

CHEMISTRY

46.Identify the suitable reagent for the following conversion.



47. The correct order of decreasing acidity of the following aliphatic acids is:
(1) HCOOH > CH₃COOH > (CH₃)₂CHCOOH > (CH₃)₃CCOOH
(2) HCOOH > (CH₃)₃CCOOH > (CH₃)₂CHCOOH > CH₃COOH
(3) (CH₃)₃CCOOH > (CH₃)₂CHCOOH > CH₃COOH > HCOOH
(4) CH₃COOH > (CH₃)₂CHCOOH > (CH₃)₃CCOOH > HCOOH
Ans: (1)
Acidity ∞ 1//(+1 effect of alkyl groups
Acidity order: HCOOH > CH₃COOH > (CH₃)₂CHCOOH > (CH₃)₃CCOOH
48. Which of the following reactions does NOT belong to "Lassaigne's test"?
(1) Na + X → + NaX
(2) 2CuO + C → 2Cu + CO₂

(1) $\operatorname{Na} + A \xrightarrow{\Delta} + \operatorname{Na}A$ (2) $2\operatorname{Cu}O + C \xrightarrow{\Delta} 2\operatorname{Cu} + \operatorname{CO}_2$ (3) $\operatorname{Na} + C + N \xrightarrow{\Delta} \operatorname{Na}CN$ (4) $2\operatorname{Na} + S \xrightarrow{\Delta} \operatorname{Na}_2S$ Ans: (2)

49. If the constant of a reaction is 0.03 s⁻¹, how much time does it takes for 7.2 mol L⁻¹ concentration of the reactant to get reduced to 0.9 mol L⁻¹? (Given: log 2 = 0.301)
(1) 210 s
(2) 21.0 s
(3) 69.3 s
(4) 23.1 s
Ans: (3)

Reaction follows first order kinetics (as unit of rate constant is s^{-1})

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$$k = \frac{2.303}{t} \log \frac{[R_0]}{[R]}$$
$$0.03 = \frac{2.303}{t} \log \frac{7.2}{0.9}$$
$$= 69.31 \text{ s}$$

50. Given below are two statements:

Statement I: A hypothetical diatomic molecule with bond order zero is quite stable. **Statement II:** As bond order increases, the bond length increases.

In the light of the above statements, choose the most appropriate answer from the options given below:

(1) Statement I is true but Statement II is false.

(2) Statement I is false but Statement II is true.

(3) Both Statement I and Statement II are true.

(4) Both Statement I and Statement II are false.

Ans: (4)

Bond order zero indicates that the molecules is not exist.

Bond order $\propto \frac{1}{\text{Bond length}}$

51. Out of the following complex compounds, which of the following will be having the minimum conductance in solution?

(1) $[Co(NH_3)_6]Cl_3$ (2) $[Co(NH_3)_5Cl]Cl$ (3) $[Co(NH_3)_3Cl_3]$ (4) $[Co(NH_3)_4Cl_2]$ Ans: (3) and (4)

Conductance depends on number of ions produced. Minimum ions produced from the complex (3) and (4).

52. Which of the following aqueous solution will exhibit highest boiling point? (1) $0.01 \text{ M Na}_2\text{SO}_4$ (2) $0.015 \text{ M C}_6\text{H}_{12}\text{O}_6$ (3) 0.01 M Urea (4) 0.01 M KNO_3 Ans: (1)

 $\Delta T_{b} = i \times K_{b} \times m$

 $\mathbf{T}_{\!_{b}} \propto \! i \! \times \! m \; \; \text{or} \; \mathbf{T}_{\!_{b}} \propto \! i \! \times \! M$

For option (1) i \times M is highest. So T_b is highest for option (1)

53. Given below are two statements: one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A):

^I undergoes S_N2 reaction faster than

Cl



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Reason (R): Iodine is a better leaving group because of its large size. In the light of the above statements, choose the correct answer from the options given below:

- (1) A sis true but R is false
- (2) A is false but R is true
- (3) Both A and R true and R is the correct explanation of A.
- (4) Both A and R true but R is not the correct explanation of A.

Ans: (3)

The decreasing order of leaving group in nucleophilic substitution reaction is $I^\Theta > Br^\Theta > Cl^\Theta > F^\Theta$

54. Consider the following compounds:

 $\underline{K}O_2$, H_2O_2 and H_2SO_4

The oxidation state of the underlined elements in them are, respectively,

(2) + 4, -4 and + 6(1) + 1, -2, and + 4(3) + 1, -1 and + 6(4) + 2, -2 and + 6Ans: (3) $\underline{\mathrm{KO}}_2 \longrightarrow +1$ $H_2O_2 \rightarrow -1$ $H_2SO_4 \rightarrow +6$ 55. Match List - I with List - II. List-I List-II A. Haber process I. Fe catalyst B. Wacker oxidation II. PdCl₂ C. Wilkinson catalyst III. [(PPh₃)₃RhCl] D. Ziegler catalyst IDUCATIO IV. TiCl₄ with Al(CH₃)₃ Choose the correct answer from the options given below: (1)A – I, B – II, C – III, D – IV (2)A – I, B – IV, C – III, D – II (3) A – I, B – II, C – IV, D – III (4)A – II, B – III, C – I, D – IV

Ans: (1)

56. Given below are two statements:

Statement I: Like nitrogen that can form ammonia, arsenic can form arsine.

Statement II: Antimony cannot form antimony pentoxide.

In the light of the above statements, choose the most appropriate answer from the options given below:

(1) Statement I is correct but Statement II is incorrect.

(2) Statement I is incorrect but Statement II is correct.

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- (3) Both Statement I and Statement II are correct.
- (4) Both Statement I and Statement II are incorrect.

Ans: (1)

57. Given below are two statements:

Statement I: Ferromagnetism is considered as an extreme form of paramagnetism. **Statement II:** The number of unpaired electrons in a Cr^{2+} io (Z = 24) is the same as that of a Nd³⁺ ion (Z = 60).

In the light of the above statements, choose the correct answer from the options given below:

- (1) Statement I is true but Statement II is false.
- (2) Statement I is false but Statement II is true.
- (3) Both Statement I and Statement II are true.
- (4) Both Statement I and Statement II are false.
- Ans: (1)

58. Which one of the following reactions does NOT give benzene as the product?



59. Match List - I with List - II.

List-I List-II A. XeO₃ I. sp³d; linear II. sp³; pyramidal B. XeF₂ III. $sp^{3}d^{3}$; distorted octahedral C. XeOF₄ IV. sp³d³; square pyramidal D. XeF₆ Choose the correct answer from the options given below: (1) A – IV, B – II, C – III, D – I (2) A – IV, B – II, C – I , D – III (3) A – II, B – I, C – IV, D – III (4) A – II, B – I, C – III, D – IV Ans: (3)



60. How many products (including stereoisomers) are expected from monochlorination of the following compound?

H₃C CH-CH₂-CH₃ H₃C (1) 5 (2) 6 (3) 2 (4) 3 Ans: (2)

- 61. Which of the following statements are true?
 - A. Unlike Ga that has a very high melting point, C has a very low melting point.
 - B. On Pauling scale, the electronegativity values of N and Cl are not the same.
 - C. Ar, K^+ , Cl^- , Ca^{2+} , and S^{2-} are all isoelectronic species.
 - D. The correct order of the first ionization enthalpies of Na, Mg, Al and Si is Si > Al > Mg > Na.
 - E. The atomic radius of Cs is greater than that of Li and Rb.

Choose the correct answer from the options given below:

(1) C and D only (2) A, C, and E only (3) A, B, and E only (4) C and E only **Ans: (4)**

62. The standard heat of formation, in kcal/mol of Ba^{2+} is:

[Given : standard heat of formation of SO_4^{2-} ion (aq) = -216 kcal/mol, standard heat of crystallization of BaSO₄(s) = -4.5 kcal/mol, standard heat of formation of BaSO₄(s) = -349 kcal/mol]

(1) +133.0 (2) +220.5 (3)
$$-128.5$$
 (4) -133.0 **Ans: (3)**

According to Hess Law, $\Delta_{f}H_{(BaSO_{4(s)})} = \Delta_{f}H_{(Ba_{aq}^{+2})} + \Delta_{f}H_{(SO_{4(aq)}^{-2})} + \Delta H_{crystallization of BaSO_{4}}$

 $-349 = \Delta_{\rm f} H_{({\rm Ba}_{\rm aq}^{+2})} + (-216) + (-4.5)$

 $\Delta_{\rm f} H_{({\rm Ba}_{\rm aq}^{+2})} = -128.5 \text{ kcal/mol}$

63. Match List - I with List - II.

List-II	
(Type of Solution)	
I. Solid in solid	
II. Liquid in gas	
III. Solid in gas	
IV. Liquid in solid	

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Choose the correct answer from the options given below: (1) A - III, B - I, C - IV, D - II(2) A - III, B - II, C - I, D - IV(3) A - II, B - IV, C - I, D - III(4) A - II, B - I, C - IV, D - IIIAns: (4)

64. $C(s) + 2H_2(g) \longrightarrow CH_4(g); \Delta H = -74.8 \text{ kJ mol}^{-1}$

Which of the following diagrams gives ab accurate representation of the above reaction?



66. Total number of possible isomers (both structural as well as stereoisomers) of cyclic ethers of molecular formula C_4H_8O is:





67. For the reaction A(g) \implies 2B(g), the backward reaction rate constant is higher than the forward reaction rate constant by a factor of 2500, at 1000 K. [Given: R = 0.0831 L atm mol⁻¹ K⁻¹] K_p for the reaction at 1000 K is (1) 0.033 (2) 0.021 (3) 83.1 (4) 2.077 × 10⁵ Ans: (1) $K_c = \frac{k_f}{k_b}$ $k_b = 2500k_f$ $K_c = \frac{1}{2500}$ $K_p = K_c \times (RT)^{\Delta n_g}$ $= \frac{1}{2500} \times 0.0831 \times 1000 = 0.033$

68. The ratio of the wavelengths of the light absorbed by a Hydrogen atom when it undergoes $n = 2 \rightarrow n = 3$ and $n = 4 \rightarrow n = 6$ transition, respectively, is

(1)
$$\frac{1}{9}$$
 (2) $\frac{1}{4}$ (3) $\frac{1}{36}$ (4) $\frac{1}{16}$
Ans: (2)
 $\frac{1}{\lambda_1} = R_H \left[\frac{1}{n_1^2} - \frac{1}{n_2^2} \right]$
For $n_1 = 2$ to $n_2 = 3$
 $\frac{1}{\lambda_1} = R_H \left[\frac{1}{4} - \frac{1}{9} \right]$ (1)
For $n_1 = 4$ to $n_2 = 6$
 $\frac{1}{\lambda_2} = R_H \left[\frac{1}{16} - \frac{1}{36} \right]$ (2)
 $\frac{\lambda_1}{\lambda_2} = \frac{1}{4}$

69. If the molar conductivity (Λ_m) of a 0.050 mol L⁻¹ solution of a monobasic weak acid is 90 S cm² mol⁻¹, its extent (degree) of dissociation will be [Assume $\Lambda^{\circ}_{+} = 349.6$ S cm² mol⁻¹ and $\Lambda^{\circ}_{-} = 50.4$ S cm² mol⁻¹.]

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(1) 0.225 (2) 0.215 (3) 0.115 (4) 0.125 **Ans: (1)** $\Lambda_{\rm m} = 90 \text{ S cm}^2 \text{ mol}^{-1}$ $\Lambda_{\rm m}^{\circ} = \Lambda_{+}^{\circ} + \Lambda_{-}^{\circ}$ $= 349.6 + 50.4 = 400 \text{ S cm}^2 \text{ mol}^{-1}$ $\alpha = \frac{\Lambda_{\rm m}}{\Lambda_{\rm m}^{\circ}} = \frac{90}{400} = 0.225$

- 70. 5 moles of liquid X and 10 moles of liquid Y make a solution having a vapour pressure of 70 torr. The vapour pressure of pure X and Y are 63 torr and 78 torr respectively. Which of the following is true regarding the described solution?(1) The selection is ideal
 - (1) The solution is ideal.
 - (2) The solution has volume greater than the sum of individual volumes
 - (3) The solution shows positive deviation.
 - (4) The solution shows negative deviation.

$$P_{T(Calculated)} = P_X^{\circ} \chi_X + P_Y^{\circ} \chi_Y$$
$$= 63 \times \left(\frac{5}{15}\right) + 78 \times \left(\frac{10}{15}\right)$$
$$= 73 \text{ torr}$$

 $P_{T(observed)} = 70 \text{ torr}$

 $P_{solution(observed)} < P_{solution(calculated)}$

Vapour pressure of the solution is lower than that predicted by Raoult's law.

- :. The solution shows negative deviation. M MOODBIDRI (R)
- 71. Among the following, choose the ones with equal of atoms.

A. 212 g of $Na_2CO_3(s)$ [molar mass = 106 g]

- B. 248 g of Na₂O(s) [molar mass = 62 g]
- C. 240 g of NaOH(s) [molar mass = 40 g]
- D. 12 g of $H_2(g)$ [molar mass = 2 g]
- E. 220 g of $CO_2(g)$ [molar mass = 44 g]

Choose the correct answer from the options given below:

- (1) B, C, and D only
- (2) B, D, and E only(4) A, B, and D only

- (3) A, B, and C only
- (4) A, B, and D only

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	Ans: (4)						
	A) Na_2CO_3						
	Number of atoms =	$=\frac{212}{106}\times6\times N_{A}=12\times N_{A}$					
	B) Na ₂ O						
	Number of atoms =	$\frac{248}{62} \times 3 \times N_{\rm A} = 1$	$2 \times N_A$				
	C) NaOH						
	Number of atoms =	$\frac{240}{40} \times 3 \times N_{\rm A} = 1$	$8 \times N_A$				
	D) H ₂						
	Number of atoms = $\frac{12}{2} \times 2 \times N_A = 12 \times N_A$						
	E) CO ₂	E) CO_2					
	Number of atoms =	$\frac{220}{44} \times 3 \times N_{\rm A} = 1$	$5 \times N_A$				
72. Which of the following are paramagnetic?							
	A. $[NiCl_4]^{2-}$	B. Ni(CO) ₄		C. $[Ni(CN)_4]^{2-}$			
	D. $[Ni(H_2O)_6]^{2+}$	E. Ni $(PPh_3)_4$					
	Choose the correct answer from the options given below:						
	(1) A and D only (2) A, D and E only (3) A and C only (4) B and E only				(4) B and E only		
	Ans: (1)						
	A. [NiCl4] ^{2–}	n = 2	parama	agnetic			
	B. Ni(CO) ₄	n = 0	diamag	gnetic			
	C. [Ni(CN)4] ²⁻	n = 0 on Foun	diamag	gnetic			
	D. $[Ni(H_2O)_6]^{2+}$	n = 2	parama	agnetic			
	E. Ni(PPh ₃) ₄	n = 0	diamag	gnetic			

73. If the half-life $(t_{1/2})$ for a first order reaction is 1 minute, then the time required for 99.9% completion of the reaction is closest to:

(1) 5 minutes (2) 10 minutes (3) 2 minutes (4) 4 minutes Ans: (2) $\frac{t_{50\%}}{t_{99.9\%}} = \frac{\log \frac{100}{50}}{\log \frac{100}{0.1}} \Rightarrow \frac{1}{t_{99.9\%}} = \frac{\log 2}{\log 10^3}$ $t_{99.9\%} = 10 \text{ min}$



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74. Energy and radius of first Bohr orbit of He⁺ and Li²⁺ are
[Given
$$R_H = 2.18 \times 10^{-18}$$
, $a_0 = 52.9 \text{ pm}$]
(1) $E_n(Li^{2+}) = -19.62 \times 10^{-16} \text{ J}; r_n(Li^{2+}) = 17.6 \text{ pm}$
 $E_n(He^+) = -8.72 \times 10^{-16} \text{ J}; r_n(He^+) = 26.4 \text{ pm}$
(2) $E_n(Li^{2+}) = -8.72 \times 10^{-16} \text{ J}; r_n(Li^{2+}) = 17.6 \text{ pm}$
 $E_n(He^+) = -19.62 \times 10^{-18} \text{ J}; r_n(He^+) = 17.6 \text{ pm}$
 $E_n(He^+) = -8.72 \times 10^{-18} \text{ J}; r_n(He^+) = 17.6 \text{ pm}$
 $E_n(He^+) = -8.72 \times 10^{-18} \text{ J}; r_n(He^+) = 26.4 \text{ pm}$
(4) $E_n(Li^{2+}) = -8.72 \times 10^{-18} \text{ J}; r_n(He^+) = 26.4 \text{ pm}$
 $E_n(He^+) = -19.62 \times 10^{-18} \text{ J}; r_n(He^+) = 17.6 \text{ pm}$
Ans: (3)
 $E_n = -2.18 \times 10^{-18} \times \frac{z^2}{n^2} \text{ J}$
 $E_{He^+} = -2.18 \times 10^{-18} \times \frac{z^2}{n^2} \text{ J} = -8.72 \times 10^{-18} \text{ J}$
 $R_n = 52.9 \times \frac{n^2}{z} \text{ pm}$
 $R_{He^+} = 52.9 \times \frac{1^2}{2} = 26.4 \text{ pm}$
 $R_{He^+} = 52.9 \times \frac{1^2}{2} = 26.4 \text{ pm}$
(a)
 $R_{(n=1)} = 52.9 \times \frac{1^2}{3} = 17.6 \text{ pm}$
(b)
The correct order of bond dissocretion of the second dissocretion of the second

7 ciation energy of C -H bond marked with * is:



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Bond dissociation energy : $sp_{C-H} > sp_{C-H}^2 > sp_{C-H}^3$ Correct order : II > I > III 76. Dalton's Atomic theory could not explain which of the following? (1) Law of multiple of proportion (2) law of gaseous volume (3) Law of conservation of mass (4) Law of constant proportion Ans: (2) Law of gaseous volume 77. Identify the correct orders against the property mentioned A. $H_2O > NH_3 > CHCl_3 - dipole$ moment B. $XeF_4 > XeO_3 > XeF_2$ – number of lone pairs on central atom C. O - H > C - H > N - O - bond length D. $N_2 > O_2 > H_2$ – bond enthalpy. Choose the correct answer from the options given below: (1) A, C only (2) B, C only (3) A, D only (4) B, D only Ans: (3) A, D only 78. Match List - I with List - II. List-I List-II (Name of Vitamin) (Deficiency disease) A. Vitamin B_{12} I. Cheilosis B. Vitamin D **II.** Convulsions C. Vitamin B₂ III. Rickets D. Vitamin B₆ IV. Pernicious anameia Choose the correct answer from the options given below: (1)A – II, B – III, C – I, D – IV (2) A – IV, B – III, C – II, D – I (3) A – I, B – III, C – II, D – IV (4) A – IV, B – III, C – I, D – II Ans: (4) 79. The correct order of decreasing basic strength of the given amines is:

(1) N-ethylethanamine > ethanamine > N-methylaniline > benzenamine

(2) Benzenamine > ethanamine > N-methylaniline > N-ethylethanamine

(3) N-methylaniline > benzenamine > ethanamine > N-ethylethanamine

(4) N-ethylethanamine > ethanamine > benzenamine > N-methylaniline Ans: (1)



80. The correct order of the wavelength of light absorbed by the following complexes is, A. $[Co(NH_3)_6]^{3+}$ B. $[Co(CN)_6]^{3-}$ C. $[Co(H_2O)_4]^{2+}$ D. $[Ti(H_2O)_6]^{3+}$ Choose the correct answer form the options given below (1) C < D < A < B (2) C < A < D < B (3) B < D < A < C (4) B < A < D < C Ans: (4) $E \propto \frac{1}{\lambda}$ Strong ligand $\propto \frac{1}{\lambda}$

81. Which one of the following compounds does not decolourize bromine water?



Ans: (3)

Cyclohexane does not decolourize bromine water because of absence of unsaturation.

82. Predict the major product 'P' in the following sequence of reactions –



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List-I	List-II
(Mixture)	(Method of Separation)
A. $CHCl_3 + C_6H_5NH_2$	I. Distillation under reduced pressure
B. Crude oil in petroleum industry	II. Steam distillation
C. Glycerol from spent-lye	III. Fractional distillation
D. Aniline - water	IV. Simple distillation
Choose the correct answer from the	options given below:
(1) A – III, B – IV, C – I, D – II	(2) A - III, B - IV, C - II, D - I
(3) A – IV, B – III, C – I, D – II	(4) A – IV, B – III, C – II, D – I
Ans: (3)	

- A. $[Ne]3s^1$ B. $[Ar]3d^34s^2$ C. $[Kr]4d^{10}5s^25p^5$ D. $[Ar]3d^{10}4s^1$ E. $[Rn]5f^06d^27s^2$ Choose the correct answer from the option given below: (1) D and E only (2) A, C and D only (3) B and E only (4) A and C only Ans: (4) A \rightarrow s-Block element C \rightarrow p-Block element
- 85. Which one of the following compounds can exist as cis-trans isomers?
 - (1) 1, 1-Dimethylcyclopropane
 (2) 1, 2-Dimethylcyclohexane
 (3) Pent-1-ene
 (4) 2-Methylhex-2-ene
- 86. Phosphoric acid ionizes in three steps with their ionization constant values K_{a_1} , K_{a_2} and K_{a_3} , respectively, while K is the overall ionization constant. Which of

the following statements are true?

A. $\log K = \log K_{a_1} + \log K_{a_2} + \log K_{a_3}$

B. H_3PO_4 is a stronger acid than $H_2PO_4^-$ and HPO_4^{2-} .

C.
$$K_{a_1} > K_{a_2} > K_{a_3}$$

D. $K_{a_1} = \frac{K_{a_3} + K_{a_2}}{2}$

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Choose the correct answer form the options given below: (1) B, C and D only (2) A, B and C only (3) A and B only (4) A and C only

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Ans: (2)

A, B and C only

• The overall equilibrium constant for a reaction is the product of the equilibrium constants for the individual steps

 \therefore K = K_{a1}. K_{a2}. K_{a3}

• Taking log on both sides $log(K) = log(K_{a_1}, K_{a_2}, K_{a_3})$

 $\log(K) = \log(K_{a_1}) + \log(K_{a_2}) + \log(K_{a_3})$

A higher value of Ka indicates a stronger acid
 ∴ H₃PO₄ is a stronger acid compared to H₂PO₄ and H₂PO₄⁻²

 $:: K_{a_1} > K_{a_2} > K_{a_3}$

87. Match List - I with List - II.

List-I	List-II						
(Ion)	(Group Number in Catio	on Analysis)					
A. Co ²⁺	I. Group-I						
B. Mg^{2+}	II. Group-III						
C. Pb ²⁺	III. Group-IV						
D. Al ³⁺	IV. Group-VI						
Choose the correct answer from the options given below:							
(1) A – III,	B – II, C – IV, D – I	(2) A – III, B – II, C – I , D – IV					
(3) A – III,	B – IV, C – II, D – I	(4) A - III, B - IV, C - I, D - II					
Ans: (4)							
$CO^{2+} \rightarrow Gr$	roup IV						
$Mg^{2+} \rightarrow Gr$	oup VI						
$Pb^{2+} \rightarrow Grootering Grootering$	oup I						
$A1^{3+} \rightarrow Groups$	oup III						
A – III, B –	IV, C – I, D – II						

88. Higher yield of NO in $N_2(g) + O_2(g) \rightleftharpoons 2NO(g)$ can be obtained at

 $[\Delta H \text{ of the reaction} = + 180.7 \text{ kJ mol}^{-1}]$

- A. highest temperature
- B. lower temperature
- C. higher concentration of N_2
- D. higher concentration of O₂

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Choose the correct answer form the options given below.

(1) B, C, D only (2) A, C, D only (3) A, D only **Ans: (2)**

(4) B, C only

 $\therefore \Delta H = +180.7 \text{ KJ mol}^{-1} (\text{i.e.}, \Delta H > 0)$

The reaction is endothermic which absorbs heat :. Increasing the temperature favours the forward reaction.

According to Le-chatelier principle, increasing the concentration on the reactant side favours the formation of product to counteract the effect of that change. \therefore A, C, D only

89. Given below are two statements:

Statement I: Benzenediazonium salt is prepared by the reaction of aniline with nitrous acid at 273-278 K. It decomposes easily in the dry state.

Statement II: Insertion of iodine into the benzene ring is difficult and hence iodobenzene is prepared through the reaction of benzenedizonium salt with KI. In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Statement I is correct but Statement II is incorrect.
- (2) Statement I is incorrect but Statement II is correct.
- (3) Both Statement I and Statement II are correct.
- (4) Both Statement I and Statement II are incorrect

Ans: (3)

Both statement I and II are correct.

- Statement I corresponds to diazotization reaction.
 Benzene diazonium salts are unstable in dry state & can decompose explosively
 ∴ Statement I is correct.
- Statement II corresponds to Sandmeyer reaction
 Direct iodination is not possible because it is reversible in nature
 ∴ statement II is correct.



90. The major product of the following reaction is:



DEPARTMENT OF CHEMISTRY

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