

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E. SEMESTER : VI
CHEMICAL TECHNOLOGY

Subject Name: Principles of Dyeing & Printing

Subject Code: 163608

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam(E)	University Exam(P)	Mid Sem Exam(Theory) (M)	Practical (Internal)
4	0	3	7	70	0	30	50

Sr. No	Course contents
1.	Chemistry of substrates
2.	General considerations of the applications of different classes of synthetic dyes to important textile fibers, Introduction to physic-chemical principles involved in dyeing.
3.	Methods of dyeing & dyeing machinery.
4.	Preparation of fabrics for printing: Procedure for printing of various fabrics, Selection of thickening agents, chemical & dyestuffs for printing etc. Formulation & properties of printing pastes. Introduction to different machines used for printing & styles of printing, Printing of cotton & synthetic fabrics with various classes of dyes in different styles.

Reference Books:

1. Color & Chemical Constitutions, Griffith, Academic Press, 1976
2. Technology of Dyeing, Vol.6, Shenai V.A., Sevak Publ., Bombay, 2nd Ed., 1994
3. Hilton K.A., Dying & printing, Cockett S.R., Leonard Hill Books Ltd., London, 1961
4. Technology of Printing, Vol.4 Shenai V.A., Sevak Publ., Bombay, 2nd Ed., 1994
5. Manual of Textile Printing, Storey J., Thems & Hudson Thames & Hudson Ltd., London 1992
6. Textile Printing, Miles L.W.C., SDC, London, 2nd Ed., 1994
7. Color Chemistry: Synthesis, Properties and Applications of Organic Dyes and Pigments, Heinrich Zollinger, Wiley-VCH, 2nd Ed, 1991
8. Colour Chemistry, R M Christie, RSC, 2001
9. Fundamental Processes of Dye Chemistry, Fierz, David, Blangey, Interscience Publishers, 1955
10. Industrial Organic Chemistry, Arpe H.J. VCH, Weinheim, Weissermal K. 1993
11. Organic Synthesis, Smith M.B., Tata McGraw Hill, New York, 2nd Ed., 2004
12. Chemistry of Synthetic Dyes – Vol I, Venkatraman K., Academic Press, New York, 2009
13. Chemistry of Synthetic Dyes – Vol II, Venkatraman K., Academic Press, New York, 2009
14. Chemistry of Synthetic Dyes – Vol III, Venkatraman K., Academic Press, New York, 2009

15. Chemistry of Synthetic Dyes – Vol IV, Venkatraman K., Academic Press, New York, 2009
16. Chemistry of Synthetic Dyes – Vol V, Venkatraman K., Academic Press, New York, 2009
17. Chemistry of Synthetic Dyes – Vol VI, Venkatraman K., Academic Press, New York, 2009