

List of Important Questions

1. What are Silicones? Explain the classification, preparation and applications of Silicones.
2. Explain the the preparation and structure of Diborane.
3. What are Oxides? Explain the classification of Oxides based on Oxygen content and chemical behaviour.
4. Write a short note on Pseudo halogens.
5. What is Lanthanide contraction? Explain the consequences of Lanthanide contraction.
6. Write the differences between Lanthanides and Actinides.
7. Explain the following characteristic properties of d-block elements.
 - (a) Variable oxidation states and their stability
 - (b) Magnetic properties
 - (c) Catalytic properties
 - (d) Ability to form complexes
8. What are Organometallic compounds? Explain the classification of Organometallic compounds based on Carbon-Metal (C-M) bond.
9. What are Grignard reagents? Explain the preparation and synthetic applications of Grignard reagents.
10. What are Interhalogen compounds? Explain the preparation and structures of AX, AX₃, AX₅ and AX₇ type Interhalogen compounds.
11. Explain the abnormal electronic configurations of Cr and Cu.
12. Explain the preparation and structure of Borazole.
13. Explain the preparation and structure of P₃N₃Cl₆.
14. Explain the separation of Lanthanides by ion-exchange method.
15. What are Super Grignard reagents? Explain the preparation and synthetic applications of Super Grignard reagents
16. Write a short note on Latimer diagrams.
17. Explain Actinide contraction in detail.
18. Explain the structures of Oxides of Sulphur.
19. Explain the structures of Oxoacids of Sulphur.
20. Write a short note on Silanes.