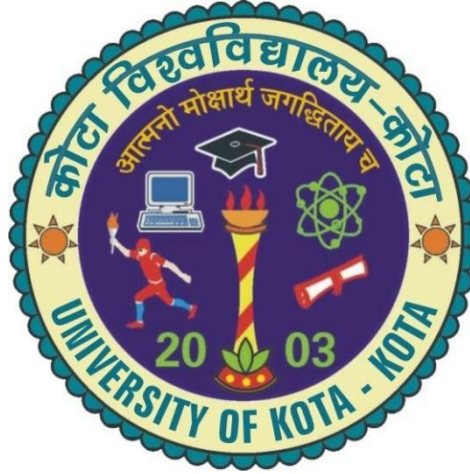


Syllabus and Course Scheme
Academic year 2024-2025



B.A. Part I
T.D.P.
Exam.-2024

**List of Papers for the Degree of B.A in Textile Dyeing
and Printing (T.D.P.)
Semester-wise Titles of the Papers in Textile Dyeing
and Printing (T.D.P.)**

Year	Sem.	Course Code	Paper Title	Theory/ Practical	Credits
FIRST YEAR	I	TDP101 TH	Weaving and Marketing	Th.	4
	I	TDP102 PR	Fibres & textiles	Pra	2
	II	TDP103 TH	Designing & Dyeing	Th.	4
	II	TDP104 PR	Colors & Pretreatment	Pra	2

**TEXTILE DYEING
AND PRINTING**

Programme: B.A. Semester - I		Year: I	Semester: I Paper-I
Subject: Textile dyeing & Printing			
<p>Each paper contains 100 marks. For regular and non collegiates theory paper will be of 100 marks. For regular students internal evaluation of marks 30 are divided into 20 marks for assignment, 10 marks for written test For non collegiate students internal evaluation marks 30 are divided into 20 marks for assignment and 10 marks for viva/presentation.</p>			
Course Code: TDP101 TH	Course Title: Weaving and Marketing		
<p>Course Objective: The course is designed to train students in the basics of fibres and textiles science. To understand difference among various fibres properties and their manufacturing process. To understand various types of yarn and their properties for suitable application in textiles. To understands basics of weaving technology and weave representation. This course will teach students to understand the term marketing and role of marketing in economy and basics of supply chain management.</p>			
Credits: 4		Core: Compulsory	
Max. Marks: 100		Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): 6-0-0			
Unit	Topic	No. of Lectures	
Unit I	Introduction to Textile Classification of textile fibers General properties of textile fibers Identification of textile fibers	20	
Unit II	Natural Fibers-Manufacture, Chemical composition, general properties & Flowchart-cotton,silk, wool Manmade Fibers- Manufacture, Chemical composition, general properties & Flowchart -Rayon, Nylon, Polyester	20	
Unit III	Different methods of yarn construction <ul style="list-style-type: none"> • Types of yarn • Yarn characteristics and their measurement • Twist, Crimp, Strength 	20	

	<ul style="list-style-type: none"> • Yarn numbering system –Tex, Denier, Count 	
Unit IV	<p>Introduction to weaving Terms used in weaving Loom & it's parts Elementary weaves and their derivatives Plain weave- Rib, Basket Twill weave-Right hand & Left hand Satin weaves- Satin & sateen Weave Representation : Weaving plan, Various Drafts and Peg Plans</p>	15
Unit V	<p>Meaning, nature & scope of marketing</p> <ul style="list-style-type: none"> • Role & importance of marketing in modern economy. • Meaning and importance of marketing mix • Products, Pricing, Physical distribution ,Promotion 	15

Suggested Reading:

1. Textiles- Bucker-(1998)Abhishek Publication
2. Essentials of Textiles- M.Joseph, Holf Rinechants,
3. Textile -Year 1998-By A.F. Barker -Chapter 7, Principles of weaving-Pg.154-174
4. Weaving Technology-M.M.Kulkarni, Virinda Publication, Jalgon
5. Principles and practice of Dyeing- V A Shenai, 1993 Sevak Publications.
6. Textile design & colon, Z. Grorikio

Suggested Online Link:

- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=8x0nJkh/R0vHkX1U70Z/CQ==>
- <https://nptel.ac.in/courses/116104044>
- [https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22%E0%A4%9F%E0%A5%87%E0%A4%95%E0%A5%8D%E0%A4%B8%E0%A4%9F%E0%A4%BE%E0%A4%87%E0%A4%B2%22,%22s%22:\[\],%22b%22:{%22filters%22:\[\]}}}](https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22%E0%A4%9F%E0%A5%87%E0%A4%95%E0%A5%8D%E0%A4%B8%E0%A4%9F%E0%A4%BE%E0%A4%87%E0%A4%B2%22,%22s%22:[],%22b%22:{%22filters%22:[]}})
- [https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22textile%22,%22s%22:\[\],%22b%22:{%22filters%22:\[\]}}}](https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22textile%22,%22s%22:[],%22b%22:{%22filters%22:[]}})
- <https://indianculture.gov.in/hi/textiles-and-fabrics-of-india/type-of-textile/dyeing>

Course Learning Outcome :-

Students will be able to understand about science and introductory technology of textiles which may help them to think to make career in this field as textile is the second largest area in terms of employment generation. Students will be able to understand basics of textile manufacturing and fibre identifications which will help them in daily life at the time of garment purchasing. Knowledge about marketing will help them to understand the advertising and promotion industry which will help them to understand the economy and their contribution in economy.

**TEXTILE DYEING
AND PRINTING**

Programme: B.A. Semester - I	Year: I	Semester: I Paper-II
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The practical contains 50 marks	Subject: Textile dyeing & Printing
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Course Code: TDP103 PR	Course Title: Fibres & textiles
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Course Objective: The course is designed to train students in the basics of fibres and textiles science. To provide practical knowledge about identification of various fibres using various techniques primary secondary, practical aspects of weaving

Credits: 2	Core: Compulsory
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Max. Marks: 50	Min. Passing Marks: 20
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Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-4

1.	Identification of fibers using no technical Tests (Feeling & Burning Test)	
2.	Identification of fibers using technical tests (Microscopic test & Chemical test)	
3.	Assessing ends and picks per inch of different fabrics	
4.	Weaving of basic weave sample (Plain, Twill, Satin)	
5.	Field and industrial visit	

**Textile Dyeing and
Printing**

Programme: B.A. Semester - II	Year: I	Semester: II Paper-I
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Subject: Textile Dyeing and Printing

Each paper contains 100 marks. For regular and non collegiates theory paper will be of 70 marks. For regular students internal evaluation of marks 30 are divided into 10 marks for assignment, 10 marks for written test and 10 marks for viva/presentation.
For non collegiate students internal evaluation marks 30 are divided into 20 marks for assignment and 10 marks for viva/presentation.

Course Code: TDP102 TH	Course Title: Designing & Dyeing
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Course Objective: This course is designed to help students to learn about basics of design and pre treatments of textiles. To study various motifs and their arrangement in design. To understand about design repeat. To understand importance of various pretreatments of textiles and their objectives and methods. To understand basics of dyes, its classification and dyeing process. To understand various dyeing machineries used in textile dyeing.

Credits: 4 **Core: Compulsory**

Max. Marks: 70 **Min. Passing Marks:28**

Total No. of Lectures-Tutorials-Practical (in hours per week): 6-0-0

Unit	Topic	No. of Lectures
Unit I	1.Elements of design (line, form, colour, texture, tone, space) 2. Principle of design (unity, harmony, balance, dominance, rhythm, proportion) 3. Definition of Motifs & its characteristics with reference -Classification of motifs (i) Traditional (ii) Modern -Types of motifs (i) Geometrical (ii) Stylized (iii) figurative (iv) Abstract (v) Folk (vi) Tribal 4. Concept of Repeat in Design: Types of Repeats: Plain, Vertical, Horizontal, Twill, Mirror, Half step, All over.	20
Unit II	Preparatory processes (a) Scouring (b) Bleaching (i) bleaching of cotton, silk, nylon (ii) Optical bleaching agents (c) Desizing (i) Acid desizing (ii) Rot steeping (iii) enzymatic desizing (d) Singing (i) gas singing (ii) Plate signing (iii) roller singing (e) Mercerization-Historical significance & introduction Action of Caustic Soda on Cotton fibre, Nature of Change occurring in cotton fibres	20
Unit III	Nomenclature of Dyes: Colour and Dyes, colouring and Dyeing. The dye molecule (chromophores and auxochromes) Theory of dyeing (Affinity of a dye, role of water, electrolytes, heat) Dye auxiliary: Carriers or swelling agents, leveling agents (anionic leveling agents and cationicleveling agents).	20
Unit IV	Classification of dye-stuff and its properties (A) Natural - (a) Vegetable (b) Animal (c) Mineral Synthetic dyes - Acid dyes, direct dyes, reactive dyes, Vat dyes, Sulphur dyes, Azoic dyes	15

Unit V	Dyeing of textile goods in various forms and machinery employed Dyeing of loose fibers Dyeing of yarn Hank dyeing machine ii. Cheese/Bobbin dyeing machine iii. Beam dyeing machine (A) Cloth dyeing Jigger dyeing machine Winch dyeing machine Padding mangle Thermosole process Dope dyeing	15
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Suggested Reading:

1. Bosom worth Dorothy (1995): The encyclopedia of patterns and motifs, Studio editions, London Grociki, Z.J.; Watsons Textile Design and Colour, London,
2. V.A. Shenai (1987), Chemistry of dyes and principles of Dyeing
3. Technology of Textile Processing -Vo.II, Chemistry of Dyes and Principles of Dyeing, V.A. Shenai, 1993, Sevak Publications.

Suggested Online Link:

- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=8x0nJkh/R0vHkX1U70Z/CQ==>
- <https://nptel.ac.in/courses/116104044>
- [https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22%E0%A4%9F%E0%A5%87%E0%A4%95%E0%A5%8D%E0%A4%B8%E0%A4%9F%E0%A4%BE%E0%A4%87%E0%A4%B2%22,%22s%22:\[\],%22b%22:{%22filters%22:\[\]}}](https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22%E0%A4%9F%E0%A5%87%E0%A4%95%E0%A5%8D%E0%A4%B8%E0%A4%9F%E0%A4%BE%E0%A4%87%E0%A4%B2%22,%22s%22:[],%22b%22:{%22filters%22:[]}})
- [https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22textile%22,%22s%22:\[\],%22b%22:{%22filters%22:\[\]}}](https://ndl.iitkgp.ac.in/result?q={%22t%22:%22search%22,%22k%22:%22textile%22,%22s%22:[],%22b%22:{%22filters%22:[]}})
- <https://indianculture.gov.in/hi/textiles-and-fabrics-of-india/type-of-textile/dyeing>
- <https://textilelearner.net/dyeing-methods/>
- <https://www.britannica.com/topic/textile/Dyeing-and-printing>

Course Learning Outcome : -

Students will be to understand about designing which will be helpful them to make career in the field of fashion and designer. Learning about pretreatment will help students to innovate in that field which will be helpful for water saving in textile chemical processing. Learning about dyes and dyeing process will be helpful to students to start their career in handloom and khadi processing.

**TEXTILE DYEING
AND PRINTING**

Programme: B.A. Semester - II		Year: I	Semester: II Paper-II
The practical contains 50 marks		Subject: Textile dyeing & Printing	
Course Code: TDP103 PR	Course Title: Colors & Pretreatment		
Course Objective: The course is designed to train students in the basics of fibres and textiles science. To provide practical knowledge about primary secondary, tertiary. Warm and cool colors and practical aspects of preparatory processes			
Credits: 2		Core: Compulsory	
Max. Marks: 50		Min. Passing Marks: 20	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-4			
1.	Colour wheel, primary, secondary, tertiary colour, cool colours, warm colours		
2.	Monochromatic, complimentary polychromatic, analogous colour		
3	Desizing of cotton fabric		
4	Scouring of Cotton fabric		
5	Bleaching		
6	Field and industrial visit		
