

NEET D- AND F-BLOCK ELEMENTS — ACTINOIDS: ELECTRONIC CONFIGURATION, IONIC SIZES AND OXIDATION STATES — PYQS

Max. Marks: 16
Questions: 4

Section A (MCQ) — 4 questions

Q.1 Decrease in size from left to right in actinoid series is greater and gradual than that in lanthanoid series due to [NEET (UG) 2022 (Phase 2)]

- (1) 5f orbitals have greater shielding effect
- (2) 4f orbitals are penultimate
- (3) 4f orbitals have greater shielding effect
- (4) 5f orbitals have poor shielding effect

Scan or tap for the full solution



Q.2 The reason for greater range of oxidation states in actinoids is attributed to [NEET 2017]

- (1) actinoid contraction
- (2) 5f, 6d and 7s levels having comparable energies
- (3) 4f and 5d levels being close in energies
- (4) the radioactive nature of actinoids.

Scan or tap for the full solution



Q.3 Which of the following exhibits only + 3 oxidation state? [AIPMT 2012 (Mains)]

- (1) U (2) Th (3) Ac (4) Pa

Scan or tap for the full solution



Q.4 More number of oxidation states are exhibited by the actinoids than by the lanthanoids. The main reason for this is [AIPMT 2005]

- (1) more active nature of the actinoids
- (2) more energy difference between 5f and 6d orbitals than that between 4f and 5d orbitals
- (3) lesser energy difference between 5f and 6d orbitals than that between 4f and 5d orbitals
- (4) greater metallic character of the lanthanoids than that of the corresponding actinoids.

Scan or tap for the full solution



ANSWER KEY

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