

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

Max. Marks: 20
Questions: 5

Section A (MCQ) — 5 questions

- Q.1** Which of the following statements are correct?
- The process of adding an electron to a neutral gaseous atom is always exothermic.
 - The process of removing an electron from an isolated gaseous atom is always endothermic.
 - The 1st ionization energy of boron is less than that of beryllium.
 - The electronegativity of C is 2.5 in CH₄ and CCl₄
 - Li is the most electropositive among elements of group I.
- Choose the correct answer from the options given below: [JEE Main 2025 (Online) 3rd April Morning Shift]
- (1) A, C and D Only (2) B and C Only
(3) B and D Only (4) B, C and E Only

 Scan or tap for the full solution 

- Q.2** Match List I with List II

LIST I (Elements)		LIST II (Properties in their respective groups)	
A.	Cl, S	I.	Elements with highest electronegativity
B.	Ge, As	II.	Elements with largest atomic size
C.	Fr, Ra	III.	Elements which show properties of both metals and non-metal
D.	F, O	IV.	Elements with highest negative electron gain enthalpy

Choose the correct answer from the options given below: [JEE Main 2024 (Online) 8th April Morning Shift]

- (1) A-III, B-II, C-I, D-IV
(2) A-II, B-I, C-IV, D-III
(3) A-II, B-III, C-IV, D-I
(4) A-IV, B-III, C-II, D-I

 Scan or tap for the full solution 

- Q.3** The electron affinity values are negative for
- Be $\rightarrow$ Be⁻
 - N $\rightarrow$ N⁻
 - O $\rightarrow$ O²⁻
 - Na $\rightarrow$ Na⁻
 - Al $\rightarrow$ Al⁻
- Choose the most appropriate answer from the options given below :

[JEE Main 2024 (Online) 6th April Morning Shift]

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

 Scan or tap for the full solution 

- Q.4** The correct sequence of electron gain enthalpy of the elements listed below is
- Ar
 - Br
 - F
 - S
- Choose the **most appropriate** from the options given below:

[JEE Main 2024 (Online) 31st January Morning Shift]

- (1) A > D > C > B (2) A > D > B > C
(3) D > C > B > A (4) C > B > D > A

 Scan or tap for the full solution 

- Q.5** Given below are two statements:
- Statement-I:** Fluorine has most negative electron gain enthalpy in its group.
- Statement-II:** Oxygen has least negative electron gain enthalpy in its group.

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

[JEE Main 2024 (Online) 29th January Evening Shift]

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

 Scan or tap for the full solution 

ANSWER KEY

Ques.	1	2	3	4	5						
Ans.	2	4	4	2	3						