Class 11 JEE Chemistry

SOME APPLICATIONS OF d& f- BLOCK ELEMENTS

1. Iron and steel stand out as paramount materials in the construction industry due to their exceptional properties. The production process involves reducing iron oxides, eliminating impurities, and incorporating carbon as well as alloying metals like chromium, manganese, and nickel.

- 2. Certain compounds are synthesized for specific applications; for instance, titanium dioxide (TiO_2) serves the pigment industry, while manganese dioxide (MnO_2) finds utility in dry cell batteries, often in conjunction with zinc.
- 3. Many elements or compounds within the d-block and f-block categories serve crucial roles as catalysts, facilitating various chemical reactions across industries.
- 4. Silver bromide (AgBr) plays a significant role in photography as a vital chemical component. Additionally, silver (Ag) and silver iodide (AgI) are also utilized in photographic processes.