

CLASS:
12

**INDIAN SCHOOL MUSCAT
SECOND PERIODIC TEST**

SUBJECT:
CHEMISTRY

SET - B

Q.NO.	VALUE POINTS	SPLIT UP MARKS
1.	structure	1
2.	$3\text{Cl}_2 + 6\text{NaOH} \rightarrow \text{NaClO}_3 + 5\text{NaCl} + 3\text{H}_2\text{O}$	$\frac{1}{2} + \frac{1}{2}$
3.	Ionization enthalpy of xenon is the least of all noble gases / nearly equal to ionization enthalpy of oxygen	1
4.	a) $\text{XeF}_4 + \text{SbF}_5 \rightarrow [\text{XeF}_3]^+ [\text{SbF}_6]^-$ b) $5\text{SO}_2 + 2\text{MnO}_4^- + 2\text{H}_2\text{O} \rightarrow 5\text{SO}_4^{2-} + 4\text{H}^+ + 2\text{Mn}^{2+}$	1 $\frac{1}{2} + \frac{1}{2}$
5.	a) Due to strong hydrogen bonds between ammonia molecules b) I-Cl [interhalogen] bond is weaker than I-I	1 1
6.	Reacting ozone with excess KI to which borate buffer is added/liberated iodine estimated with standard sodium thiosulphate solution	1 1
7.	a) Due to small size of oxygen atom O-O bond experiences greater interelectronic repulsions which makes it weaker when compared to S-S. b) low bond dissociation energy of F-F and high hydration enthalpy of fluoride ion	1 $\frac{1}{2} + \frac{1}{2}$
8.	a) $\text{BiH}_3, \text{AsH}_3, \text{SbH}_3, \text{PH}_3, \text{NH}_3$ b) $\text{H}_2\text{O}, \text{H}_2\text{S}, \text{H}_2\text{Se}, \text{H}_2\text{Te}$ c) $\text{HF}, \text{HCl}, \text{HBr}, \text{HI}$	1 1 1
9.	structures	1 each
10.	Equations + conditions	2+1