

# GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. SEMESTER: VI

Textile Production

Subject Name: **Technology of Printing – I**

Subject Code: **162804**

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

Sr. No	Course Content	Total Hrs.
1.	<b>Introduction:</b> Necessity and definition of printing. Various stages involved in printing.	02
2.	<b>Equipments and Methods Used for Block, Stencil &amp; Roller Printing :</b> Engraving Process, Stencil cutting process, Methods of block & stencil printing, Engraving of copper rollers, Construction & Working of roller printing machine, Design setting mechanism in roller printing machine.	08
3.	<b>Preparation of Print Paste &amp; Thickening Agents :</b> Selection of dyes for print paste, Formulation & properties of printing paste, Classification, properties & functions of thickeners, Selection of suitable thickeners, Merits & demerits of various thickening agents.	08
4.	<b>Styles of Printing:</b> Various styles of printing: Direct style, Dyed style, Raised style, Azoic style, Resist style, Discharge style, Batik style, Crimp style, Brasso style etc.	08
5.	<b>Printing of Different Fabrics:</b> Printing of Cotton/Viscose fabric with Direct, Azoic, Vat, Indigosol, Aniline Black, Reactive & Pigment Dyes.	16
6.	<b>Methods of Fixation:</b> Necessity of dye fixation. Working of different machines like Steamer, Ager, Polymeriser, etc. for fixation of dyes.	14

### **Practical:**

This shall be based on prescribed syllabi.

### **Text Book:**

1. Technology of Printing. - V.A. Shenai

**Reference Books:**

1.	Textile Printing	L.W.C.Miles
2.	Printing on Textiles by direct and transfer techniques.	Lee, R.W.
3.	An Introduction to textile printing.	W. Clarke
4.	Textile Printing	John Storey