CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA

Chemistry question- SET - 2

1	Which	Which of the following has a zero bond order?					
	a)	He_2	b)	\mathbf{F}_2			
	c)	N_2	d)	H-F			
2	For a cyclic process, the change in internal energy of the system is						
	a)	always +ve	b)	always -ve			
	c)	equal to zero	d)	equal to infinity			
3	In dsp ² hybridization, the new orbitals have the following geometry						
	a)	squre planar	b)	tetrahedral			
	c)	trigonal	d)	trigonal bipyramidal			
4	Grignard reagent gives primary alcohol with						
	a)	НСНО	b)	CH ₃ CHO			
	c)	ethylene oxide	d)	hydrogen			
5	Which of the following is not a buffer solution?						
	a)	NH ₄ Cl+NH ₄ OH	b)	NaOH+HCl			
	c)	CH ₃ COONa+CH ₃ COOH	d)	HCOONa+HCOOH			
			25520				
6	A+B+0	C →Products is	35351				
6	A+B+0 a)	□ →Products is unimolecular	25021	trimolecular			
6			25021				
6 7	a) c)	unimolecular	b) d)	trimolecular termolecular			
	a) c)	unimolecular bimolecular	b) d) entra	trimolecular termolecular			
	a) c) The pH	unimolecular bimolecular I of a solution increases from 1 to 2. The conce	b) d) entra	trimolecular termolecular ution of H ⁺ ions			
	a) c) The ph a) c)	unimolecular bimolecular I of a solution increases from 1 to 2. The concederates	b) d) entra	trimolecular termolecular tion of H ⁺ ions increases			
7	a) c) The ph a) c)	unimolecular bimolecular I of a solution increases from 1 to 2. The concederaces decreases remains the same	b) d) entra b) d)	trimolecular termolecular tion of H ⁺ ions increases			
7	a) c) The ph a) c) The co a)	unimolecular bimolecular I of a solution increases from 1 to 2. The concederates decreases remains the same mpound that is not a lewis acid is	b) d) entra b) d)	trimolecular termolecular tion of H ⁺ ions increases becomes zero			
7	a) c) The ph a) c) The co a) c)	unimolecular bimolecular I of a solution increases from 1 to 2. The concederates decreases remains the same mpound that is not a lewis acid is BF ₃	b) d) entra b) d) b)	trimolecular termolecular ation of H ⁺ ions increases becomes zero AlCl ₃ BaCl ₂			
7	a) c) The ph a) c) The co a) c)	unimolecular bimolecular I of a solution increases from 1 to 2. The concederases remains the same mpound that is not a lewis acid is BF ₃ BeCl ₂	b) d) entra b) d) d) on is	trimolecular termolecular ation of H ⁺ ions increases becomes zero AlCl ₃ BaCl ₂			
7	a) c) The ph a) c) The co a) c) The rea	unimolecular bimolecular I of a solution increases from 1 to 2. The concederceases remains the same mpound that is not a lewis acid is BF ₃ BeCl ₂ action of ₁ H ³ and ₁ H ² to form ₂ He4 and a neutre	b) d) entra b) d) d) on is	trimolecular termolecular ation of H ⁺ ions increases becomes zero AlCl ₃ BaCl ₂ an example of			
7	a) c) The ph a) c) The co a) c) The rea a) c)	unimolecular I of a solution increases from 1 to 2. The concedereases remains the same mpound that is not a lewis acid is BF ₃ BeCl ₂ action of ₁ H ³ and ₁ H ² to form ₂ He4 and a neutron a fission reaction	b) d) entra b) d) on is b) d)	trimolecular termolecular tion of H ⁺ ions increases becomes zero AlCl ₃ BaCl ₂ an example of a fusion reaction neither a fission or fusion reaction			
7 8	a) c) The ph a) c) The co a) c) The rea a) c) Which	unimolecular H of a solution increases from 1 to 2. The concedereases remains the same mpound that is not a lewis acid is BF ₃ BeCl ₂ action of ₁ H ³ and ₁ H ² to form ₂ He4 and a neutron both fission and fusion reaction	b) d) entra b) d) on is b) d) form	trimolecular termolecular tion of H ⁺ ions increases becomes zero AlCl ₃ BaCl ₂ an example of a fusion reaction neither a fission or fusion reaction			



11	The element having no neutron in the nucleus of its atom is						
	a)	hydrogen		b)	nitrogen		
	c)	boron		d)	helium		
12	Which of the following species have three unpaired electrons?						
	a)	P ³⁻ Cr ²⁺		b)	Cr ³⁺		
	c)	Cr ²⁺		d)	Br		
13	The empirical formula of alkyne is						
	a)	C_nH_{2n+2}		b)	$C_{n}H_{2n}$		
	c)	$C_nH_{2n\text{-}2}$		d)	CnH_{2n+1}		
14	Which of the following rate law is 3 rd order overall?						
	a)	$rate = k [A]^3 [B]^1$		b)	$rate=k[A]^3[B]^3$		
	c)	$rate=k[A]^{5}[B]^{2}$		d)	$rate=k[A]^{1}[B]^{2}$		
15	Which compound is acidic in nature						
	a)	CH_4		b)	benzene		
	c)	C_2H_2		d)	anilene		
16	Which oxidation states is not shown by carbon in its compounds?						
	a)	+4		b)	+1		
	c)	0		d)	+2		
17	At constant temperature, the pressure of the gas is reduced to one third, the volume						
	a)	reduces to one t	hird	b)	increases by three times		
	c)	remains the sam	e	d)	can not be predicted		
18	The un	its of R, the gas o	constant are				
	a) erg k	c ⁻¹ mol ⁻¹	b) cal k ⁻¹ mol ⁻¹	c) joule	e k ⁻¹ mol ⁻¹ d) all of these		
19 An ageous solution of NaCl in water has vapour pressure							
	a)	equal to that of	water	b)	more than that of water		
	c)	less than that of	water	d)	none of these		
20	Which of the following reduces carboxylic acid directly to primary alcohols?						
	a)	LiAlH ₄		b)	Na+C ₂ H ₅ OH		
	c)	NaBH ₄		d)	H_2		

