

Subject : CHEMISTRY DPP No. : 2 Class: XIth

Date:

Topic :- Classification of Elements & Periodicity in Properties

1.	A π -bond is formed by a) s - s orbitals	sideways overlapping of b) <i>p-p</i> orbitals	c) <i>s-p</i> orbitals	d) s-p-s orbitas	
2.	Which oxide of nitrogen a) NO_2	n is isoelectronic with CO b) N_2O	O ₂ ? c) NO	d) N_2O_2	
3.	In which of the following a) NO_2 and NH_3	ng pairs of molecules/ionb) BF ₃ and NO ₂	ns, the central atom has c) NH_2^- and H_2O	sp^2 -hybridization? d) BF $_3$ and NH $_2^-$	
4.	Which of the following a) Cs^+	has <mark>large</mark> st ionic <mark>radi</mark> us? b) Li ⁺	c) Na ⁺	d) K ⁺	
5.	Boron cannot form whi a) BF_6^{3-}	ch o <mark>ne of</mark> the following a b) BH4	anions? c) B(OH) 4	d) BO ₂	
6.	Most covalent halide of a) $AlCl_3$	Faluminium is: b) AlI ₃	c) AlBr ₃	d)AlF ₃	
7.	The shape of ClO_3^- accoa) Planar triangle	rding to VSEPR model is b) Pyramidal	: c) Tetrahedral	d) Square planar	
8.	The correct order of increasing bond angles in the following triatomic species is: a) $NO_2^- < NO_2 < NO_2^+$ b) $NO_2^+ < NO_2 < NO_2^-$ c) $NO_2^+ < NO_2^- < NO_2^-$ d) $NO_2^- < NO_2^+ < NO_2^-$				
9.	Which of the following a) Mg — Ba	pairs has both members b) Mg — Cu	from the same group of c) $Mg - K$	f the Periodic Table? d) Mg — Na	
10.	Silicon has 4 electrons a) It gains electrons	in the outermost orbit. In b) It losses electrons	n forming the bond: c) It shares electrons	d) None of these	
11.	sp^2 -hybridization is sho a) BeCl_2	own by: b)BF ₃	c) NH ₃	d)XeF ₂	

12.	A p -block element in which last electron enters into s -orbitals of valence shell instead of p -orbital is:						
	a) As	b) Ga	c) No such element exist	d)He			
13.	Which of the following are not correct? a) Lone pair of electrons present on central atom can give rise to dipole moment b) Dipole moment is vector quantity c) CO_2 molecule has dipole moment d) Difference in electronegativities of combining atoms can lead to dipole moment						
14.		ation energies of the elements b) Be $> B > Li > Na$		d) Be $> Li > B > Na$			
15.	Differentiating electron a) s	n in inner transition elem $$ b) p	nents enters the c) <i>d</i>	orbital. d) f			
16.	Which is expected to coa) Diamond	onduct electricity? b) Molten sulphur	c) Molten KCl	d) Crystalline NaCl			
17.	Elements whose electronal Ionic bond	oneg <mark>ativit</mark> ies are 1.2 and b) Covalent bond	d 3.0, form: c) Coordinate bond	d) Metallic bond			
18.		der of ionic sizes?) At. n b) $Sn > Yb > Ce > Lu$		•			
19.	Oxygen is divalent, but sulphur exhibits variable valency of 2, 4 and 6, because: a) Sulphur is less electronegative than oxygen b) Sulphur is bigger atom than oxygen c) Ionisation potential of sulphur is more than oxygen d) Of the presence of <i>d</i> -orbitals in sulphur						
20.	O. In the Periodic Table, going down in the fluorine group a) Stability of hydrides will increases c) Electronegativity will increases d) IE will increases						