

ATOMIC ENERGY CENTRAL SCHOOL-3, TARAPUR

MODULE-2

WORK-SHEET

UNIT: d and f-block elements

Chapter : f-block elements

Answer the following questions :

1. Why Lanthanides and actinides are called as f- block elements?
2. Write the stable common oxidation state shown by lanthanides.
3. Explain Lanthanoid contraction. Give reason of this and write its consequences.
4. Why the study of actinides is more difficult?
5. Actinoid contraction is greater from element to element than lanthanoid contraction. Why?
6. There is a greater range in oxidation states in actinides why?
7. Why Ce(IV) is a strong oxidant agent ?
8. Why La^{3+} and Lu^{3+} are colourless?
9. Compare the chemistry of the actinoids with that of lanthanoids with reference to:
 - (i) electronic configuration
 - (ii) oxidation states and
 - (iii) chemical reactivity.
10. Why the elements of f-block are called as inner transition metals?
