St. Ann's College For Women, Mehdipatnam, Hyderabad – 28

ANNEXURE1 – TABLE – A, CURRICULAM PLANS – LECTURER WISE – 2013 – 2014

Dept: Chemistry Class: B. Sc. II Paper: I Unit I (Inorganic chemistry)

S. No	Month	Hours Allotted	Lecture no.	Syllabus Topic	Av Aids used
1.	June	3+1*	1 -4	**Chemistry of d-block elements** 1. Introduction 2. Characteristics of d-block with refernce to electronic configuration 3. Ionic radi, IP 4. variable valance, Stability/prop. of various oxidation states & e.m.f	Ppt/power board
2	July	4	5 - 8	5. Oxidation state 6. Magnetic properties 7. Colour , catalytic properties, 8. ability to form complexes,	Ppt/power board
3	August	4	9 - 12	9. Comparitive treatment of second and third transition series with their 3rd analogues 10. Study of Ti, Cr, Cu traids in respect of electronic configuration 11. Study of Ti, Cr, Cu traids in respect of electronic configuration **Chemistry of f-block elements** 12. Chemistry of Lanthanides-electronic structure. oxidation states,	Ppt/power board
4	Sep.	4	13 - 16	13. lanthanide contraction - Consequences of lanthanide contraction 14. Magnetic properties, spectral properties 15. Separation of Lanthanides by ion exchange and solvent extraction methods. 16. Chemistry of Actinides- electronic Configuration, oxidation states, actinide contraction	Ppt/power board
	October	1	17	**17.** Comparison with lanthanides in terms of Magnetic properties, spectral properties and Complex formation	--

	Nov.	**4 + 2***	**18 - 23**	**Theories of bonding in metals** 18. Valence bond theory Explanation of metallic properties and its limitations 19. Free electron theory Thermal and electrical conductivity of metals, limitations 20. Band theory, formation of bands 21. Conductors, semicondutors, insulators **Metalcarbonyls and its related compounds** 22. EAN rule, classification of metalcarbonyls Structures of metalcarbonyls Shapes of metalcarbonyls of Vanadim, Cr 23. Shapes of metalcarbonyls of Fe, Mn	-- **Ppt/power board**
	Dec.	**3**	**24 - 26**	24. Shapes of metalcarbonyls of Co, Ni 25. Metal nitrosyls 26. Metallocenes	**Ppt/power board**
	January	**3**	**27 - 29**	Revision	

- **Special classes**