

PRACTICE TEST

Level 1

CLASS: XII

Unit 7: The p-Block Elements

Full marks: 20

Time: 40 Min

Q.No	Questions	M
1	The oxides of the type E_2O_3 of nitrogen and phosphorus are acidic. True/False?	1
2	Complete the reaction: $Ca_3N_2 + H_2O \rightarrow$	1
3	Write the reaction for What happens when ammoniumdichromate is heated?	1
4	Write the reaction for What happens when bariumazide is heated?	1
5	Explain why dinitrogen is relatively less reactive while phosphorous is highly reactive.	2
6	Mention the conditions required to maximise the yield of ammonia in Habers process.	2
7	Answer the following: i. Why does PCl_3 fume in moisture? ii. What happens when sulphur dioxide is passed through an aqueous solution of Fe(III) salt?	2
OR		
Arrange the following in the order of property indicated for each set: (ii) HF, HCl, HBr, HI - increasing acid strength. (iii) NH_3 , PH_3 , AsH_3 , SbH_3 , BiH_3 – increasing base strength.		
8	i. Elements of Group 16 generally show lower value of first ionisation enthalpy compared to the corresponding periods of group 15. Why? ii. What inspired N. Bartlett for carrying out reaction between Xe and PtF_6 ?	2
OR		
	i. With what neutral molecule is ClO^- isoelectronic? ii. Arrange the following in the order of increasing bond dissociation enthalpy. F_2 , Cl_2 , Br_2 , I_2	
9	Write the conditions to maximise the yield of H_2SO_4 by Contact process.	2
10	1. Halogens have maximum negative electron gain enthalpy in the respective periods of the periodic table. Why? 2. Although electron gain enthalpy of fluorine is less negative as compared to chlorine, fluorine is a stronger oxidising agent than chlorine. Why? 3. Fluorine exhibits only -1 oxidation state whereas other halogens exhibit + 1, + 3, + 5 & + 7 oxidation states also. Explain.	3
11	Answer the following- a. How does ammonia react with a solution of Cu^{2+} ? b. Why does NO_2 dimerise? c. What is the covalence of nitrogen in N_2O_5 ?	3