

NEET P-BLOCK ELEMENTS (GROUP 15–18) — GROUP 17 ELEMENTS (HALOGEN FAMILY) — PYQS

Max. Marks: 92

Questions: 23

Section A (MCQ) — 23 questions

Q.1 Given below are two statements :

In light of the above statements, choose the most appropriate answer from the options given below.

Statement-I: Heating NaCl with concentrated H_2SO_4 and MnO_2 results in oxidation of Mn.

Statement-II: Heating NaI with concentrated H_2SO_4 and MnO_2 results in reduction of Mn.

[RE-NEET (UG) 2026]

- (1) Statement-I is incorrect but Statement-II is correct
- (2) Both Statement-I and Statement-II are correct
- (3) Both Statement-I and Statement-II are incorrect
- (4) Statement-I is correct but Statement-II is incorrect

Scan or tap for the
full solution



Q.2 Identify the incorrect statement from the following :

[RE-NEET (UG) 2024]

- (1) The acidic strength of HX (X = F, Cl, Br and I) follows the order: $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$.
- (2) Fluorine exhibits -1 oxidation state whereas other halogens exhibit $+1$, $+3$, $+5$ and $+7$ oxidation states also.
- (3) The enthalpy of dissociation of F_2 is smaller than that of Cl_2 .
- (4) Fluorine is stronger oxidising agent than chlorine.

Scan or tap for the
full solution



Q.3 Given below are two statements : one is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**

Assertion (A): ICl is more reactive than I_2

Reason (R): I – Cl bond is weaker than I – I bond.

In the light of the above statements, choose the most appropriate answer from the options given below:

[NEET (UG) 2022]

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A).
- (2) Both (A) and (R) are correct but (R) is not the correct explanation of (A).
- (3) (A) is correct but (R) is not correct.
- (4) (A) is not correct but (R) is correct.

Scan or tap for the
full solution



Q.4 Fluorine is a stronger oxidising agent than chlorine because :

- A. F-F bond has a low enthalpy of dissociation.
- B. Fluoride ion (F^-) has high hydration enthalpy.
- C. Electron gain enthalpy of fluorine is less negative than chlorine.
- D. Fluorine has a very small size.

Choose the most appropriate answer from the options given :

[NEET (UG) 2022 (Phase 2)]

- (1) B and C only
- (2) A and B only
- (3) A and C only
- (4) A and D only

Scan or tap for the
full solution



Q.5 **Statement-I:** Acid strength increases in the order given as $\text{HF} \ll \text{HCl} \ll \text{HBr} \ll \text{HI}$.

Statement-II: As the size of the elements, F, Cl, Br, I increases down the group, the bond strength of HF, HCl, HBr and HI decreases and so the acid strength increases.

In the light of the above statements, choose the correct answer from the options given below.

[NEET (UG) 2021]

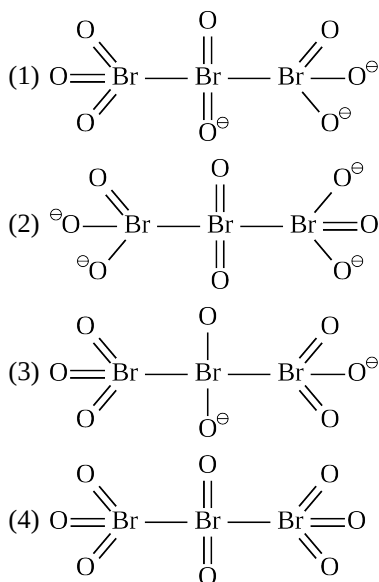
- (1) Statement-I is incorrect but Statement-II is true.
- (2) Both Statement-I and Statement-II are true.
- (3) Both Statement-I and Statement-II are false.
- (4) Statement-I is correct but Statement-II is false.

Scan or tap for the
full solution



Q.6 The correct structure of tribromooctaoxide is :

[NEET (UG) 2019]



Scan or tap for the full solution 

Q.7 Which of the following statements is not true for halogens? [NEET 2018]

- (1) All are oxidizing agents.
- (2) All form monobasic oxyacids.
- (3) All but fluorine show positive oxidation states.
- (4) Chlorine has the highest electron-gain enthalpy.

Scan or tap for the full solution 

Q.8 Match the interhalogen compounds of **column-I** with the geometry in **column-II** and assign the correct code. [NEET 2017]

Column-I		Column-II	
a.	XX'	i.	T-shape
b.	XX'_3	ii.	Pentagonal bipyramidal
c.	XX'_5	iii.	Linear
d.	XX'_7	iv.	Square pyramidal
		v.	Tetrahedral

- (1) (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
- (2) (a)-(v), (b)-(iv), (c)-(iii), (d)-(ii)
- (3) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- (4) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)

Scan or tap for the full solution 

Q.9 HgCl_2 and I_2 both when dissolved in water containing I^- ions, the pair of species formed is [NEET 2017]

- (1) HgI_2 , I^-
- (2) HgI_4^{2-} , I_3^-
- (3) Hg_2I_2 , I^-
- (4) HgI_2 , I_3^-

Scan or tap for the full solution 

Q.10 Which one of the following orders is correct for the bond dissociation enthalpy of halogen molecules?

[NEET 2016 (Phase 1)]

- (1) $\text{Br}_2 > \text{I}_2 > \text{F}_2 > \text{Cl}_2$
- (2) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$
- (3) $\text{I}_2 > \text{Br}_2 > \text{Cl}_2 > \text{F}_2$
- (4) $\text{Cl}_2 > \text{Br}_2 > \text{F}_2 > \text{I}_2$

Scan or tap for the full solution 

Q.11 Among the following the correct order of acidity is [NEET 2016 (Phase 1)]

- (1) $\text{HClO}_2 < \text{HClO} < \text{HClO}_3 < \text{HClO}_4$
- (2) $\text{HClO}_4 < \text{HClO}_2 < \text{HClO} < \text{HClO}_3$
- (3) $\text{HClO}_3 < \text{HClO}_4 < \text{HClO}_2 < \text{HClO}$
- (4) $\text{HClO} < \text{HClO}_2 < \text{HClO}_3 < \text{HClO}_4$

Scan or tap for the full solution 

Q.12 The variation of the boiling points of the hydrogen halides is in the order $\text{HF} > \text{HI} > \text{HBr} > \text{HCl}$.

What explains the higher boiling point of hydrogen fluoride? [AIPMT 2015]

- (1) There is strong hydrogen bonding between HF molecules.
- (2) The bond energy of HF molecules is greater than in other hydrogen halides.
- (3) The effect of nuclear shielding is much reduced in fluorine which polarises the HF molecule.
- (4) The electronegativity of fluorine is much higher than for other elements in the group.

Scan or tap for the full solution 

Q.13 Which is the strongest acid in the following?

[NEET 2013]

- (1) HClO_4
- (2) H_2SO_3
- (3) H_2SO_4
- (4) HClO_3

Scan or tap for the full solution 

Q.14 Among the following which is the strongest oxidising agent? [AIPMT 2009]

- (1) Br_2
- (2) I_2
- (3) Cl_2
- (4) F_2

Scan or tap for the full solution 

Q.15 Which of the following arrangements do not give the correct picture of the trends indicated against them? [AIPMT 2008]

- (1) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Bond dissociation energy
- (2) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Electronegativity
- (3) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Oxidizing power
- (4) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Electron gain enthalpy

Scan or tap for the full solution 

Q.16 Which one of the following orders correctly represents the increasing acid strengths of the given acids? [AIPMT 2007]

- (1) $\text{HOClO} < \text{HOCl} < \text{HOClO}_3 < \text{HOClO}_2$
- (2) $\text{HOClO}_2 < \text{HOClO}_3 < \text{HOClO} < \text{HOCl}$
- (3) $\text{HOClO}_3 < \text{HOClO}_2 < \text{HOClO} < \text{HOCl}$
- (4) $\text{HOCl} < \text{HOClO} < \text{HOClO}_2 < \text{HOClO}_3$

Scan or tap for the full solution



Q.17 Which one of the following orders is not in accordance with the property stated against it? [AIPMT 2006]

- (1) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Bond dissociation energy
- (2) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Oxidising power
- (3) $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$: Acidic property in water
- (4) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Electronegativity

Scan or tap for the full solution



Q.18 Which one of the following orders is not in accordance with the property stated against it? [AIPMT 2006]

- (1) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Bond dissociation energy
- (2) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Oxidising power
- (3) $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$: Acidic property in water
- (4) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$: Electronegativity.

Scan or tap for the full solution



Q.19 Which one of the following oxides is expected to exhibit paramagnetic behaviour? [AIPMT 2005]

- (1) CO_2 (2) SiO_2 (3) SO_2 (4) ClO_2

Scan or tap for the full solution



Q.20 Which one of the following orders correctly represents the increasing acid strengths of the given acids? [AIPMT 2005]

- (1) $\text{HOClO} < \text{HOCl} < \text{HOClO}_3 < \text{HOClO}_2$
- (2) $\text{HOClO}_3 < \text{HOClO}_2 < \text{HOClO} < \text{HOCl}$
- (3) $\text{HOClO}_2 < \text{HOClO}_3 < \text{HOClO} < \text{HOCl}$
- (4) $\text{HOCl} < \text{HOClO} < \text{HOClO}_2 < \text{HOClO}_3$

Scan or tap for the full solution



Q.21 Which one of the following statements is not true? [AIPMT 2003]

- (1) Among halide ions, iodide is the most powerful reducing agent.
- (2) Fluorine is the only halogen that does not show a variable oxidation state.
- (3) HOCl is a stronger acid than HOBr .
- (4) HF is a stronger acid than HCl .

Scan or tap for the full solution



Q.22 Which of the following statement is true? [AIPMT 2002]

- (1) Silicon exhibits 4 coordination number in its compounds
- (2) Bond energy of F_2 is less than Cl_2
- (3) Mn(III) oxidation state is more stable than Mn(II) in aqueous state
- (4) Elements of 15th group show only +3 and +5 oxidation states

Scan or tap for the full solution



Q.23 Which statement is wrong? [AIPMT 2000]

- (1) Bond energy of $\text{F}_2 > \text{Cl}_2$
- (2) Electronegativity of $\text{F} > \text{Cl}$
- (3) F is more oxidising than Cl
- (4) Electron affinity of $\text{Cl} > \text{F}$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7
Ans.	1	1	1	2	2	4	3
Ques.	8	9	10	11	12	13	14
Ans.	1	2	4	4	1	1	4
Ques.	15	16	17	18	19	20	21
Ans.	1, 4	4	1	1	4	4	4
Ques.	22	23					
Ans.	2	1					