

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc. Chemistry - END SEMESTER EXAMINATIONS APRIL - 2024

SEMESTER - IV

22UCHCT4008 - Transition, Inner Transition Elements And Metallurgy

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Discuss the following properties of d-block elements.
a) Atomic radii b) Ionic radii d) Metallic character.
2. Discuss the magnetic and catalytic properties of vanadium.
3. Explain Alumino thermic Reduction.
4. How gold electroplating and silvering of mirror are done?
5. Explain lanthanide contraction and effects.
6. How Thorium is extracted from its ore?
7. Explain the various types of Platinum.
8. Differentiate Transition and Non-Transition elements.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain the different steps involved in the extraction of metal from its ore.
10. Explain the role of sodium, potassium, iron and calcium in biological process.
11. Discuss the various types of Refining process of metals.
12. Discuss the oxidation state, magnetic, colour and catalytic properties of Titanium and Manganese.
13. Write a note on actinides series.
