

P S Senior sec school Mylapore

P block elements -17th group

1.	Why halogens have maximum negative electron gain enthalpy?
2.	Why Electron gain enthalpy of fluorine is less negative than chlorine?
3.	Why halogens are coloured?
4.	Although electron gain enthalpy of fluorine is less negative as compared to chlorine , fluorine is a stronger oxidising agent than chlorine. Why?
5.	Give two examples to show anomalous behaviour fluorine and state the reason for that.
6.	Write the uses of ClO_2 and I_2O_5
7.	What happens when chlorine is treated with a. cold and dil. NaOH b. Excess ammonia
8.	Explain Deacon process.
9.	Write two poisonous gases obtained from chlorine
10.	Why Bond dissociation enthalpy of fluorine is lower than chlorine?
11.	Why chlorine water loses its yellow colour on standing?
12.	Give reason for the bleaching action of chlorine.
13.	What happens when Iron is treated with HCl?
14.	What is meant by aqua regia? Write its one use with equation.
15.	Draw the structure of HOCl and HClO_4
16.	What are interhalogen compounds? How are they prepared?
17.	Why interhalogen compounds are more reactive than halogens?
18.	Draw the shape of a. BrF_3 b. IF_7 c. BrF_5
19.	Why are halogens strong oxidising agents?
20.	Name one oxoacid formed by Fluorine
21.	Complete the following: a. $\text{F}_2 + \text{H}_2\text{O} \text{-----}>$. b. $\text{NaCl} + \text{H}_2\text{SO}_4 + \text{MnO}_2 \text{-----}>$ c. $\text{Cl}_2 + \text{NaI} \text{-----}\rightarrow$ d. $\text{NaHCO}_3 + \text{HCl} \text{-----}\rightarrow$ e. $\text{Cl}_2 + \text{H}_2\text{O} \text{-----}\rightarrow$ f. $\text{Ca}(\text{OH})_2 + \text{Cl}_2 \text{-----}\rightarrow$
22.	Arrange the following in the order of property indicated for each set: a. F_2 I_2 Br_2 Cl_2 (increasing order of BDE) b. HF HCl HBr HI (increasing acidic strength) c. HOCl HClO_2 HClO_3 HClO_4 (increasing acid strength)
23.	Why are pentahalides are more covalent than trihalides?
24.	Account for the following: a. ClF_3 exists but FCl_3 does not. b. HF is stored in wax coated bottles. c. Bleaching action of chlorine is permanent. d. NCl_3 is hydrolyse but NF_3 does not. e. SnCl_4 is more covalent than SnCl_2 f. Fluorine does not exhibit any positive oxidation state. g. ICl is more reactive than Iodine
25.	With what neutral molecule is ClO^- isoelectronic? Is that molecule a lewis base?
26.	A greenish yellow gas A is obtained by treating Manganese chloride with potassium permanganate. A reacts with Hydrogen forms B , when B is treated with ammonia forms white dense fumes. A also reacts with hot and concentrated NaOH forms C and D. Identify A,BC and D . write the equations involved.