

SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc (Industrial Chemistry)
Semester: VI
Syllabus with Effect from: November-2013

Paper Code: US06CICH01	Total Credit: 3
Title of Paper: Synthetic Dyes & Intermediates	

Unit	Description in detail	Weightage (%)
I	Introduction to the Dyes, Natural to synthetic dyes, Theories of colour, Classification of Dyes on the basis of structure and the mode of application to the fibers and Chemical constitution of dyes.	25%
II	Chemistry of the following dyes with respect to general structural features, chemistry mode of application to fibers and classification: Azo dyes, Acid dyes, Basic dyes and Mordant dyes.	25%
III	Anthraquinone (VAT) dyes, Indigoid dyes. Reactive dyes and Disperse dye: Introduction, Classification and applications.	25%
IV	Analysis of dyes and dye intermediates: Nitrite value determination, Coupling value, Titanous chloride reduction, Halogen content determination, Metal Estimations: Cu, Ni, Cr, etc.	25%

Basic Text & Reference Books:

- LUBS Chemistry of synthetic dyes and pigments, R.E. Krieger Publishing Company.
- Chemistry of dyes and intermediates, Cain, Thorpe and Linstend. 1969.
- Dyeing and Chemical technology of textile fibres, E.R. Trotman.
- Development in the Chemistry and Technology of Organic Dyes, J. Driffths, Society of Chemicals Industry, Blackwell Scientific Publications
- The chemistry of Synthetic Dyes, K. Venkataraman, Academic Press, Vol. I - III.
- The analytical Chemistry of Synthetic Dyes, K. Venkateraman, John Wiley, New York.
- A Laboratory Course in Dyeing, C.H. Gites, The society of Dyes and Colourists.
- The Dyeing of Synthetic polymers and acetate fibres, D.M. Nunn, Dyers Company Publishing Trust.
- Dyes and Their Intermediates, H.A. Abrahert, Pergaman Press.

