frac{1}{2}}$ of Francium is
 (a) 12.3 years (b) 12.3 mins (c) 21 years (d) 21 mins
30. Oxidation state of alkali metals is
 (a) +1 (b) +2 (c) +3 (d) +4
31. Which among the following is the strongest reducing agent ?
 (a) Na (b) K (c) AC (d) Mg
32. Which of the following oxides in most basic nature ?
 (a) Na_2O (b) BeO (c) Li_2O (d) H_2O
33. Which hydroxide decomposes on heating ?
 (a) $NaOH$ (b) $RbOH$ (c) KOH (d) $LiOH$
34. Electronic configuration of 2 S-block elements
 (a) ns^2 (b) ns^1 (c) ns^2np1 (d) ns^2np^2
35. Oxidation state of alkaline earth metals is
 (a) +1 (b) +2 (c) +4 (d) +6
36. Alkaline earth metals are
 (a) Monovalent (b) Divalent (c) Trivalent (d) Zero valent
37. Which of the following is the correct equation for Vander Waals gas ?
 (a) $\left(P + \frac{a}{n^2V^2}\right)(V - nb) = nRT$ (b) $\left(P + \frac{an}{n^2V^2}\right)(V - nb) = nRT$
 (c) $\left(P + \frac{an^2}{V^2}\right)(V - nb) = nRT$ (d) $\left(\frac{P + n^2a^2}{V}\right)(V - nb) = nRT$

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38. The value for gas constant is
 (a) $0.082 dm^3 atm$ (b) $0.987 cal mol^{-1} k^{-1}$
 (c) $8.3 J mol^{-1} k^{-1}$ (d) $8 erg mol^{-1} k^{-1}$
39. Maximum deviation from ideal gas is expected from
 (a) $CH_{4(g)}$ (b) $NH_{3(g)}$ (c) $H_{2(g)}$ (d) $N_{2(g)}$
40. Pressure is
 (a) Force / area (b) Force X area
 (c) Area / Force (d) Force / area X volume
41. The absolute zero is
 (a) $-273^{\circ}C$ (b) $273^{\circ} C$ (c) OK (d) both a, c
42. Van relates the law.
 (a) Boyle's law (b) Charles law
 (c) Avagadro's hypothesis (d) Gay Lusacc's law
43. The law relates with pressure and volume is
 (a) Boyle's (b) Charles (c) Dalton (d) None
44. Partial pressure is given as
 (a) $\frac{\text{Mole fraction}}{\text{Total pressure}}$ (b) $\frac{\text{Mole fraction} \times \text{Total pressure}}{2}$
 (c) $\frac{\text{Mole fraction} \times \text{total pressure}}{2}$ (d) $\frac{2 \times \text{mole fraction}}{\text{Total pressure}}$
45. Mathematical equation for Graham's law of diffusion is
 (a) $\frac{r_2}{r_1} = \sqrt{\frac{M_2}{M_1}}$ (b) $r_1 r_2 = \sqrt{\frac{M_2}{M_1}}$ (c) $\frac{r_1}{r_2} = \sqrt{\frac{M_2}{M_1}}$ (d) $\frac{r_1}{r_2} = \left[\frac{M_2}{M_1}\right]^2$
46. Compression factor 'Z' is given by
 (a) $\frac{PV}{nRT}$ (b) $\frac{P}{nRT}$ (c) $\frac{PV}{R}$ (d) $\frac{PV}{T}$
47. When the gas behaves ideally, the 'Z' value is
 (a) > 1 (b) < 1 (c) = 0 (d) = 1
48. Which mixture of gases at room temperature does not obey Dalton's law of partial pressure ?
 (a) NO_2, O_2 (b) SO_2, SO_3 (c) CO, CO_2 (d) NH_3, HCl
49. The correct increasing order of liquefiability of the gas ?
 (a) $H_2 < CO_2 < CH_4 < CN_2$ (b) $H_2 < N_2 < CH_4 < CO_2$
 (c) $CO_2 < CH_4 < H_2 < N_2$ (d) $CO_2 < CH_4 < N_2 < H_2$
50. The inversion temperature for a gas is
 (a) $\frac{Za}{Rb}$ (b) $\frac{a}{Rb}$ (c) $\frac{Rb}{2a}$ (d) $\frac{Rb}{a}$

**XI - STD
ONE MARK
TEST NO : 3**

2018 - 2019	
XI - Std]	CHEMISTRY [TIME : 1.00 Hr. (Maximum Marks : 50)]
Unit. 7. Thermodynamics 9. Solutions	8. Physical & Chemical Equilibrium

Choose the correct answer :

$$50 \times 1 = 50$$

- In an adiabatic expansion of ideal gas
- (a) $W = -\Delta U$ (b) $W = \Delta U + \Delta H$ (c) $\Delta U = 0$ (d) $W = 0$
- The heat of formation of CO and CO_2 are -26.4 KCal , -94 KCal . Heat of combustion of CO is
- (a) $+26.4 \text{ KCal}$ (b) -67.6 KCal (c) -120.6 KCal (d) 52.8 KCal
- Which of the following is not thermodynamic function ?
- (a) Internal energy (b) Enthalpy (c) Entropy (d) Frictional energy
- In an isothermal reversible compression of an ideal gas the sign of q , ΔS , W are
- (a) $+, -, -$ (b) $- , + , -$ (c) $+, -, +$ (d) $- , -, +$
- All naturally occurring process are process.
- (a) Reversible (b) Irreversible (c) Cyclic (d) Isochoric
- For an isothermal process
- (a) $q = 0$ (b) $dv = 0$ (c) $dT = 0$ (d) $dp = 0$
- Internal energy denoted by (a) H (b) S (c) G (d) U
- The SI unit of heat is (a) Joule (b) Calorie (c) Mole (d) $J \text{ mol}^{-1}$
- Identify the suitable condition for adiabatic process
- (i) $\Delta T = 0$ (ii) $\Delta p = 0$ (iii) $q = 0$ (iv) $W = 0$
- (a) only (i) (b) only (iii) (c) (i), (ii) (d) (i), (ii), (iv)
- 1st law of thermodynamics does not give information about
- (a) Spontaneity (b) Feasibility (c) a, b (d) neither (a) nor (b)
- SI unit of molar heat capacity is
- (a) $J \text{ mol}^{-1}$ (b) $KJ \text{ mol}^{-1}$ (c) $JK^{-1} \text{ mol}^{-1}$ (d) JK^{-1}
- When water freezes in a glass beaker ΔS of the system
- (a) $\Delta S > 0$ (b) $\Delta S < 0$ (c) $D\Delta = 0$ (d) $\Delta S \geq 0$
- Condition for spontaneous endothermic reaction is
- (a) $\Delta G > 0$ (b) $\Delta G < 0$ (c) $\Delta G = 0$ (d) ΔG may be + ve, - ve

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- ΔG^0 of reversible reaction at its equilibrium is
- (a) + ve (b) - ve (c) zero (d) both a, b
- The condition for std. free energy is
- (a) $298 \text{ K}, 1 \text{ atm}$ (b) $273 \text{ K}, 1 \text{ atm}$ (c) $298^\circ \text{ C}, 5 \text{ atm}$ (d) $25 \text{ K}, 1 \text{ atm}$
- Which is true about cyclic process ?
- (a) $\Delta U = 0, \Delta H = 0$ (b) $\Delta U > 0, \Delta H < 0$
- (c) $\Delta H = 0, \Delta U < 0$ (d) $\Delta U = 0, \Delta H < 0$
- In endothermic reaction ΔH is
- (a) $= 0$ (b) > 0 (c) < 0 (d) Constant
- The equilibrium constant for a reaction at room temperature is K_1 and that 700 K is K_2 . If $K_1 > K_2$
- (a) Forward reaction is exothermic
- (b) Reverse reaction is endothermic
- (c) Does not attain equilibrium (d) Rate does not change
- K_c / K_p for the reaction, $\text{N}_{2(g)} + 3\text{H}_{2(g)} \rightleftharpoons 2\text{NH}_{3(g)}$
- (a) $\frac{1}{RT}$ (b) \sqrt{RT} (c) RT (d) $(RT)^2$
- $\text{Fe(OH)}_{3(g)} \rightleftharpoons \text{Fe}^{3+}_{(aq)} + 3 \text{OH}^-_{(aq)}$. If the concentration of OH^- ions decreased by $\frac{1}{4}$ times, then the equilibrium concentration of Fe^{3+} will
- (a) Not changed (b) Decreased by $\frac{1}{4}$ times
- (c) Increased by 4 times (d) Increased by 64 times
- Which of the reaction does going to completion ?
- (a) $KC = 10^3$ (b) $KC = 10^2$ (c) $KC = 10^{-2}$ (d) $KC = 10^{-3}$
- $\text{N}_2 + \text{O}_2 \rightleftharpoons 2\text{NO}$ KC for $\frac{1}{2}\text{N}_2 + \frac{1}{2}\text{O}_2 \rightleftharpoons \text{NO}$ the KC will be
- (a) K (b) K^2 (c) $K^{1/2}$ (d) $\frac{K}{2}$
- The ratio for K_p/K_c for $\text{CO} + \frac{1}{2}\text{O}_{2(g)} \rightleftharpoons \text{CO}_2$ is
- (a) $\frac{R}{T}$ (b) RT (c) $(RT)^{1/2}$ (d) $(RT)^{-1/2}$

[PTO]

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24. For $\text{CaCO}_3 \rightleftharpoons \text{CaO}_{(s)} + \text{CO}_{2(g)}$ $K_p = ?$
 (a) KC (b) $KC RT$ (c) $KC (RT)^2$ (d) $KC (RT)$
25. $3\text{A} + 2\text{B} \rightleftharpoons \text{C}$ the 'K' value is
 (a) $\frac{[3\text{A}] \times [2\text{B}]}{[\text{C}]}$ (b) $\frac{[\text{A}]^3 [\text{B}]}{[\text{C}]}$ (c) $\frac{[\text{C}]}{[\text{A}]^3 [\text{B}]^3}$ (d) $\frac{[\text{C}]}{[3\text{A}] \times [2\text{B}]}$
26. $\text{A} + 4\text{B} \rightleftharpoons \text{AB}_4$ is attained by mixing equal moles of A, B in 1 litre vessel then at equilibrium
 (a) $[\text{A}] = [\text{B}]$ (b) $[\text{A}] > [\text{B}]$ (c) $[\text{A}] < [\text{B}]$ (d) $[\text{AB}_4] > [\text{A}]$
27. Rate constant for forward reaction is 2.5×10^2 and $KC = 50$ then 'K' value for reverse reaction is
 (a) 11.5 (b) 5 (c) 2×10^2 (d) 2×10^{-3}
28. The example of solid solution is
 (a) Glucose in H_2O (b) Copper in gold
 (c) Camphor in nitrogen (d) Oxygen in nitrogen
29. The molality of solution containing 1.8 g of glucose dissolved in 250 g of H_2O is
 (a) 0.2 M (b) 0.01 M (c) 0.02 M (d) 0.04 M
30. Which of the following is/are independent of temperature ?
 (a) Molality (b) Molarity (c) Mole fraction (d) a, c
31. Which one is having lowest Henry's law constant ?
 (a) N_2 (b) He (c) CO_2 (d) H_2
32. Osmotic pressure is given by
 (a) $\pi = nRT$ (b) $\pi V = nRT$ (c) $\pi RT = n$ (d) None
33. Normality of 1.25 M H_2SO_4 is
 (a) 1.25 N (b) 3.75 N (c) 2.5 N (d) 2.25 N
34. The Van't Hoff factor for dilute aqueous solution of strong electrolyte Ba(OH)_2 is (a) 0 (b) 1 (c) 2 (d) 3
35. The molality of 10% w/w aqueous NaOH ?
 (a) 2.278 (b) 2.5 (c) 10 (d) 0.4
36. Which of the following has highest boiling point ?
 (a) $0.1 \text{ M } \text{KNO}_3$ (b) $0.1 \text{ M } \text{Na}_3\text{PO}_4$ (c) $0.1 \text{ M } \text{BaCl}_2$ (d) $0.1 \text{ M } \text{K}_2\text{SO}_4$
37. Phenol dimerises in benzene having Van't Hoff factor 0.54. What is the degree of dissociation ?
 (a) 0.46 (b) 92 (c) 46 (d) 0.92

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38. Which of the following should have max. value for K_H ?
 (a) He (b) H_2 (c) N_2 (d) CO_2
39. In a binary solution
 (a) Solvent may be liquid (b) Solvent may be solid
 (c) Solute may be gas (d) Any of these
40. 18 % solution of urea is (mol mass = 60) (w/v)
 (a) 1 M (b) 2 M (c) 0.3 M (d) 3 M
41. The solution having minimum boiling point is
 (a) $0.1 \text{ M } \text{C}_6\text{H}_{12}\text{O}_6$ (b) $0.1 \text{ M } \text{CaCl}_2$ (c) $0.1 \text{ M } \text{NaCl}$ (d) $0.1 \text{ M } \text{AlCl}_3$
42. For non-electrolytic solution
 (a) $i = +ve$ (b) $i = -ve$ (c) $i = 0$ (d) $i = 1$
43. The normality of 10% (w/v) CH_3COOH is
 (a) 1 N (b) 10 N (c) 1.7 N (d) 0.83 N
44. Osmotic pressure of 0.1 M NaCl at 27°C
 (a) 4 atm (b) 2.46 atm (c) 4.92 atm (d) 1.23 atm
45. Which of the following equimolar solution have highest vapour pressure ?
 (a) Glucose (b) NaCl (c) K_2SO_4 (d) $\text{K}_4\text{Fe(CN)}_6$
46. Which of the following maximum freezing point ?
 (a) Pure H_2O (b) $0.1 \text{ M NaCl}_{(aq)}$ (c) $0.01 \text{ M NaCl}_{(aq)}$ (d) $0.5 \text{ M NaCl}_{(aq)}$
47. When saturated solution KCl is heated becomes
 (a) Unsaturated (b) Super saturated
 (c) Remains saturated (d) Attains equilibrium
48. The correct equation for the degree of an association solute 'n' molecules of which undergoes association in solution is
 (a) $\alpha = \frac{n(i-1)}{n-1}$ (b) $\alpha^2 = \frac{n(i-1)}{n-1}$ (c) $\alpha = \frac{n(i-1)}{1-n}$ (d) $\alpha = \frac{n(1-i)}{n(1-i)}$
49. The relative lowering of vapour pressure of sugar solution in H_2O is 3.5×10^{-3} . The mole fraction of H_2O in that solution is
 (a) 0.0035 (b) 0.35 (c) 0.035 / 18 (d) 0.9965
50. Among the following mixtures dipole-dipole as the major interaction is present in
 (a) $\text{C}_6\text{H}_6, \text{CCl}_4$ (b) $\text{C}_6\text{H}_6, \text{C}_2\text{H}_5\text{OH}$ (c) $\text{CH}_3\text{COCH}_3, \text{CH}_3\text{CN}$ (d) $\text{KCl}, \text{H}_2\text{O}$

XI - STD	2018 - 2019
XI - Std]	CHEMISTRY [TIME : 1.00 Hr.
	(Maximum Marks : 50)
10. Chemical Bonding 11. Fundamentals of Organic Chemistry 12. Basic Concept of Organic Reactions	50 x 1 = 50

Choose the correct answer :

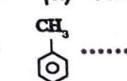
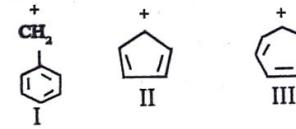
1. Which one of the following is electron deficient ?
 (a) PH_3 (b) $(\text{CH}_3)_2$ (c) BH_3 (d) NH_3
2. Which one of the following is diamagnetic ?
 (a) O_2 (b) O_2^{2-} (c) O_2^+ (d) None
3. The molecules having same hybridisation, shape, no.of lone pairs of electrons are
 (a) SeF_4 , XeO_2F_2 (b) SF_4 , XeF_2 (c) XeOF_4 , TeF_4 (d) SeCl_4 , XeF_4
4. Non - zero dipolemoment shown by
 (a) CO_2 (b) p - dichlorobenzene (c) CCl_4 (d) H_2O
5. The ratio of no. of sigma π bonds in 2 - butynal is
 (a) 8/3 (b) 5/3 (c) 8/2 (d) 9/2
6. Which of the molecule has no dative bond ?
 (a) CO (b) SO_4^{2-} (c) CO_3^{2-} (d) None
7. Formal charge of C - atom in carbonate ion
 (a) -1 (b) 0 (c) +1 (d) +2
8. The molecule having double bond
 (a) O_2 (b) N_2 (c) He_2 (d) H_2
9. Correct order of covalent character is
 (a) $\text{LiCl} < \text{NaCl} < \text{BeCl}_2$ (b) $\text{NaCl} < \text{LiCl} < \text{BeCl}_2$
 (c) $\text{BeCl}_2 < \text{LiCl} < \text{NaCl}$ (d) $\text{BeCl}_2 < \text{NaCl} < \text{LiCl}$
10. Which one has a planar structure ?
 (a) XeF_4 (b) XeOF_2 (c) XeO_2F_2 (d) XeO_4
11. Which one is a polar molecule ?
 (a) BF_3 (b) SiF_4 (c) SF_4 (d) XeF_4
12. CO_2 is isostructural with
 (a) C_2H_2 (b) SnCl_2 (c) NO_2 (d) SO_2

- 2 -
13. The molecule that has linear structure is
 (a) CO_2 (b) NO_2 (c) SO_2 (d) SiO_2
14. Stable molecule is
 (a) $\text{Nb} < \text{Na}$ (b) $\text{Nb} = \text{Na}$ (c) $\text{Nb} > \text{Na}$ (d) $\text{Nb} \geq \text{Na}$
15. How many lone pairs, bond pairs present in SO_4^{2-} respectively
 (a) 6, 5 (b) 6, 10 (c) 6, 4 (d) 6, 3
16. Hybridisation of CO_2 is
 (a) sp^2 (b) sp^3 (c) sp (d) dsp^2
17. Bond order for NO^+ is (a) 2 (b) 3 (c) 4 (d) 4.5
18. The general formula for alkadiene is
 (a) C_nH_{2n} (b) $\text{C}_n\text{H}_{2n-1}$ (c) $\text{C}_n\text{H}_{2n-2}$ (d) C_nH_{n-2}
19. IUPAC name of $\text{CH}_3 - \text{CH} = \text{CH} - \text{C} \equiv \text{CH}$ is
 (a) Pent - 4 - yn - 2 ene (b) Pent - 3 - en - 1 - yne
 (c) Pent - 2 - en - 4 - yne (d) Pent - 1 - yn - 3 - ene
20. The isomer of $\text{C}_2\text{H}_5\text{OH}$ is
 (a) CH_3CHO (b) $\text{CH}_3 - \text{O} - \text{CH}_3$ (c) $\text{CH}_3 - \text{CO} - \text{CH}_3$ (d) methyl carbinol
21. Phosphorous estimated as
 (a) $\text{Mg}_2\text{P}_2\text{O}_7$ (b) $\text{Mg}_3[\text{PO}_4]_2$ (c) H_3PO_4 (d) P_2O_5
22. The purity of organic compound's determined by
 (a) Chromatography (b) crystallisation
 (c) Melting or boiling points (d) both a & c
23. Which of the following has linear shape ?
 (a) C_2H_4 (b) C_2H_2 (c) CH_4 (d) C_3H_6
24. The no. of isomer in C_5H_{12} is (a) 2 (b) 3 (c) 4 (d) 5
25. The general formula for alcohols is
 (a) $\text{C}_n\text{H}_{2n}\text{O}_2$ (b) $\text{C}_n\text{H}_{2n}\text{O}$ (c) $\text{C}_n\text{H}_{2n+1}$ (d) $\text{C}_n\text{H}_{2n+2}$
26. Correct order of bond length for $\text{C} - \text{H}$, $\text{C} - \text{O}$, $\text{C} - \text{C}$, $\text{C} = \text{C}$ is
 (a) $\text{C} - \text{H} < \text{C} - \text{O} < \text{C} - \text{C} < \text{C} = \text{C}$
 (b) $\text{C} - \text{H} < \text{C} = \text{C} < \text{C} - \text{O} < \text{C} - \text{C}$
 (c) $\text{C} - \text{C} < \text{C} = \text{C} < \text{C} - \text{O} < \text{C} - \text{H}$
 (d) $\text{C} - \text{O} < \text{C} - \text{H} < \text{C} - \text{C} < \text{C} = \text{C}$

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27. The principle of paper chromatography is
- (a) Partition (b) Sublimation (c) Adsorption (d) Filtration
28. How many σ , π bonds in $\text{CH}_2 = \text{C} = \text{O}$?
- (a) $4\sigma, 2\pi$ (b) $2\sigma, 4\pi$ (c) $4\sigma, 4\pi$ (d) $2\sigma, 2\pi$
29. Compounds having boiling points widely apart 40 k and above can be purified by
- (a) Crystallisation (b) Sublimation
- (c) Fractional distillation (d) Steam distillation
30. Hybridisation of each carbon in $\text{CH}_3 - \text{CH}_3$
- (a) $\text{SP} - \text{SP}^2$ (b) $\text{SP}^2 - \text{SP}$ (c) $\text{SP}^3 - \text{SP}^3$ (d) $\text{SP} - \text{SP}^3$
31. IUPAC name for the $\begin{array}{c} \text{H}_3\text{C} - \text{CH} - \text{CH} - \text{CH}_3 \\ | \qquad | \\ \text{C}_2\text{H}_5 \quad \text{C}_2\text{H}_5 \end{array}$
- (a) 2, 3 diethylbutane (b) 2-ethyl - 3 - methylpentane
- (c) 2, 3 Dimethyl butane (d) 3, 4 Dimethyl hexane
32. No. of σ bonds in each carbon of $\text{CH}_2 = \text{C} = \text{CH}_2$
- (a) $2\sigma, 4\sigma, 1\sigma$ (b) $2\sigma, 2\sigma, 2\sigma$ (c) $3\sigma, 2\sigma, 2\sigma$ (d) $3\sigma, 2\sigma, 3\sigma$
33. $\begin{array}{c} \text{CH}_2 - \text{C} - \text{CH}_3, \text{CH}_2 = \text{C} - \text{CH}_3 \text{ are} \\ || \qquad || \\ \text{O} \qquad \text{O}^- \end{array}$
- (a) Resonating structures (b) Tautomers
- (c) Optical isomers (d) Conformers
34. Hybridisation of benzyl carbonium ion ?
- (a) sp^2 (b) spd^2 (c) sp^3 (d) sp^2d
35. Which of the following species is not electrophilic in nature ? ...
- (a) Cl^- (b) BH_3 (c) H_3O^+ (d) N^+O_2
36. Hyper conjugation is also known as
- (a) no bond resonance (b) Boker - Nathan effect
- (c) both a, b (d) none
37. Which of the following does not exert a resonance effect ?
- (a) $\text{C}_6\text{H}_5\text{OH}$ (b) $\text{C}_6\text{H}_5\text{Cl}$ (c) $\text{C}_6\text{H}_5\text{NH}_2$ (d) $\text{C}_6\text{H}_5\text{NH}_3^+$

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38. Heterolytic fission of C-Br results in the formation of
- (a) Free radical (b) Carbanion
- (c) Carbocation (d) Carbanion, carbocation
39. The shape of carbocation is
- (a) Linear (b) Tetrahedral (c) Planar (d) Pyramidal
40. Which of the following heterolytic compound
- (a) Pyrrole (b) Furan (c) Thiophene (d) All of these
41. The most stable carbocation is
- (a) $\text{CH}_3 - \text{CH}_2$ (b) $\text{CH}_2 = \text{CH}$ (c) $\text{CH}_2 \equiv \text{C}$ (d) $(\text{CH}_3)_2 = \text{OH}$
42. The nucleophile is not
- (a) Lewis base (b) Lewis acid (c) H_2O (d) Carbanion
43. The no. of hyperconjugation structure is 
- (a) 3 (b) 2 (c) 6 (d) None
44. The stability of alkyl free radical is due to
- (a) Hyperconjugation (b) +I effect (c) - I effect (d) Both a, b
45. Which of the following compound most reactive towards electrophilic nitration is
- (a) Toluene (b) Benzene (c) Benzoic acid (d) Nitrobenzene
46. Which of the following has maximum - I effect ?
- (a) F (b) NO_2 (c) CN (d) OH
47. Which one is most acidic ?
- (a) HCOOH (b) CH_3COOH (c) $\text{CH}_3\text{CH}_2\text{COOH}$ (d) $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$
48. Electrometric effect complete transfer of
- (a) σ electron (b) π electron (c) proton (d) both σ , π electrons
49. CH_2 is an
- (a) Electrophile (b) Nucleophile (c) Free radical (d) Ambiphiles
50. Correct order of stability of carbocation
- 
- (a) III > I > II (b) I > III > II (c) III > II > I (d) II > III > I

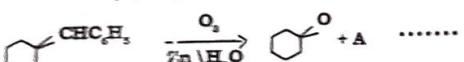
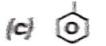
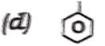
**XI - STD
ONE MARK
TEST NO : 5**

2018 - 2019

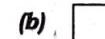
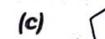
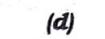
CHEMISTRY [TIME : 1.00 Hr.]	
(Maximum Marks : 50)	
13. Hydrocarbons	14. Haloalkanes and Haloarenes
15. Environmental chemistry	

Choose the correct answer :

50 x 1 = 50

1. Which of the following is optically active ?
(a) 2-methyl pentane (b) Citric acid (c) Glycerol (d) None
2. The general formula for cyclo alkanes
(a) C_nH_n (b) C_nH_2n (c) C_nH_{2n-2} (d) C_nH_{2n+2}
3. Which among the following alkenes on reductive ozonolysis produces only propanone ?
(a) 2-methyl propene (b) 2-methyl but -2- ene
(c) 2, 3 Dimethyl but - 1-ene (d) 2, 3 Dimethyl but - 2- ene
4. Cis - 2 - butene, trans - 2 - butene are
(a) Conformational isomers (b) Structural isomers
(c) Configurational isomers (d) Optical isomers
5. Identify compound (A) 
6. Which one of the following is non-aromatic ?
(a)  (b)  (c)  (d) 
7. Which one is not undergo Friedel craft's reaction easily ?
(a) Nitrobenzene (b) Toluene (c) Cumene (d) Xylene
8. In which alkane isomerization will not occur ?
(a) C_2H_6 (b) C_4H_{10} (c) C_5H_{10} (d) C_5H_{16}
9. Eclipsed form of ethane has higher energy due to
(a) Torsional strain (b) Steric strain (c) Angle strain (d) Both a, b
10. Which one is most stable ?
(a) Cyclopropane (b) Cyclobutane (c) Cyclopentane (d) Cyclohexane

- 2 -

11. C - C - C bond angle in benzene is
(a) 120° (b) 60° (c) 45° (d) 135°
12. Which of the following has maximum angle strain ?
(a)  (b)  (c)  (d) 
13. Bond angle in chair form of cyclohexane is
(a) $109^\circ 28'$ (b) 120° (c) 60° (d) 108°
14. Which form of cyclohexane is free from angle strain ?
(a) Boat - form (b) Chair form (c) Twist boat (d) All of these
15. C - C bond length in benzene is
(a) 1.39 \AA^0 (b) 1.09 \AA^0 (c) 1.54 \AA^0 (d) 1.34 \AA^0
16. No. of stereoisomers for $CH_3CH = CHCH_2CHBrCH_3$
(a) 2 (b) 4 (c) 6 (d) 8
17. Dihedral angle in staggered form of ethane is
(a) 0° (b) 120° (c) 60° (d) 180°
18. Which one has the highest boiling point ?
(a) n - butyl chloride (b) Isobutyl chloride
(c) t - butyl chloride (d) n - propyl chloride
19. C - X bond strongest in
(a) CH_3Cl (b) CH_3I (c) CH_3Br (d) CH_3F
20. Ethyl formate react with $RMgX$ gives
(a) $R - CO - R$ (b) $R - CH - R$ (c) $R - CHO$ (d) $R - O - R$

21. The name of $C_2F_4Cl_2$ is
(a) Freon - 112 (b) Freon - 113 (c) Freon - 114 (d) Freon - 115
22. The most easily hydrolysed molecule under SN_1 condition is
(a) Allyl chloride (b) Ethyl chloride
(c) Isopropyl chloride (d) Benzyl chloride
23. The carbocation formed in SN_1 reaction of alkyl halide in the slow step is
(a) sp^2 hybridised (b) sp^3 hybridised (c) sp hybridised (d) none

[PTO]

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24. CHCl_3 reacts with HNO_3 to give
 (a) Nitro toluene (b) Nitro glycerine (c) Chloropicrin (d) Chloropicric acid
25. The correct order of bond energy of C – X bond is
 (a) C – Cl > C – I > C – Br (b) C – Cl > C – Br > C – I
 (c) C – I > C – Cl > C – Br (d) C – I > C – Br > C – Cl
26. Which one has high boiling point ?
 (a) 1 – chloropentane (b) 2 – chloropentane
 (c) 3 – chloropentanone (d) 1 – tetrachloro methane
27. $\text{C}_2\text{H}_5\text{Br}$ reacts with Na/Pb alloy to form
 (a) Ethane (b) Sodium ethoxide (c) Ethanol (d) Tetra ethyl lead
28. Which of the following halogen exchange reaction will occur in acetone ?
 (a) R – I + NaCl (b) R – F + KCl (c) R – Cl + NaI (d) R – F + AgBr
29. For reacting with HCl the alcohol which does not require ZnCl_2 is
 (a) $\text{CH}_3 - \text{CH}_2\text{OH}$ (b) $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$
 (c) $\text{CH}_3 - \text{CH} - \text{OH}$ (d) $(\text{CH}_3)_3 - \text{C} - \text{OH}$
30. When alkylhalides are heated with dry Ag_2O that give
 (a) Diethyl ether (b) Ester (c) Ketone (d) Aldehyde
31. Which is a sweet smelling liquid ?
 (a) CH_3Cl (b) CH_3Br (c) CH_3I (d) $\text{CH}_3\text{CH}_2\text{Cl}$
32. is used in the treatment of goitre.
 (a) Halo ethane (b) Benzoquinone (c) Chloromycetin (d) Thyroxine
33. The order stability of carbonium ion is
 (a) $1^\circ > 2^\circ > 3^\circ$ (b) $2^\circ > 3^\circ > 1^\circ$ (c) $2^\circ > 1^\circ > 3^\circ$ (d) $3^\circ > 2^\circ > 1^\circ$
34. is used in fire extinguishers
 (a) $\text{CCl}_2 = \text{CCl}_2$ (b) $\text{CHCl} = \text{CCl}_2$ (c) $\text{CH}_2 = \text{CCl}_2$ (d) CCl_4
35. $\text{CH}_3\text{CH}_2\text{Cl}$ hydrolysis by
 (a) SN_1 (b) SN_2 (c) both SN_1 , SN_2 (d) E_1
36. $\text{C}_6\text{H}_5\text{CH}_2\text{Cl} \xrightarrow[\text{alk. KMnO}_4]{(O)} ?$
 (a) $\text{C}_6\text{H}_5\text{CHO}$ (b) $\text{C}_6\text{H}_5\text{COOH}$ (c) $\text{C}_6\text{H}_5\text{CH}_2\text{OH}$ (d) $\text{C}_6\text{H}_5\text{CH}_3$

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37. Chloropicrin prepared by adding HNO_3 to
 (a) CCl_4 (b) CH_3Cl (c) CHCl_3 (d) None
38. $\text{C}_6\text{H}_5\text{Cl} \xrightarrow[\text{?}]{\text{CuCN/523 K}} \text{C}_6\text{H}_5\text{CN}$
 (a) NaOH (b)  (c)  (d) Na
39. Which of the following is natural, human disturbance in ecology ?
 (a) Forest fire (b) Floods (c) Acid rain (d) Green house effect
40. Bhopal Gas Tragedy is a case of
 (a) Thermal pollution (b) Air pollution
 (c) Nuclear pollution (d) Land pollution
41. Which sequence for green house gas is based on
 (a) $\text{CFC} > \text{N}_2\text{O} > \text{CO}_2 > \text{CH}_4$ (b) $\text{CFC} > \text{CO}_2 > \text{N}_2\text{O} > \text{CH}_4$
 (c) $\text{CFC} > \text{N}_2\text{O} > \text{CH}_4 > \text{CO}_2$ (d) $\text{CFC} > \text{CH}_4 > \text{N}_2\text{O} > \text{CO}_2$
42. The pH of normal rain water is (a) 6.5 (b) 7.5 (c) 5.6 (d) 4.6
43. Ozone depletion will cause
 (a) Forest fires (b) Eutrophication
 (c) Bio magnification (d) Global warming
44. Release of oxides of nitrogen and hydrocarbons into the atmosphere by motor vehicles is prevented by using
 (a) Grit chamber (b) Scrubbers
 (c) Trickling filters (d) Catalytic converters
45. Which among the following is green house gas ?
 (a) H_2 (b) CH_4 (c) O_3 (d) All of these
46. is responsible for global warming
 (a) CO_2 (b) NO_2 (c) N_2O (d) None
47. Identify the secondary pollutant
 (a) CO (b) O_3 (c) pb (d) CH_4
48. The pollutants of troposphere contains
 (a) Dust (b) Water vapours (c) Mist (d) All of these
49. Photochemical smog actually causes
 (a) Soil pollution (b) Noise pollution (c) Water pollution (d) Air pollution
50. Permissible level of nitrate ions in drinking water is
 (a) 20 ppm (b) 30 ppm (c) 40 ppm (d) 50 ppm

XI - STD - ONE MARK TEST KEYS, 2018 - 2019

CHEMISTRY - EM

KEYS TEST NO : 1

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (a) | 2. (a) | 3. (b) | 4. (d) | 5. (c) | 6. (c) | 7. (c) | 8. (a) | 9. (b) | 10. (c) |
| 11. (c) | 12. (b) | 13. (b) | 14. (c) | 15. (a) | 16. (c) | 17. (d) | 18. (c) | 19. (c) | 20. (a) |
| 21. (a) | 22. (c) | 23. (c) | 24. (c) | 25. (b) | 26. (d) | 27. (a) | 28. (d) | 29. (b) | 30. (d) |
| 31. (b) | 32. (c) | 33. (d) | 34. (a) | 35. (a) | 36. (d) | 37. (c) | 38. (a) | 39. (c) | 40. (a) |
| 41. (b) | 42. (b) | 43. (b) | 44. (b) | 45. (a) | 46. (a) | 47. (b) | 48. (c) | 49. (d) | 50. (d) |

KEYS TEST NO : 2

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (c) | 2. (d) | 3. (c) | 4. (c) | 5. (d) | 6. (d) | 7. (b) | 8. (d) | 9. (c) | 10. (c) |
| 11. (b) | 12. (a) | 13. (d) | 14. (a) | 15. (b) | 16. (b) | 17. (b) | 18. (b) | 19. (c) | 20. (b) |
| 21. (b) | 22. (c) | 23. (b) | 24. (b) | 25. (a) | 26. (b) | 27. (d) | 28. (c) | 29. (d) | 30. (a) |
| 31. (b) | 32. (a) | 33. (d) | 34. (a) | 35. (b) | 36. (b) | 37. (c) | 38. (c) | 39. (b) | 40. (a) |
| 41. (d) | 42. (c) | 43. (a) | 44. (b) | 45. (c) | 46. (a) | 47. (d) | 48. (d) | 49. (b) | 50. (a) |

KEYS TEST NO : 3

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (a) | 2. (b) | 3. (d) | 4. (d) | 5. (b) | 6. (c) | 7. (d) | 8. (a) | 9. (b) | 10. (c) |
| 11. (c) | 12. (b) | 13. (b) | 14. (c) | 15. (a) | 16. (a) | 17. (b) | 18. (c) | 19. (d) | 20. (d) |
| 21. (a) | 22. (c) | 23. (d) | 24. (b) | 25. (c) | 26. (b) | 27. (b) | 28. (b) | 29. (d) | 30. (d) |
| 31. (c) | 32. (b) | 33. (c) | 34. (d) | 35. (b) | 36. (b) | 37. (d) | 38. (a) | 39. (d) | 40. (d) |
| 41. (a) | 42. (d) | 43. (c) | 44. (c) | 45. (a) | 46. (a) | 47. (a) | 48. (c) | 49. (d) | 50. (c) |

KEYS TEST NO : 4

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (c) | 2. (b) | 3. (a) | 4. (d) | 5. (a) | 6. (c) | 7. (b) | 8. (a) | 9. (b) | 10. (a) |
| 11. (c) | 12. (a) | 13. (a) | 14. (c) | 15. (b) | 16. (c) | 17. (b) | 18. (c) | 19. (b) | 20. (b) |
| 21. (a) | 22. (d) | 23. (b) | 24. (b) | 25. (d) | 26. (b) | 27. (a) | 28. (a) | 29. (a) | 30. (c) |
| 31. (c) | 32. (d) | 33. (b) | 34. (a) | 35. (c) | 36. (c) | 37. (d) | 38. (d) | 39. (c) | 40. (d) |
| 41. (c) | 42. (b) | 43. (a) | 44. (d) | 45. (a) | 46. (b) | 47. (b) | 48. (b) | 49. (a) | 50. (a) |

KEYS TEST NO : 5

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|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (a) | 2. (b) | 3. (d) | 4. (c) | 5. (a) | 6. (d) | 7. (a) | 8. (a) | 9. (d) | 10. (c) |
| 11. (a) | 12. (a) | 13. (a) | 14. (d) | 15. (a) | 16. (b) | 17. (a) | 18. (a) | 19. (d) | 20. (c) |
| 21. (c) | 22. (a) | 23. (b) | 24. (c) | 25. (b) | 26. (d) | 27. (d) | 28. (c) | 29. (d) | 30. (a) |
| 31. (c) | 32. (d) | 33. (d) | 34. (d) | 35. (b) | 36. (b) | 37. (c) | 38. (c) | 39. (a) | 40. (b) |
| 41. (c) | 42. (d) | 43. (c) | 44. (c) | 45. (b) | 46. (a) | 47. (b) | 48. (d) | 49. (d) | 50. (d) |