

www.FirstRanker.com

7/7/2019

	DU MSc Chemistry
Topic:- DU_J19_MSC_CHEM	
1) Specific Redox reaction of chlorine is known as [Question ID = 1959]	
 reduction [Option ID = 7836] redox chlorination [Option ID = 7835] disproportionation [Option ID = 7834] oxidation [Option ID = 7833] 	
Correct Answer :- oxidation [Option ID = 7833] 	
2) Which of the following is not a standard condition?	
2) which of the following is not a standard condition?	
[Question ID = 1906]	
 1 mol dm⁻³ solutions [Option ID = 7624] 100 atm [Option ID = 7622] 100 kPa [Option ID = 7621] 298 K [Option ID = 7623] 	
Correct Answer :-	
• 100 kPa [Option ID = 7621]	
3) Which transitions are studied by UV spectrophotometer? [Question ID = 1955]	
 Rotational [Option ID = 7818] Electronic [Option ID = 7817] Vibrational [Option ID = 7819] Nuclear [Option ID = 7820] 	
Correct Answer :-	
Electronic [Option ID = 7817]	
4) Which electrode/s may be used to determine the pH of a solution?[Question ID = 1897]	
1. Quinhydrone electrode [Option ID = 7587] 2. Hydrogen electrode [Option ID = 7586]	
3. All of the above [Option ID = 7588] 4. Glass electrode [Option ID = 7585] www.FirstPanker.com	



www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

	Correct Answer :- • Glass electrode [Option ID = 7585]
	5) Which acid is present in lemon ? [Question ID = 1949]
	1. lactic acid [Option ID = 7794]
	2. tartaric acid [Option ID = 7796] 3. citric acid [Option ID = 7795]
	4. marlic acid [Option ID = 7793]
	Correct Answer :-
	• marlic acid [Option ID = 7793]
	6) Gram molecular volume of oxygen at STP is [Question ID = 1964]
	1. 11200 cm ³ [Option ID = 7853]
	2. 22400 cm ³ [Option ID = 7856] 3. 5600 cm ³ [Option ID = 7855]
	4. 3200 cm ³ [Option ID = 7854]
-	Correct Answer :-
	• 11200 cm ³ [Option ID = 7853]
	7) Glucose does not react with: [Question ID = 1921]
	HCN
	NaHSO
	2. [Option ID = 7684]
	C ₆ H ₅ NHNH ₂
	J = J = J = J = J = J = J = J = J = J =
	4. [Option ID = 7682]
	Correct Answer :-
	C ₆ H ₅ NHNH ₂
-	• [Option ID = 7681]
	8) Which does not increase rate by affecting the number or nature of collisions? [Question ID = 1905]
	1. adding a catalyst [Option ID = 7619]
	2. Increasing the surface area [Option ID = 7617] 3. increasing the pressure [Option ID = 7618]
	4. increasing the temperature [Option ID = 7620]
Ť	Correct Answer :-

www.FirstRanker.com







www.FirstRanker.com





www.FirstRanker.com

2019 192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion
NO ₂ OMe
• [Option ID = 7693]
14) A mixture of CaCl ₂ and NaCl weighing 4.44 g is treated with sodium carbonate solution to precipitate all the Ca ²⁺ ions as calcium carbonate. The to get 0.56 g of CaO. The percentage of NaCl in the mixture (atomic mass of Ca = 40) is
[Question ID = 1963]
1. 70 [Option ID = 7850] 2. 75 [Option ID = 7849] 3. 25 [Option ID = 7852] 4. 30.6 [Option ID = 7851]
Correct Answer :-
• 75 [Option ID = 7849]
 Which pair of species is listed in increasing order of the property given? [Question ID = 1958] Ionization energy: O, F [Option ID = 7829] Covalent character: HI, HBr [Option ID = 7832] Melting point: I₂, Br₂ [Option ID = 7830] Radius: Te²⁻, Te⁴⁺ [Option ID = 7831]
Correct Answer :- Ionization energy: O, F [Option ID = 7829]
16) The material, whose dimensions can be changed upon the application of an electric field is called [Ouestion ID = 1947]
1. Ferromagnetic [Option ID = 7785] 2. Ferroelectric [Option ID = 7787] 3. Piezoelectric [Option ID = 7786] 4. Pyroelectric [Option ID = 7788]
Correct Answer :- • Ferromagnetic [Option ID = 7785]
17) In the case of a particle in a one-dimensional box, the energy of an energy state is given by: [Question ID = 1887]
1. $E_n = 8n^2h^2/ma^2$, where $n = 1, 2, 3,$ [Option ID = 7548] 2. $E_n = n^2h^2$ (8ma ²), where $n = 1, 2, 3,$ [Option ID = 7546] 3. $E_n = n^2h^2/8ma^2$, where $n = 1, 2, 3,$ [Option ID = 7545] 4. $E_n = n^2h^2a^2/8m$, where $n = 1, 2, 3,$ [Option ID = 7547]

Correct Answer :-



,10	152.100.100.100.000/Carriconargen/Ceports/r aperset question/r aperset question/r aperset question/r
• $E_n = n^2 h^2 / 8ma^2$, where n = 1, 2, 3, [C	Option ID = 7545]
18) How many chiral carbon atoms are	e present in 2, 3, 4 – trichloropentane? [Question ID = 1965]
1. 2 [Option ID = 7858]	
2. 1 [Option ID = 7857]	
3. 3 [Option ID = 7859]	
4. 4 [Option ID = 7860]	
Correct Answer :-	
• 1 [Option ID = 7857]	
19) The process of heating the concen	trated ore in a limited supply of air or in absence of air is known as: [Question ID = 1952]
1 Cupellation [Option ID - 7906]	
2. Roasting [Option ID = 7805]	
3. Calcination [Option ID = 7808]	
4. Leaching [Option ID = 7807]	
Correct Answer :-	
• Roasting [Option ID = 7805]	
20) Spectroscopic transitions leading t	to bending of bond angles in molecules will appear at which region of the electromagnetic spectrum? [Ques
1 Radiofrequency [Ontion ID = 7564]	
2. Infra-red [Option ID = 7563]	
3. Microwave [Option ID = 7562]	
4. Ultraviolet [Option ID = 7561]	
Correct Answer :-	
• Ultraviolet [Option ID = 7561]	
21) Oxidation product of quinoline wit	h KMnO ₄ is :
[Question ID = 1933]	
1. Phthalic anhydride [Option ID = 7731]	
2. Phthalic acid [Option ID = 7729]	
3. Nicotinic acid [Option ID = 7730]	
4. None of these [Option ID = 7732]	
Correct Answer :-	
• Phthalic acid [Option ID = 7729]	
22) The IUPAC name for the complex	Co(NO ₂)(NH ₃) ₅]Cl ₂ is [Question ID = 1973]
1. nitrito-N-pentaamminecobalt (II) chloride	[Option ID = 7891]
2. nitrito-N-pentaamminecobalt (III) chloride	e [Option ID = 7889]
 pentaammine nitrito-N-cobalt (III) chlorid pentaammine nitrito-N-cobalt (II) chloride 	e [Option ID = 7890] e [Option ID = 7892]
r (an) elliptice	e la construcción de la cons



www.FirstRanker.com



192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion



^{2. 10&}lt;sup>20</sup> [Option ID = 7646]

www.FirstRanker.com



www.FirstRanker.com

)19	192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion
3. 10 ³⁰ [Option ID = 7648]	
4. 10^{15} [Option ID = 7647]	
Correct Answer :-	
• 10^{25} [Option ID = 7645]	
26) The oxidation state of Cr in [Cr(N	$[H_3)_4 Cl_2]^+$ is [Question ID = 1975]
1 2 [Ontion ID - 7899]	
2. 0 [Option ID = 7897]	
3. 1 [Option ID = 7898]	
4. 3 [Option ID = 7900]	
Correct Answer :-	
• 0 [Option ID = 7897]	
27) Activated charcoal is used to rem	ove colouring matter from pure substances. It works by [Question ID = 1970]
1. absorption [Option ID = 7879]	
2. adsorption [Option ID = 7880]	
3. reduction [Option ID = 7877]	
Correct Answer :-	
• reduction [Option ID = 7877]	
28) Which type of colloid is the disso	lution of sulphur (S ₈) [Question ID = 1969]
1. Micelle [Option ID = 7874] 2. Multimolecular colloid [Option ID = 787	51
3. Associated colloid [Option ID = 7873]	
4. Macromolecular colloid [Option ID = 78	76]
Correct Answer :-	
• Associated colloid [Option ID = 7873]	
29) For the given complex [CoCl. (or	
1976]	((Ma3)2], the number of geometrical isomers, the number of optical isomers and total number of isomers of a
1. 0, 1, 3 [Option ID = 7902] 2. 0, 2. 2 [Option ID = 7903]	
3. 2, 2, 3 [Option ID = 7901]	
4. 3, 3, 4 [Option ID = 7904]	
Correct Answer :-	
• 2, 2, 3 [Option ID = 7901]	
30) A covalent molecule AB ₃ has pyra	amidal structure. The number of lone pair and bond pair electrons in the molecule are respectively [Question I/
1. 2 and 2 [Option ID = 7843]	
TI T 210 F [Obdou TD = 10 10]	www.FirstRanker.com

WWW.FIRStRanker.com 192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestions







19	192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion
34) The unit of rate constant for a zero	o order reaction is: [Question ID = 1893]
1. s^{-1} [Option ID = 7569]	
2. mol dm ⁻³ s ⁻¹ [Option ID = 7570]	
3. mol ⁻¹ dm ³ s ⁻¹ [Option ID = 7571]	
4. mol ⁻² dm ⁶ s ⁻¹ [Option ID = 7572]	
Correct Answer :-	
• s^{-1} [Option ID = 7569]	
35) Using the basic phase rule equatio	n, find out which of the following is a correct representation of the degrees of freedom (F) of a system: [Que
1 E=0 for a two-component system with ty	we phases in equilibrium [Ontion ID = 7616]
2. $F=2$, for a one-component system with tw	vo phases in equilibrium [Option ID = 7614]
3. F=3, for a two-component system with tw	vo phases in equilibrium [Option ID = 7615]
4. F=1, for a one-component system with tw	vo phases in equilibrium [Option ID = 7613]
Correct Answer :-	
• F=1, for a one-component system with t	wo phases in equilibrium [Option ID = 7613]
36) What is the unit of specific conduc	tance (or conductivity) of a conductor? [Question ID = 1882]
1. Siemens ⁻¹ cm [Option ID = 7526]	
2. Siemens ⁻¹ cm ⁻¹ [Option ID = 7525]	
3. Siemens cm ⁻¹ [Option ID = 7527]	
4. Siemens cm [Option ID = 7528]	
Correct Answer :-	
• Siemens ⁻¹ cm ⁻¹ [Option ID = 7525]	
37) The addition of a catalyst during a	chemical reaction alters which of the following quantities? [Ouestion ID = 1971]
1. Internal energy [Option ID = 7884]	
3. Enthalpy [Option ID = 7883]	
4. Entropy [Option ID = 7882]	
Correct Answer :-	
• Activation energy [Option ID = 7881]	
38) A ligand can also be regarded as [(Question ID = 1962]
1. Lewis base [Option ID = 7846]	
2. Lewis acid [Option ID = 7845]	
3. Bronsted base [Option ID = 7848]	
4. Bronsted acid [Option ID = 7847]	
Correct Answer :-	
 Lewis acid [Option ID = 7845] 	



www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

39) When a solute is distributed between two immiscible liquids, on which of the following parameters the value of partition coefficient (K_D) dependence

1. Amount of solute [Option ID = 7595]

- 2. Relative amount of the two solvents [Option ID = 7596]
- 3. Temperature [Option ID = 7593]
- 4. Pressure [Option ID = 7594]

Correct Answer :-

• Temperature [Option ID = 7593]

40) The equation that relates the change in the equilibrium constant, K_{eq}, of a chemical reaction to the change in temperature, T, is known as: [Que

1. Wilhemy's equation [Option ID = 7536]

2. Sackur-Tetrode equation [Option ID = 7535]

- 3. Mark-Houwink equation [Option ID = 7533]
- 4. Van't Hoff equation [Option ID = 7534]

Correct Answer :-

• Mark-Houwink equation [Option ID = 7533]

41) Milk is a colloidal system in which

[Question ID = 1954]

Water is dispersed in fat [Option ID = 7815]
 Fat is dispersed in water [Option ID = 7814]
 Fat is dissolved in water [Option ID = 7813]
 None of these [Option ID = 7816]

Correct Answer :-

• Fat is dissolved in water [Option ID = 7813]

42) In a body-center cubic (BCC) type of crystal lattice, the number of atoms belonging exclusively to each unit cell within the lattice is/are: [Quest

1. 2 [Option ID = 7574] 2. 1 [Option ID = 7573] 3. 3 [Option ID = 7575] 4. 4 [Option ID = 7576]

Correct Answer :-

• 1 [Option ID = 7573]

43) What quantity will remain unchanged for a sample of gas in a sealed rigid container when it is cooled from 100°C to 75°C at constant volume?

1. The pressure of the gas [Option ID = 7627]

- 2. The average energy of the molecules [Option ID = 7626]
- 3. The average speed of the molecules [Option ID = 7625]

4. The density of the gas [Option ID = 7628]

Correct Answer :-

www.FirstRanker.com



 44) The number of independent modes of vibration in a non-liner mol 1. 3N - 3 [Option ID = 7568] 2. 3N [Option ID = 7567] 3. 3N - 5 [Option ID = 7565] 4. 3N - 6 [Option ID = 7566] 	lecule having N atoms is [Question ID = 1892]
4. 514 - 0 [Option 10 - 7500]	
Correct Answer :- • 3N - 5 [Option ID = 7565]	
 45) 10 cm³ of NaOH solution of pH 12 is mixed with 990 cm³ of water 1. 11 [Option ID = 7541] 2. 1 [Option ID = 7543] 3. 10 [Option ID = 7542] 4. 3 [Option ID = 7544] 	r. What is the pH of the resulting solution? [Question ID = 1886]
Correct Answer :- 11 [Option ID = 7541] 	
 46) Degeneracy of 1st excited state of a particle in 2-D rectangular both 1. 2 [Option ID = 7540] 2. 0 [Option ID = 7539] 3. 1 [Option ID = 7537] 4. 3 [Option ID = 7538] 	ox with sides `a' and `2a' is: [Question ID = 1885]
Correct Answer :- • 1 [Option ID = 7537]	
 47) Today the concentration of green house gases is very high becaus [Question ID = 1946] 1. Increase in combustion of oil and coal [Option ID = 7782] 2. Use of refrigerator [Option ID = 7781] 3. Deforestation [Option ID = 7783] 4. all of the above [Option ID = 7784] 	se of
Correct Answer :- • Use of refrigerator [Option ID = 7781]	
 48) A system maintaining same pressure is known as: [Question ID = 1. Isochoric system [Option ID = 7635] 2. Isothermal system [Option ID = 7633] 3. Isotonic system [Option ID = 7634] 4. Isobaric system [Option ID = 7636] 	= 1909]



19	192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestior
Correct Answer :-	
 Isothermal system [Option ID = 7633] 	
49) The term PVC used in the plastic industry	stands for [Question ID = 1950]
1. phosphavinyl chloride [Option ID = 7800]	
2. phosphorvanadium chloride [Option ID = 7799]	
3. polyvinyl carbobate [Option ID = 7797] 4. polyvinyl chloride [Option ID = 7798]	
Correct Answer :-	
 polyvinyl carbobate [Option ID = 7797] 	
50) A compound is formed by elements A and the compound is:	B. This crystallises in the cubic structure where the A atoms are at the corners of the cube and B aton
[Question ID = 1960]	
1. AB ₄ [Option ID = 7840]	
2. AB [Option ID = 7839]	
3. A_8B_4 [Option ID = 7838]	
4. A_6B [Option ID = 7837]	
Correct Answer :-	
• A_6B [Option ID = 7837]	
51) What type of light scattering involves int	eraction of photons with acoustic phonons in solids? [Question ID = 1901]
1. Compton Scattering [Option ID = 7604]	
2. Mie Scattering [Option ID = 7602]	
3. Rayleigh Scattering [Option ID = 7601]	
4. Brillouin Scattering [Option ID = 7603]	
Correct Answer :-	
• Rayleigh Scattering [Option ID = 7601]	
52) The correct expression for the Freundlich	adsorption equation involving `x' mass of gas adsorbed on `m' mass of adsorbent at pressure `p', with
$1 (x/m) = k n^{1/n} [Option ID = 7610]$	1
2. $(x/n) = k p^{n}$ [Option ID = 7610] 2. $(x/n) = k m^{n}$ [Option ID = 7611]	
3. $(x/p) = k m^{1/n}$ [Option ID = 7609]	
4. $(x/m) = k p^{n}$ [Option ID = 7612]	
Correct Answer :-	



www.FirstRanker.com





www.FirstRanker.com

7/7/2019





www.FirstRanker.com

7/7/2019





www.FirstRanker.com

7/7/2019





www.FirstRanker.com

7/7/2019





www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

Find product (A) of the below reaction is:



A. NMR Spectroscopy	i. Quadruple Splitting
B. Raman Spectroscopy	ii. Binding Energy
C. Mossbauer Spectroscopy	iii. Polarizability Ellipsoid
D. Photoelectron Spectroscopy	iv. Larmor Precession

[Question ID = 1895]

1. A = iv, B = iii, C = ii, D = i [Option ID = 7579] 2. A = iv, B = iii, C = i, D = ii [Option ID = 7578] 3. A = ii, B = iv, C = i, D = iii [Option ID = 7577] 4. A = iii, B = iv, C = i, D = ii [Option ID = 7580]

Correct Answer :-







www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion





[Question ID = 1935]



www.FirstRanker.com



Correct Answer :-

www.FirstRanker.com



www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion







www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

Find the major product of the given reaction:





www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

The major product formed in the following reaction is:







0 [Option ID = 7657]

72) Papaverine on oxidation with potassium permanganate gives a ketone, which on fusion with potassium hydroxide gives



[Question ID = 15235]

www.FirstRanker.com



www.FirstRanker.com

7/7/2019

4.

.













www.FirstRanker.com





www.FirstRanker.com





www.FirstRanker.com



www.FirstRanker.com



www.FirstRanker.com



www.FirstRanker.com



www.FirstRanker.com

19	192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion
83) Total spin angular momentum o	of nd ¹⁰ electronic system is (a.u.): [Question ID = 1908]
1. 0 [Option ID = 7629]	
2. ¼ [Option ID = 7631]	
4. $\frac{1}{2}$ [Option ID = 7632]	
Correct Answer :-	
• 0 [Option ID = 7629]	
84) Electronic transitions originatin	g from the 2S energy level of the Hydrogen atom to higher levels belong to which series? [Question ID = 1890]
1. Brackett Series [Option ID = 7559]	
2. Lyman Series [Option ID = 7557]	
3. Pfund Series [Option ID = 7560]	
4. baliner Series [Opuon ID = 7556]	
Correct Answer :-	
• Lyman Series [Option ID = 7557]	
85) Which of the following indicato	rs cannot be used in redox potentiometric titrations? [Question ID = 1898]
1 Nile red [Ontion ID 701]	
1. Nile red [Option ID = 7591] 2. Methylene blue [Option ID = 7590]	
3. Erioglaucine A [Option ID = 7589]	
4. Quinhydrone [Option ID = 7592]	
Correct Answer :-	
• Erioglaucine A [Option ID = 7589]	
86) Which of the following represent	the connect hand orders for N = N \pm and N \pm malegular 2 [Ouestion TD = 1999]
•••• which of the following represen	it the correct bond orders for M ₂ , W ₂ and W ₂ molecules: [Question 1D = 1000]
1. 3.0, 2.5, 2.5 [Option ID = 7551]	
2. 3.0, 2.0, 2.5 [Option ID = 7550] 3. 3.0, 3.0, 3.0 [Option ID = 7549]	
4. 2.5, 2.5, 2.5 [Option $ID = 7552$]	
Correct Answer :-	
• $3.0, 3.0, 3.0$ [Option ID = 7549]	
87) Which of the following equation	is used in the calculation of the equilibrium Constant (K)? [Question $ID = 1910$]
$1 \ln (K) = - (RT/nFF^{0}) [Ontion ID - 764]$	101
2. $\ln (K) = (nFF^0/RT)$ [Option ID = 7637]	
3. $\ln (K) = - (nFE^0/RT)$ [Option ID = 763]	د 181
4. In (K) = (RT/nFE^0) [Option ID = 7639]]
	*
Correct Answer :-	
 In (K) – (nFE^U/RT) [Option ID – 763] 	7]



www.FirstRanker.com



192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

88) Which of the following molecules give pure rotational spectra? [Question ID = 1896]



89) Which of the following is most reactive toward $S_N 2$ reaction? [Question ID = 1918]





www.FirstRanker.com



www.FirstRanker.com



```
7/7/2019
                                                                              192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion
       93) The vibrational energy of a simple harmonic oscillator, as calculated from the Schrodinger equation, depends on:
       [Question ID = 1900]
       1. Oscillation frequency [Option ID = 7598]
       2. Vibrational quantum number [Option ID = 7597]
       3. Planck's constant [Option ID = 7599]
       4. All of the above [Option ID = 7600]
       Correct Answer :-
       • Vibrational quantum number [Option ID = 7597]
       94) The frequency of 3 x 10<sup>18</sup> Hz falls in the:
       [Question ID = 1883]
       1. Visible and ultraviolet region [Option ID = 7531]
       3. X-Ray region [Option ID = 7532]
       4. Microwave region [Option ID = 7529]
       Correct Answer :-
       • Microwave region [Option ID = 7529]
       95) The reduced C-C bond strength/order in Zeise's salt as compared to C-C bond in free ethylene is due to the following factor:
       [Question ID = 1978]
       1. back bonding or back donation [Option ID = 7912]
       2. sp hybridization [Option ID = 7909]
       3. quadruple bonding [Option ID = 7911]
       4. ionic bonding [Option ID = 7910]
       Correct Answer :-
       • sp hybridization [Option ID = 7909]
       96) The correct statement with respect to the complexes Ni(CO)<sub>4</sub> and [Ni(CN)_4]^{2-} is
       [Question ID = 1972]
       1. nickel is in the same oxidation state in both [Option ID = 7888]
       2. have tetrahedral and square planar geometry, respectively [Option ID = 7885]
       4. both have square planar geometry [Option ID = 7886
                                                           www.FirstRanker.com
192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestions
```



www.FirstRanker.com

7/7/2019

192.168.183.10:8195/GameChanger/Reports/PapersetQuestion/PapersetQuestion

97) The chemical reaction: $2A + B \rightarrow C + 2D$ is found to be first order with respect to A but second order with respect to B. The rate of the reaction [Ouestion ID = 1889]
1. None of these [Option ID = 7556] 2. k [A] [B] ² [Option ID = 7554] 3. k [A] ² [B] [Option ID = 7553] 4. k [A] [B] [Option ID = 7555]
 Correct Answer :- • k [A] ² [B] [Option ID = 7553]
98) Chemical potential is also known as
[Question ID = 1881] 1. Partial molar enthalpy [Option ID = 7522] 2. Partial molar volume [Option ID = 7523] 3. Partial molar entropy [Option ID = 7521] 4. None of the above [Option ID = 7524]
 Correct Answer :- • Partial molar entropy [Option ID = 7521]
 99) Who is regarded as father of modern chemistry? [Question ID = 1948] 1. Einstein [Option ID = 7789] 2. Lavoisier [Option ID = 7792] 3. C.V. Raman [Option ID = 7791] 4. Rutherford [Option ID = 7790]
 Correct Answer :- • Einstein [Option ID = 7789]
 100) ¹H NMR spectrum of a mixture of benzene and acetonitrile shows two singlets of equal integration. The molar ratio of benzene : acetonitrile is 1. 1: 2 [Option ID = 7691] 2. 1: 1 [Option ID = 7689] 3. 2: 1 [Option ID = 7690] 4. 6: 1 [Option ID = 7692]
 Correct Answer :- • 1: 1 [Option ID = 7689]