



MAHARAJA AGARSAIN PUBLIC SCHOOL
a Cambridge International School
Ashok Vihar, Delhi

CLASS - XI
SUBJECT- TEXTILE DESIGN (829)
SESSION-2023-24

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	SUBJECT ENRICHMENT/PRACTICAL/ ENGLISH/ CONVERSATION/ VISUAL STIMULUS	LEARNING OUTCOMES	RESOURCES	SDG
(JUNE-JULY) PT-1	Unit 1: Overview of Textile Industries and Textile Fibers The major Textile Production Segments in India. Sources of Fabrics. Classification of Textile Fibers according to origin and chemical composition; Essential Properties and Performances of Textile Materials like Aesthetic, Durability, Comfort, Safety, Care and Maintenance Properties. Properties of Cotton, Flax, Hemp and Jute. Properties of Silk, Wool, Mohair and other Natural Fibers. Properties of Viscose Rayon, Loyocel and Acetate. Properties of Polyester, Nylon, Acrylic and Spandex.	Unit 1: Overview of Textile Industries and Natural Textile Fibers D.O.E. - 22.5.23 Syllabus covered- 20%	SUGGESTED LIST OF PRACTICALS: Experiment No. 1: To determine the chemical nature of fiber by burning test. Experiment No. 2: To determine the variation in staple lengths of natural fibers. (Tie and Dye - Dupatta/ T Shirt)	After finishing the unit, the students shall be able to- 1.Use appropriate terminology used in Textile Application. 2.Recognize the interrelationships in Textile Business. 3.Get an overview of Textile Industries in India. 4.Familiarize the background of Indian Textile Industries. 5.Be aware of the sources and properties of Textile fibers. 6.Predict the performances and characteristics of fabrics, according to fiber content for various end uses.	https://documents.in/document/fibre-to-fabric-final-2003.html NCERT book https://drive.google.com/file/d/13PhbrlYRSst-CFLV-qqKQFP8kUVE25t7/vi?usp=sharing	Industry innovation and infrastructure

<p>TERM-1 (JULY-AUG)</p>	<p>Unit 1: Overview of Textile Industries and Textile Fibers</p> <p>The major Textile Production Segments in India. Sources of Fabrics. Classification of Textile Fibers according to origin and chemical composition; Essential Properties and Performances of Textile Materials like Aesthetic, Durability, Comfort, Safety, Care and Maintenance Properties. Properties of Cotton, Flax, Hemp and Jute. Properties of Silk, Wool, Mohair and other Natural Fibers. Properties of Viscose Rayon, Loyocel and Acetate. Properties of Polyester, Nylon, Acrylic and Spandex.</p> <p>Communication Skills</p>	<p>Unit 1: Overview of Textile Industries and Natural Textile Fibers Communication Skills D.O.E. - 3.7.23 Syllabus covered- 35%</p>		<p>After finishing the course, the students shall be able to-</p> <ol style="list-style-type: none"> 1. Use appropriate terminology used in Textile Application. 2. Recognize the interrelationships in Textile Business. 3. Get an overview of Textile Industries in India. 4. Familiarize the background of Indian Textile Industries. 5. Be aware of the sources and properties of Textile fibers. 6. Predict the performances and characteristics of fabrics, according to fiber content for various end uses. 7. Practice interpersonal skills. 		
<p>HALF YEARLY (SEP)</p>	<p>Unit 2: Textile Spinning</p> <p>Classification of Yarns; Spun Yarn Production Process, Carded and Combed Yarns; Woolen and Worsted Yarns; MonoFilament and MultiFilament Yarns. Yarn Numbering Systems – Cotton Count, Metric Count, Denier, Tex and Deci- Tex. Single and Plied Yarns; Yarn Twist, Amount of Twist and Direction of Twist. Textured Yarns – Core Spun Yarn; Novelty and Fancy Yarns, Blended Yarns, Sewing</p>	<p>Unit 1: Overview of Textile Industries and Textile Fibers</p> <p>Unit 2: Textile Spinning Self management skills D.O.E. - Sep. 23 Syllabus covered- 60%</p>	<p>SUGGESTED LIST OF PRACTICALS:</p> <p>Experiment No. 3: To determine the yarn fineness using a direct count system.</p> <p>Experiment No. 4: To determine the yarn fineness using the English count system (indirect).</p> <p>Experiment No. 5: To convert yarn fineness from direct count system into indirect count system and vice versa.</p> <p>Experiment No. 6: To determine</p>	<p>After finishing the unit, the students shall be able to -</p> <ol style="list-style-type: none"> 1. Define and summarize the basics of Yarn Manufacturing. 2. Predict and Select different types of yarn for fabric development according to various end uses. 3. List various personality traits and disorders. 4. Describe the various factors influencing self- 	<p>https://drive.google.com/file/d/1Ntdw2X5uC9JZ72YFtdIx8LOPy0hQgt8S/view?usp=sharing</p> <p>NCERT book https://drive.google.com/file/d/13PhbrIYRSst-CFLV-qqKQFP8kUVE25t7/vi ew?usp=sharing</p>	<p>Sustainable cities and communities</p>

	Threads. Self Management skills		<p>the twist direction in yarn.</p> <p>Experiment No. 7: To determine the twist per unit length of a yarn.</p> <p>Experiment No. 8: To determine the difference between a staple fiber yarn and a filament yarn.</p> <p>Experiment No. 9: To differentiate between a single staple fiber yarn and a plied staple fiber yarn.</p> <p>Experiment No.10: To determine the sequence of process and material flow in yarn manufacturing.</p>	<p>motivation.</p> <p>5.Associate the basic personality traits, types and disorders.</p>		
PT2 (NOV-DEC)	<p>Unit 3: Textile Weaving</p> <p>Preparatory to weaving, including High speed machines for Winding, Warping, Sizing, Beaming and Weft Winding. The Loom, types of Looms, classification and selvedge formations. Basic motions of the loom, including the application of Dobby and Jacquards. Non-automatic loom, Automatic loom, Shuttle less weaving machines, Terry looms and Drop box loom. Introduction to basic weaves; plain, basket, rib, twill, satin, sateen, dobby, jacquard, crepe, pique, seer</p>	<p>Unit 3: Textile Weaving</p> <p>Employability skills D.O.E. - 18.8.23</p> <p>Syllabus covered- 20%</p>	<p>SUGGESTED LIST OF PRACTICALS:</p> <p>Experiment No.11: To measure the thread density in different kind of fabrics and compare according to end uses.</p> <p>Experiment No. 12: To identify the possible end-uses of woven, knitted and non-woven fabrics.</p> <p>Experiment No.13: To measure grams per square meter (GSM) of different quality of fabrics and compare the weight according to end uses.</p>	<p>After finishing the unit, the students shall be able to</p> <ol style="list-style-type: none"> 1.Predict and select different types of woven fabrics according to various end uses. 2.Recognize and identify different types of woven fabrics. 	<p>NCERT book https://drive.google.com/file/d/13PhbrlYRSst-CFLV-qqKQFP8kUVE25t7/vi?usp=sharing</p> <p>https://www.slideshare.net/rajeshkumar572/basic-weaves-and-their-characteristics</p>	Partnerships for the goals

	sucker, terry, velvet and velveteen. Employability Skills		Experiment No.14: To analyze the design of different fabric samples.			
PRE FINAL (JAN)	Unit 4: Other Forms of Textiles Differences between woven and knitted fabrics. General knitting terms types of knitting machines; circular and flat machines. Types of Knitting Stitches. Properties of Weft Knitted Fabrics; Jersey, Rib, Purl and Interlock. Comparison and properties of Warp Knitted Fabrics; Non-Woven Fabrics; Methods and Materials to Manufacture Non-Woven Fabrics; Felt; Embroidery; Tufted Fabrics, braids and other narrow fabrics.	Unit-1,2,3 4 All skills D.O.E. - Dec..23 Syllabus covered-100%	SUGGESTED LIST OF PRACTICALS: Experiment No.15: To visit a fabric store or fabric department within a store and survey the various woven fabrics on display and note the wide variety of fabrics and possible end uses. Experiment No.16: To find the fabric thickness of different fabrics. Experiment No.17: To evaluate the wale and course per inch with the help of a pick glass. Experiment No.18: To source fifteen different nonwoven fabrics from the market physically evaluate their possible end-uses. Experiment No.19: To prepare a flow chart for the weaving or knitting process in the industry. Experiment No.20: To estimate the drape of various fabrics. (Jute- Printing)	After finishing the unit, the students shall be able to- 1.Predict and select different types of Knitted, Non-woven, Felt, and Braid according to various end uses. 2.Recognize and identify different types: Knitted, Non-woven, Felt, and Braid fabrics. Stitches.Properties of Weft Knitted Fabrics, Jersey, Rib, Purl and Interlock. 3.Compare properties of Warp Knitted Fabrics, Non-Woven Fabrics – Methods and Materials to Manufacture Non-Woven Fabrics, Felt, Embroidery, Tufted Fabrics, Braids and other Narrow Fabrics.	NCERT book https://drive.google.com/file/d/13PhbrlYRSst-CFLV-qqKQFP8kUVE25t7/view?usp=sharing https://www.slideshare.net/sheshir/non-woven-32667208	Industry innovation and infrastructure
FINAL TERM (FEB)	Unit-1,2,3 4	Unit-1,2,3 4 All skills	Final Practical Exam	-	NCERT book	

		D.O.E. - Feb. 24 Syllabus covered- 100%				
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