

NEET CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES — ELECTRON GAIN ENTHALPY — PYQS

Max. Marks: 28

Questions: 7

Section A (MCQ) — 7 questions

Q.1 Among the following options, the correct trend in the electron gain enthalpy is [RE-NEET (UG) 2026]

- (1) $I > Br > Cl > F$ (2) $F > Cl > Br > I$
 (3) $Br > Cl > F > I$ (4) $Cl > F > Br > I$

Scan or tap for the full solution



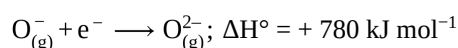
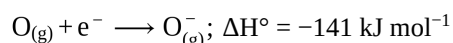
Q.2 In which of the following options the order of arrangement does not agree with the variation of property indicated against it? [NEET 2016 (Phase 1)]

- (1) $I < Br < Cl < F$ (increasing electron gain enthalpy)
 (2) $Li < Na < K < Rb$ (increasing metallic radius)
 (3) $Al^{3+} < Mg^{2+} < Na^+ < F^-$ (increasing ionic size)
 (4) $B < C < N < O$ (increasing first ionisation enthalpy)

Scan or tap for the full solution



Q.3 The formation of the oxide ion, $O^{2-}_{(g)}$ from oxygen atom requires first an exothermic and then an endothermic step as shown below:



Thus, process of formation of O^{2-} in gas phase is unfavourable even though O^{2-} is isoelectronic with neon. It is due to the fact that, [AIPMT 2015]

- (1) O^- ion has comparatively smaller size than oxygen atom
 (2) oxygen is more electronegative
 (3) addition of electron in oxygen results in larger size of the ion
 (4) electron repulsion outweighs the stability gained by achieving noble gas configuration.

Scan or tap for the full solution



Q.4 Which one of the following arrangements represents the correct order of least negative to most negative electron gain enthalpy for C, Ca, Al, F and O? [NEET 2013 (Karnataka)]

- (1) $Al < Ca < O < C < F$ (2) $Al < O < C < Ca < F$
 (3) $C < F < O < Al < Ca$ (4) $Ca < Al < C < O < F$

Scan or tap for the full solution



Q.5 What is the value of electron gain enthalpy of Na^+ if IE_1 of Na = 5.1 eV? [AIPMT 2011 (Mains)]

- (1) -5.1 eV (2) -10.2 eV
 (3) +2.55 eV (4) +10.2 eV

Scan or tap for the full solution



Q.6 Which of the following represents the correct order of increasing electron gain enthalpy with negative sign for the elements O, S, F and Cl? [AIPMT 2010 (Prelims)]

- (1) $Cl < F < O < S$ (2) $O < S < F < Cl$
 (3) $F < S < O < Cl$ (4) $S < O < Cl < F$

Scan or tap for the full solution



Q.7 Which one of the following arrangements represents the correct order of electron gain enthalpy (with negative sign) of the given atomic species? [AIPMT 2005]

- (1) $S < O < Cl < F$ (2) $Cl < F < S < O$
 (3) $F < Cl < O < S$ (4) $O < S < F < Cl$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7
Ans.	4	1, 4	4	4	1	2	4