FCYC201	Inorganic Chemistry-II	3-0-0	3

Module-I

s-block elements: Comparative study, diagonal relationships, salient features of hydrides, salvation and complexation tendencies including their function in biosystems, an introduction to alkyls and aryls **[4hrs]**

Module-II

p-block elements: Comparative study (including diagonal relationship) of group 13-17 elements, compounds like hydrides, oxides, oxyacids and halides of groups 13-16, hydrides of boron-diborane and higher boranes, borazine, boronhydrides, fullerenes, carbides, fluorocarbons, silicates(structural principle), S_4N_4, basic properties of halogens, interhalogens and polyhalides. **[15hrs]**

Module-III

Chemistry of noble gases: Chemical properties, chemistry of xenon, structure and bonding in xenon compounds **[4hrs]**

Module-IV

Chemistry of Elements of First Transition Series

Electronic configuration, Characteristic properties of d-block elements and chemistry of first row transition elements, oxidation states, variable valancies, atomic and ionic radii, electron affinity, electronegativity, ionisation potential, colour and magnetic properties tendency, complex formation, coordination number and geometry. **[7hrs]**

Essential readings:

1. J.D. Lee, Concise Inorganic Chemistry, 5th edition, Blackwell Publishing, 2008
2. Huheey, Keiter and Keiter, Inorganic chemistry Principle, structure and reactivity. 4Th edn
3. Inorganic Chemistry R.D.Madan, S.Chand Publication
4. Basic Inorganic Chemistry Cotton & Willikinson