

NEET P-BLOCK ELEMENTS (GROUP 15–18) — GROUP 18 ELEMENTS (NOBLE GAS FAMILY) — PYQS

Max. Marks: 24
Questions: 6

Section A (MCQ) — 6 questions

Q.1 Given below are two statements : one is labelled as Assertion A and the other is labelled as Reason R.
Assertion (A): Helium is used to dilute oxygen in diving apparatus.

Reason (R): Helium has high solubility in O_2 .

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

[NEET (UG) 2023]

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

Scan or tap for the full solution



Q.2 Noble gases are named because of their inertness towards reactivity. Identify an incorrect statement about them.

[NEET (UG) 2021]

- (1) Noble gases have large positive values of electron gain enthalpy
- (2) Noble gases are sparingly soluble in water
- (3) Noble gases have very high melting and boiling points
- (4) Noble gases have weak dispersion forces

Scan or tap for the full solution



Q.3 Match the Xenon compounds in **Column-I** with its structure in **Column-II** and assign the correct code :

[NEET (UG) 2019]

Column-I		Column-II	
a.	XeF_4	i.	pyramidal
b.	XeF_6	ii.	square planar
c.	$XeOF_4$	iii.	distorted octahedral
d.	XeO_3	iv.	square pyramidal

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

Scan or tap for the full solution



Q.4 Match the compounds given in **column I** with the hybridisation and shape given in **column II** and mark the correct option

[NEET 2016 (Phase 1)]

Column I		Column II	
a.	XeF_6	i.	distorted octahedral
b.	XeO_3	ii.	square planar
c.	$XeOF_4$	iii.	pyramidal
d.	XeF_4	iv.	square pyramidal

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

Scan or tap for the full solution



Q.5 Identify the incorrect statement, regarding the molecule XeO_4 :

[NEET 2013 (Karnataka)]

- (1) XeO_4 molecule is square planar.
- (2) There are four $p\pi - d\pi$ bonds.
- (3) There are four $sp^3 - p, \sigma$ bonds.
- (4) XeO_4 molecule is tetrahedral.

Scan or tap for the full solution



Q.6 Which compound has planar structure?

[AIPMT 2000]

- (1) XeF_4 (2) $XeOF_2$ (3) XeO_2F_2 (4) XeO_4

Scan or tap for the full solution



ANSWER KEY

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