



		EXEI	RCISE	
335.	The bond order in O ₂ (A) 2	⁻ ion is (B) 1	(C) 2.5	(D) 1.5
336.	Which of the followin (A) $\rm NH_3$	g molecules has the s (B) H ₂ O	smallest bond angle? (C) H ₂ Se	(D) H ₂ S
337.	Unusually high boiling point of water is the result of (A) Intermolecular hydrogen bonding (B) Both intra and inter molecular hydrogen bonding (C) High specific heat (D) Intramolecular hydrogen bonding			
338.	Dissolution of ionic so . This implies that (A) $\Delta H_{lattice} > \Delta H_{hydrati}$ (C) $\Delta H_{hydration} > \Delta H_{lattice}$	olid in water is accom ^{on}	panied by release of e (B) $\Delta H_{lattice} = \Delta H_{hydratic}$ (D) $\Delta H_{lattice} : \Delta H_{hydratio}$	energy represented by $\Delta H_{soluiton}$
339.	In which of the follow (A) H ₂ O	ving molecules, the c (B) H ₂ S	entral atom does not (C) BF ₃	follow the octet rule? (D) CO_2
340.	d²sp³ hybridization of atomic orbitals gives(A) Triangular structure(C) Square planar structure(D) Octahedral structure			
341.	Which of the following statements is true? (A) The dipole moment of NH_3 is zero. (B) The dipole moment of NF_3 is equal to NH_3 (C) The dipole moment of NF_3 is zero (D) The dipole moment of NF_3 is less than NH_3			
342.	Which one of the foll (A) CIF	owing has zero dipole (B) CIF ₃	e moment ? (C) SiF ₄	(D) CFCl ₃
343.	Which of the followin (A) C_2H_6	g is an electron deficience (B) B_2H_6	ient molecule? (C) SiH ₄	(D) PH ₃
344.	Which of the followin (A) H_2^+	ng is paramagnetic wi (B) O ₂ -	th bond order 0.5 ? (C) B ₂	(D) F ₂
345.	Which type of bond i (A) Covalent (C) Ionic	s not present HNO_2 m	nolecule ? (B) Coordinate (D) Ionic as well as o	corrdinate

346.	Which of the followin (A) BF_3	g molecules has trigo (B) NH ₃	nal planar geometry? (C) PCl ₃	(D) IF ₃
347.	Which of the followin (A) SiF_4	g would have a perma (B) SF_4	anent dipole moment (C) XeF ₄	(D) BF ₃
348.	In TeCl ₄ , the central a (A) dsp ²	atom, tellurium, invol (B) sp ³	ves hybridization. (C) sp³d	(D) sp ³ d ²
349.	In which of the follow (A) SF_4 and XeF_4	wing pairs, the two sp (B) SO ₃ ²⁻ and NO ₃ -	becies are isostructure (C) BF_3 and NF_3	al ? (D) BrO_3^- and XeO_3
350.	The correct sequenc (A) LiCl < NaCl < BeC (C) NaCl < LiCl < BeC	e of increasing covale Cl Cl ₂	ent character is repre (B) BeCl ₂ < LiCl < Na (D) BeCl ₂ < NaCl < Li	esented by Cl iCl
351.	What is the correct of (A) NH N < OH (C) CIH CI < NH	order of the strength O < FH F - N < OH O	of hydrogen bonds? (B) CIH CI > NH - (D) NH N > OH	- N > OH O · O > FH F
352.	Bond angle of 109°28' is found in			
	(A) NH ₃	(B) H ₂ O	(C) [⊕] CH ₃	(D) [⊕] NH ₄
353.	Which of the followin (A) NH_3	g molecules has almo (B) H ₂ O	ost negligible tendenc (C) HF	y to form hydrogen bonds? (D) HI
354.	Identify the correct	sequence of increas	sing number of π -bo	nds in the structures of the
	(I) $H_2S_2O_6$ (A) I, II, III	(II) H ₂ SO ₃ (B) II, III, I	(III) H ₂ S ₂ O ₅ (C) II, I, III	(D) I, III, II
355.	First compound of in	itert gases was prepa	red by scientist Neil	Barthleta in 1962. This com-
	(A) XePtF ₆	(B) XeO ₃	(C) XeF ₆	(D) XeOF ₄
356.	Which bond angle, θ would result in the maximum dipole moment for the triatomic molecule XY_2 shown below:			
	Y C	—-Y		

(^ `	1000		$(C) \land 14 \Box 0$		
(A	$) \theta = 1/0^{\circ}$	$(B) \theta = 90^{\circ}$	$(0) \theta = 145^{\circ}$	(1)	$10 = 1/5^{\circ}$
	/ * ===	(=) = = =	(0) = .0	· - ·	,

357. Which of the following has the highest bond order ? $(A) N_2$ (B) O₂ $(C) He_2$ (D) H₂

x

- 358. The energy of hydrogen bond is of the order of (A) 40 kJ mol⁻¹ (B) 140 kJ mol⁻¹ (C) 400 kJ⁻¹ (D) 4 kJ mol⁻¹
- 359 (D) π -orbital

360.	Which of the followng is diamagnetic ?					
	(A) H ₂ ⁺	(B) O ₂	(C) Li ₂	(D) He ₂ +		