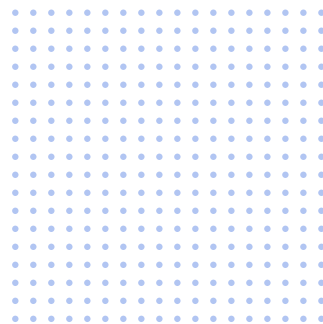




FOR JNU EE EXAM PREPARATION

JNU EE 2022 Question Paper · Ph.D Nanoscience - Chemical Sciences

EXAM

JNU EE

YEAR

2022

TYPE

Question Paper

SUBJECT

Ph.D Nanoscience - Chemical Sciences

Test Date : 09 Dec 2022**Test Slot : Slot 2****Subject : PBCS-Nanoscience Chemical Sciences****Sl. No.1****QBID:1032051**

According to Pauling's electronegativity concept

1. Bonds between dissimilar atoms are almost always stronger than might have been expected from strength of bonds of the same elements when bonded in homonuclear bonds
2. Bonds between dissimilar atoms are almost always weaker than might have been expected from strength of bonds of the same elements when bonded in homonuclear bonds
3. Bonds between dissimilar atoms are almost always same than might have been expected from strength of bonds of the same elements when bonded in homonuclear bonds
4. Bonds between dissimilar atoms are rarely stronger than might have been expected from strength of bonds of the same elements when bonded in homonuclear bonds

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14201]

2[Option ID=14202]

3[Option ID=14203]

4[Option ID=14204]

Sl. No.2**QBID:1032052**

Buffer solutions

1. Favor the change in pH on addition of small amount of acid and base
2. Resist the change in pH on addition of small amount of acid and base
3. Resist the change in pH on adding large amount of acid
4. Resist the change in pH on adding large amount of base

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14205]

2[Option ID=14206]

3[Option ID=14207]

4[Option ID=14208]

Sl. No.3**QBID:1032053**

According to Molecular Orbital Theory, the number of antibonding π^* electrons in NO and CO respectively are

1. 1 and 0
2. 1 and 1
3. 3 and 2
4. 0 and 1

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14209]

2[Option ID=14210]

3[Option ID=14211]

4[Option ID=14212]

Sl. No.4

QBID:1032054

For the production of rubber, the primary purpose of ZnO is

1. Shortening of time taken for vulcanization
2. Increasing the time taken to vulcanization
3. It doesn't change anything
4. Decreasing the volume of rubber

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14213]

2[Option ID=14214]

3[Option ID=14215]

4[Option ID=14216]

Sl. No.5

QBID:1032055

The full form of VSEPR theory is

1. Valence Share Energy Pair Repulsion
2. Valence Share Electron Pair Repulsion
3. Valence Shell Energy Pair Repulsion
4. Valence Shell Electron Pair Repulsion

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14217]

2[Option ID=14218]

3[Option ID=14219]

4[Option ID=14220]

Sl. No.6

QBID:1032056

Given below are two statements:

Statement I: Lower molecular mass alcohols are immiscible with water in all proportions.

Statement II: Boiling point of ethanol is higher than propane.

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

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is correct but Statement II is false
4. Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14221]

2[Option ID=14222]

3[Option ID=14223]

4[Option ID=14224]

Sl. No.7

QBID:1032057

The correct order of increasing acidity is

1. $[\text{Al}(\text{H}_2\text{O})_6]^{3+} < [\text{In}(\text{H}_2\text{O})_6]^{3+} < [\text{Ga}(\text{H}_2\text{O})_6]^{3+}$
2. $[\text{Al}(\text{H}_2\text{O})_6]^{3+} < [\text{Ga}(\text{H}_2\text{O})_6]^{3+} < [\text{In}(\text{H}_2\text{O})_6]^{3+}$
3. $[\text{Ga}(\text{H}_2\text{O})_6]^{3+} < [\text{Al}(\text{H}_2\text{O})_6]^{3+} < [\text{In}(\text{H}_2\text{O})_6]^{3+}$
4. $[\text{Ga}(\text{H}_2\text{O})_6]^{3+} < [\text{In}(\text{H}_2\text{O})_6]^{3+} < [\text{Al}(\text{H}_2\text{O})_6]^{3+}$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14225]

2[Option ID=14226]

3[Option ID=14227]

4[Option ID=14228]

Sl. No.8

QBID:1032058

The correct formula of Borax is

1. $\text{Na}_2[\text{B}_2\text{O}_3.2\text{B}(\text{O}_2)(\text{OH})_3].8\text{H}_2\text{O}$
2. $\text{Na}_2[\text{B}_4\text{O}_5(\text{OH})_3].6\text{H}_2\text{O}$
3. $\text{Na}_2[\text{B}_4(\text{O}_2)_2(\text{OH})_4].6\text{H}_2\text{O}$
4. $\text{Na}_2[\text{B}_4\text{O}_5(\text{OH})_4].8\text{H}_2\text{O}$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14229]

2[Option ID=14230]

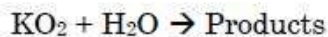
3[Option ID=14231]

4[Option ID=14232]

Sl. No.9

QBID:1032059

In the given reaction



Products are

1. KOH, O₂ only
2. KOH, H₂O, O₂ only
3. KOH, H₂O₂, O₂ only
4. KOH, H₂O₂ only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14233]

2[Option ID=14234]

3[Option ID=14235]

4[Option ID=14236]

Sl. No.10

QBID:1032060

NH₃ burns in presence of dioxygen and gives

1. N₂, H₂O only
2. NO₂, H₂O only
3. N₂O₃, H₂O only
4. N₂O₅, H₂O only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14237]

2[Option ID=14238]

3[Option ID=14239]

4[Option ID=14240]

Sl. No.11

QBID:1032061

The oxidation state of S in dithionic acid is/are

1. +4 only
2. +4, +5 only
3. +5 only
4. +1, +5 only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14241]

2[Option ID=14242]

3[Option ID=14243]

4[Option ID=14244]

Sl. No.12

QBID:1032062

Given below are two statements:

Statement I: F_2 has low enthalpy of dissociation.

Statement II: F_2 has a high free energy of hydration.

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

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is correct but Statement II is false
4. Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14245]

2[Option ID=14246]

3[Option ID=14247]

4[Option ID=14248]

Sl. No.13

QBID:1032063

In the given reaction



Product/s is/are

1. $Na^+[HXeO_4]^-$ only
2. NaH , $Na+[XeO_4]^-$ only
3. $Na_4[XeO_6]^{4-}$, H_2O only
4. $Na_4[H_4XeO_6]^{4-}$ only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14249]

2[Option ID=14250]

3[Option ID=14251]

4[Option ID=14252]

Sl. No.14

QBID:1032064

Dumas method is used for

1. Quantitative analysis of nitrogen
2. Qualitative analysis of nitrogen only
3. Quantitative analysis of sulphur
4. Qualitative analysis of sulphur only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14253]

2[Option ID=14254]

3[Option ID=14255]

4[Option ID=14256]

Sl. No.15

QBID:1032065

Which of the following species is not involved in chromyl chloride test?

1. CrO_5
2. CrO_2Cl_2
3. Na_2CrO_4
4. $(\text{CH}_3\text{COO})_2\text{Pb}$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14257]

2[Option ID=14258]

3[Option ID=14259]

4[Option ID=14260]

Sl. No.16

QBID:1032066

The color of phenolphthalein in ionized and unionized form are X and Y, respectively in acid-base titration. X and Y are respectively

1. Colorless and pink
2. Pink and colorless
3. Red and Yellow
4. Red and colorless

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14261]

2[Option ID=14262]

3[Option ID=14263]

4[Option ID=14264]

Sl. No.17

QBID:1032067

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

Assertion A: In the titration of KMnO_4 solution against oxalic acid solution, HNO_3 is not used for providing acidic medium.

Reason R: HNO_3 is itself an oxidizing agent.

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

1. Both A and R are correct and R is the correct explanation of A
2. Both A and R are correct but R is NOT the correct explanation of A
3. A is correct but R is not correct
4. A is not correct but R is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14265]

2[Option ID=14266]

3[Option ID=14267]

4[Option ID=14268]

Sl. No.18

QBID:1032068

Hypsochromic Shift

1. Is Red Shift
2. Is Blue Shift
3. Increases the intensity of absorption
4. Decreases the intensity of absorption

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14269]

2[Option ID=14270]

3[Option ID=14271]

4[Option ID=14272]

Sl. No.19

QBID:1032069

Which of the following does not form Grignard reagent under normal conditions?

1. $\text{CH}_2=\text{CH}-\text{Cl}$
2. $\text{CH}_2=\text{CH}-\text{Br}$
3. $\text{Ar}-\text{I}$
4. $\text{Ar}-\text{Br}$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14273]

2[Option ID=14274]

3[Option ID=14275]

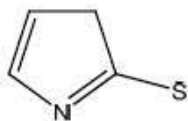
4[Option ID=14276]

Sl. No.20

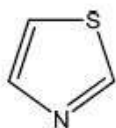
QBID:1032070

Thiazole is

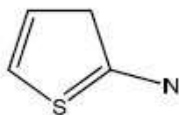
1.



2.



3.



4.



(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14277]

2[Option ID=14278]

3[Option ID=14279]

4[Option ID=14280]

Sl. No.21

QBID:1032071

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

Assertion A: For $\text{CH}_3\text{-CH}_2\text{-C(=O)-OCH}_3$, protons appear at high δ value in NMR

Reason R: -OCH_3 protons are more de-shielded

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

1. Both A and R are true and R is the correct explanation of A
2. Both A and R are true but R is NOT the correct explanation of A
3. A is true but R is false
4. A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14281]

2[Option ID=14282]

3[Option ID=14283]

4[Option ID=14284]

Sl. No.22

QBID:1032072

Which of the following is incorrect?

1. $S_1 \rightsquigarrow S_0 + \text{heat}$ Internal conversion
2. $T_1 \rightsquigarrow T_1 + \text{heat}$ Fluorescence
3. $T_1 \rightarrow S_0 + h\nu$ Phosphorescence
4. $T_1 \rightsquigarrow S_0 + \text{heat}$ Intersystem crossing

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14285]

2[Option ID=14286]

3[Option ID=14287]

4[Option ID=14288]

Sl. No.23

QBID:1032073

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

Assertion A: In [2+2] cycloadditions, the bond is formed between the two reactant molecules on the same side of π -orbitals. This is called suprafacial

Reason R: The bond is formed between the two reactant molecules on the opposite side of the π -orbitals, this addition is called as antarafacial

1. Both A and R are true and R is the correct explanation of A
2. Both A and R are true but R is NOT the correct explanation of A
3. A is true but R is false
4. A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14289]

2[Option ID=14290]

3[Option ID=14291]

4[Option ID=14292]

Sl. No.24

QBID:1032074

Which of the following are polar solvents?

- A. CH_3SOCH_3
- B. CH_3CN
- C. CH_3Cl
- D. Tetrahydrofuran

Choose the most appropriate answer from the options given below:

1. A and B Only
2. B and C Only
3. C and D Only
4. A and D Only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14293]

2[Option ID=14294]

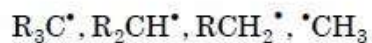
3[Option ID=14295]

4[Option ID=14296]

Sl. No.25

QBID:1032075

The correct stability order of following radicals is



1. $R_3C^\bullet > R_2\dot{C}H > R\dot{C}H_2 > \bullet CH_3$
2. $R_2\dot{C}H > R_3C^\bullet > R\dot{C}H_2 > \bullet CH_3$
3. $\bullet CH_3 > R_2\dot{C}H_2 > R_2\dot{C}H > R_3C^\bullet$
4. $\bullet CH_3 > R\dot{C}H_2 > R_2C^\bullet > R_2\dot{C}H$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14297]

2[Option ID=14298]

3[Option ID=14299]

4[Option ID=14300]

Sl. No.26

QBID:1032076

The correct common name of given structure is



1. Isopropane
2. Isobutane
3. Tertbutane
4. n-butane

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14301]

2[Option ID=14302]

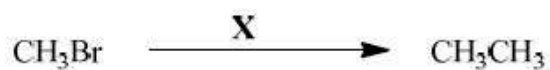
3[Option ID=14303]

4[Option ID=14304]

Sl. No.27

QBID:1032077

In the given reaction:



X is

1. Sodium metal/ ethanol
2. Sodium metal/ hydrous ether
3. Sodium metal/ dry ether
4. Sodium metal/ acetic acid

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14305]

2[Option ID=14306]

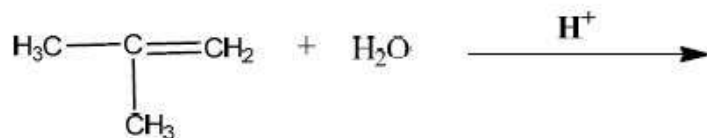
3[Option ID=14307]

4[Option ID=14308]

Sl. No.28

QBID:1032078

In the given reaction



The major product is

1. 2-Methylpropan-1-ol
2. 2-Methylpropan-2-ol
3. 2-Methylpropane
4. 2-Methylpropanal

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14309]

2[Option ID=14310]

3[Option ID=14311]

4[Option ID=14312]

Sl. No.29

QBID:1032079

Given below are two statements:

Statement I: A compound having stereogenic centre but achiral is termed as meso compounds.

Statement II: The stereoisomers of a compound which are not mirror images of each other are called diastereomers.

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

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is correct but Statement II is false
4. Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14313]

2[Option ID=14314]

3[Option ID=14315]

4[Option ID=14316]

Sl. No.30

QBID:1032080

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

Assertion A: Morphine narcotics are also referred to as opiates.

Reason R: They are obtained from opium poppy.

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

1. Both A and R are true and R is the correct explanation of A
2. Both A and R are true but R is NOT the correct explanation of A
3. A is true but R is false
4. A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14317]

2[Option ID=14318]

3[Option ID=14319]

4[Option ID=14320]

Sl. No.31

QBID:1032081

Match List I with List II

List I (Compound)	List II (pKa)
A. o-Nitrophenol	I. 8.3
B. Phenol	II. 7.2
C. Ethanol	III. 15.9
D. m-Nitrophenol	IV. 10

Choose the correct answer from the options given below:

1. A-II, B-IV, C-III, D-I
2. A-I, B-II, C-III, D-IV
3. A-I, B-IV, C-II, D-III
4. A-II, B-III, C-IV, D-I

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14321]

2[Option ID=14322]

3[Option ID=14323]

4[Option ID=14324]

Sl. No.32

QBID:1032082

Which of the following molecules have non-zero dipole moment?

- A. CH_4
- B. CCl_4
- C. CHCl_3
- D. CO_2
- E. SO_2

Choose the most appropriate answer from the options given below:

1. A and B Only
2. B, C and E Only
3. C, D and E Only
4. C and E Only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14325]
 2[Option ID=14326]
 3[Option ID=14327]
 4[Option ID=14328]

Sl. No.33
 QBID:1032083

Given below are two statements:

Statement I: Dimitri I. Mendeleev observed regularities in the characteristics X-ray spectra.

Statement II: Henry Moseley showed that the atomic number is a more fundamental property of an element than its atomic mass.

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

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

- (1) 1
 (2) 2
 (3) 3
 (4) 4

1[Option ID=14329]
 2[Option ID=14330]
 3[Option ID=14331]
 4[Option ID=14332]

Sl. No.34
 QBID:1032084

"Equal volumes of all gases under same conditions of temperature and pressure contain equal number of molecules". This statement is

1. Boyle's Law
2. Avogadro's Law
3. Thompson Law
4. De Broglie's Hypothesis

- (1) 1
 (2) 2
 (3) 3
 (4) 4

1[Option ID=14333]
 2[Option ID=14334]
 3[Option ID=14335]
 4[Option ID=14336]

Sl. No.35
 QBID:1032085

The lyophilic colloids are

1. Neither reversible, nor irreversible
2. Reversible sol only
3. Irreversible sol only
4. Reversible as well as irreversible

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14337]

2[Option ID=14338]

3[Option ID=14339]

4[Option ID=14340]

Sl. No.36

QBID:1032086

The solubility of AgCl at 25°C is $1.05 \times 10^{-5} \text{ molL}^{-1}$, the solubility product is

1. 2.1025×10^{-10}
2. 0.1025×10^{-10}
3. 1.1025×10^{-10}
4. 10.1025×10^{-10}

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14341]

2[Option ID=14342]

3[Option ID=14343]

4[Option ID=14344]

Sl. No.37

QBID:1032087

The Daniel Cell is a simple

1. Silver-Chlorine Cell
2. Hydrogen-Chlorine Cell
3. Zinc-Copper Cell
4. Magnesium-Sulphur Cell

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14345]

2[Option ID=14346]

3[Option ID=14347]

4[Option ID=14348]

Sl. No.38

QBID:1032088

According to the rate law, the rate of a chemical reaction is related to

1. Threshold energy
2. Pressure
3. Enthalpy
4. Concentration of the reactants

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14349]

2[Option ID=14350]

3[Option ID=14351]

4[Option ID=14352]

Sl. No.39

QBID:1032089

The SI units of work and energy is Newton-meter which is also called as

1. Joule
2. Calorie
3. Pascal
4. Tesla

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14353]

2[Option ID=14354]

3[Option ID=14355]

4[Option ID=14356]

Sl. No.40

QBID:1032090

Catalytic Poisoning

1. Increases the activity of the catalyst
2. Reduces the activity of the catalyst
3. The activity of the catalyst is unchanged
4. Increases the rate of the reaction

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14357]

2[Option ID=14358]

3[Option ID=14359]

4[Option ID=14360]

Sl. No.41

QBID:1032091

An extensive property is a property whose value depends upon the

1. Quantity or size of matter present in the system
2. Temperature
3. Pressure
4. Neither quantity nor size of matter present in the system

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14361]

2[Option ID=14362]

3[Option ID=14363]

4[Option ID=14364]

Sl. No.42

QBID:1032092

The osmotic pressure of a solution decreases if

1. Volume is increased
2. Volume is lowered
3. Concentration of the solute particles is increased
4. Temperature is increased

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14365]

2[Option ID=14366]

3[Option ID=14367]

4[Option ID=14368]

Sl. No.43

QBID:1032093

Unit of rate constant for a 2nd order reaction is

1. s^{-1}
2. $mol\ L^{-1}\ s^{-1}$
3. $mol\ L^{-1}\ s$
4. $mol^{-1}\ L\ s^{-1}$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14369]

2[Option ID=14370]

3[Option ID=14371]

4[Option ID=14372]

Sl. No.44

QBID:1032094

Given below are two statements:

Statement I: The orbitals undergoing hybridization should have almost equal energy

Statement II: Promotion of electron is an essential condition prior to hybridization

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

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

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14373]

2[Option ID=14374]

3[Option ID=14375]

4[Option ID=14376]

Sl. No.45

QBID:1032095

The increase in entropy is maximum in which of the following reactions?

1. $\frac{1}{2} \text{H}_2 (\text{g}) + \frac{1}{2} \text{I}_2 (\text{g}) \rightarrow \text{HI} (\text{g})$
2. $\text{N}_2 (\text{g}) + 3\text{H}_2 (\text{g}) \rightarrow 2\text{NH}_3 (\text{g})$
3. $\text{H}_2 (\text{g}) + \frac{1}{2} \text{O}_2 (\text{g}) \rightarrow \text{H}_2\text{O} (\text{g})$
4. $\text{CaCO}_3 (\text{s}) \rightarrow \text{CaO} (\text{s}) + \text{CO}_2 (\text{g})$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14377]

2[Option ID=14378]

3[Option ID=14379]

4[Option ID=14380]

Sl. No.46

QBID:1032096

The entropy change in transforming 24 gm of ice into water at 273 K is (Molar heat of fusion = 6000 Jmol⁻¹)

1. 31.4 J K⁻¹
2. 29.3 J K⁻¹
3. 27.8 J K⁻¹
4. 25.7 J K⁻¹

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=14381]
 2[Option ID=14382]
 3[Option ID=14383]
 4[Option ID=14384]

Sl. No.47
 QBID:1032097

When 3.6 gm of a non-volatile solute was dissolved in 90 gm of benzene, the boiling point is increased to 354.11 K. The molar mass of solute is (K_b for benzene = 2.53K Kg mol⁻¹, Boiling point of benzene = 353.23K)

1. 58 g mol⁻¹
2. 115 g mol⁻¹
3. 11.5 g mol⁻¹
4. 5.8 g mol⁻¹

- (1) 1
 (2) 2
 (3) 3
 (4) 4

1[Option ID=14385]
 2[Option ID=14386]
 3[Option ID=14387]
 4[Option ID=14388]

Sl. No.48
 QBID:1032098

Which of the following is/are the example of Ideal solution?

- A. Bromoethane and chloroethane
- B. Acetone and ethanol
- C. Phenol and aniline
- D. n-hexane and n-heptane

Choose the correct answer from the options given below:

1. A and B Only
2. B and C Only
3. A and D Only
4. D Only

- (1) 1
 (2) 2
 (3) 3
 (4) 4

1[Option ID=14389]
 2[Option ID=14390]
 3[Option ID=14391]
 4[Option ID=14392]

Sl. No.49
 QBID:1032099

Which of the following equation represent Arrhenius Equation?

1. $\ln A = -E_a/RT + \ln k$
2. $\ln A = E_a/RT + \ln k$
3. $\ln A = 2.303E_a/RT + \ln k$
4. $\ln A = E_a/RT - \ln k$

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=14393]

2[Option ID=14394]

3[Option ID=14395]

4[Option ID=14396]

Sl. No.50

QBID:1032100

Match List I with List II

List I (Process)	List II (Enzyme)
A. Inversion of Cane Sugar	I. Maltose
B. Glucose into ethyl alcohol	II. Diatase
C. Starch into maltose	III. Zymase
D. Maltose into glucose	IV. Invertase

Choose the correct answer from the options given below:

1. A-IV, B-III, C-II, D-I
2. A-III, B-IV, C-I, D-II
3. A-II, B-IV, C-III, D-I
4. A- IV, B-II, C-I, D-III

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=14397]

2[Option ID=14398]

3[Option ID=14399]

4[Option ID=14400]