

CURRICULUM FOR DIPLOMA IN GARMENT TECHNOLOGY SEM I, II, III, IV, V & VI

Directorate of Technical Education, Goa State

Duration of Programme

Semester I

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
GT101	BASIC DESIGN	2	-	4	6	-	-	100 (Pr)	50	150
GT102	BASIC SEWING	0	-	6	6	-	-	100 (Pr)	50	150
GT103	EMBROIDERY	2	-	4	6	-	-	100 (Pr)	50	150
GT104	PATTERN MAKING	0	-	6	6	-	-	100 (Pr)	50	150
GN101	COMMUNICATION SKILLS	-	-	2	2	-	-	50 (Pr+Or)	50	100
GT105	TEXTILE FIBERS	4	-	2	6	75	25	-	25	125
	TOTAL	32								825

Semester II

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
GT201	TEXTILE DESIGNING	2	-	4	6	-	-	100 (Pr)	50	150
GT202	DYEING TECHNIQUES	2	-	4	6	-	-	-	100	100
GT203	CHILDRENS GARMENTS	2	-	4	6	-	-	100 (Pr)	50	150
GN203	ENVIRONMENTAL SCIENCE	3	-	-	3	75	25	-	-	100
GT204	COLOUR AND GARMENT DESIGN	2	-	4	6	-	-	100 (Pr)	50	150
GN105	COMPUTER FUNDAMENTALS & APPLICATION	-	-	4	4	-	-	50 (Pr)	50	100
	TOTAL	31								750

Legends:

TH – Theory Head

TM – Test Marks

PR/OR - Practical/ Oral

TW - Term Work

(GT 101) BASIC DESIGN

1. **RATIONALE:** To develop an understanding about basic design i.e. elements, principles and figures used in the garment industry.
2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
(GT 201) Basic Design	L	T	P	C	TH	TM	TW	PR/ OR	100
	2	-	4	6	-	-	50	50	

Minimum passing %: Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks; PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 INTRODUCTION</p> <ul style="list-style-type: none"> a) Defining Design and concept of Basic Design. b) Essential tools and requirements. c) Illustrating mediums used in art and design.
<p>Unit 2 DESIGN ELEMENTS- A general Understanding</p> <ul style="list-style-type: none"> a) Classifications of design (dot, line, form and shape, texture colour and space) b) Colour Classification (primary, secondary, tertiary, quaternary and intermediate) c) Colour Wheel d) Psychology of colour and design.

Unit 3 DESIGN PRINCIPLES AND ITS RELEVANCE IN COSTUME DESIGN.

- a) Balance
- b) Proportion
- c) Rhythm
- d) Emphasis
- e) Harmony

Unit 4 BASIC FIGURE DRAWING

- a) Growth and Development of human body.
- b) Natural Figure- 8½ Head figure.
- c) Fashion Figure- 9½ Head figure.

4. COMPETENCIES TO BE DEVELOPED:

1. Students will be able to understand and create various elements and principles of design used in the garment industry.
2. Students will be able to understand the stages of life with relation to the developing of the body.
3. Students will learn to illustrate the 8- head figure and the elongated natural figure used in the fashion industry.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Demonstration of the various tools and equipments used in art and in designing.
2	Collection/ Illustration and use of the various tools & equipments
3	To create the various elements of design through identification and design concepts
4	Sourcing each element form from magazines i.e. dot, line, form and shapes, textures and colours and make a compilation as collage for each in a journal.
5	Mixing the basic colours to achieve the various classifications in colours using poster paints.
6	Creating a Standard colour wheel using formula. Understanding the placement of each colour in the wheel. Applying the required colour in the correct place in the wheel.
7	Creating a Standard colour wheel using formula. Understanding the placement of each colour in the wheel. Applying the required colour in the correct place in the wheel.

8	<p>Understanding the nature of a colour, its significance and utility value (usage).</p> <p>Relating the use of specific colours for specific occasions and in conditions.</p>
9	<p>General understanding of the various principles of design</p> <p>Associating each principle – concept and application in costume and understanding its relevance in garments.</p> <p>Collection of each principle of design in relationship to the human body and to the garment via magazine silhouettes.</p> <p>Relationship between each principle, one to another.</p>
10	<p>Understanding the growth and development from birth to adulthood (stages of life in relation to the developing of the body).</p> <p>Identifying through head proportions the growth and development from an infant to an adult figure.</p> <p>The 8 head theory – mechanical and fleshed out figures- proportions, placements and illustrations to create a complete normal human figure.</p> <p>Elongation of the natural figure into a fashion figure used by illustrators /designers.</p> <p>Brief sourcing of various types of figures used in the fashion world.</p>

NOTE

*Visit to Art Colleges/Art centers/ Museums/ Places of design for inspiration and appreciation a must.

* Assignments are liable to change keeping in mind current changes and introduction of new ideas to promote teaching learning processes effectively.

*Teacher’s Rating/Marking: Marks to be allotted as a separate criteria for work done by individuals during the term with regard to class assignments (may be part of P.A).

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	David A Lavel	Design Basics	
2.	Mary Garthe	Fashion and Colour	
3.	Edited by Trevor Lamb & Janine Boumau	Colour, Art and Science	
4.	Line Jack Selleck	Elements of Design	
5.	Yoko Ogawa, Tunko Yanaoto ei Kondo	Colour in Fashion	
6.	Anne Allen & Julian Seaman	Fashion Drawing –The Basic Principle	
7.	Julian Seaman	Fashion Illustration – Basic Techniques	

(GT102) BASIC SEWING

1. RATIONALE: A basic understanding of different sewing supplies, tools & equipment will be imparted to the student, using which sewing skills by hand & machine will be developed. Important aspects of finishing different parts of garments like necklines, plackets, fasteners etc. will be instructed & carried out practically.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
(GT202) BASIC SEWING	L	T	P	C	TH	TM	TW	PR/ OR	100
	0	-	6	6	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

<p>Unit 1 SEWING SUPPLIES:</p> <ul style="list-style-type: none"> - Threads, needles (machine & hand), tacking pins, bee wax, pin cushion, needle threader, thimble, seam ripper, awl, bodkin, loop turner, zippers, buttons, snap fasteners, hooks & eyes, eyelets etc.
<p>Unit 2 DOMESTIC SEWING MACHINE:</p> <ul style="list-style-type: none"> - Parts of a sewing machine, threading, bobbin winding, functioning of a machine, machine foots, problems in sewing machines.
<p>Unit 3 BASIC HAND SEWING SKILLS:</p> <ul style="list-style-type: none"> - Straight & diagonal tacking, slant, slip, circular hemming & darning.

Unit 4 BASIC MACHINE SEWING SKILLS:

- Reverse machining, tying ends, bobbin thread machining, top stitching, Under-stitching (Top & Bottom) & groove machining & beading

Unit 5 BASIC SEAMS:

- Seam formation for plain seam, curved seams (inward & Outward), corner seams inward & Outward), mock french seam, run 'n' fell seam, self bound seam & lapped seam.

Unit 6 SEAM FINISHES:

- Pinked, turn 'n' stitch, bound finish(with prepared bias & ready bias) machine over lock.

Unit 7 OPENINGS ON GARMENTS:

- Faced placket, continuous placket, slit continuous placket and wrapped placket.

Unit 8 FACINGS & PIPING'S:

- Shaped facing (round, square, 'V' shaped), Bias facing (round), piping (round & square).

Unit 9 FASTENERS:

- Metal hook & eye, metal hook & thread eye, pant hook & eye, snap buttons, button & button hole, zippers(centered, lapped & invisible zippers).

4. COMPETENCIES TO BE DEVELOPED:

- 1. Students will understand the parts and the functioning of the sewing machine.**
- 2. Will be able to rectify the sewing machine problems.**
- 3. Will acquire basic hand and machine sewing skills required for garment construction.**

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	A collection of pictures on various sewing supplies will be done as home assignment by students.
2	A picture of the domestic sewing machine will be neatly labeled by the student and a collection of pictures of various foots as well as the working of the sewing machine will be done. A chart of the various sewing machine problems will be created using demonstrations and reference work. Student will have to practically work on the machine on ruled paper, bobbin winding, machine threading etc.
3	Samples of straight and diagonal tacking, slant, slip, blind & circular hemming will be done by student and darning samples will be done (02 nos) patch and repairing a hole.
4	Students will have to prepare samples showing reverse machining, tying ends of threads, top stitching, under stitching (top & Bottom), groove machining, beading will be demonstrated to the student.
5	Steps in seam formation on plain seam, curved seams (inward & outward), corner seams (inward & outward) mock French seam, run 'n' fell seams, self bound seams & lapped seam samples will be made by the student in class.
6	Seam finishes on plain seam samples i.e. pinked, turn 'n' stitch, bound seam with prepared as well as ready bias & using of the machine over lock will be done in class by each student.
7	Students will individually construct samples of faced, continuous and slit continuous and wrapped plackets.
8	Samples of round, square and V-shaped necklines will be finished with shaped facing, whereas bound finish will be done on round and square necklines and bias facing for round neckline. A self-study assignment on a fancy neckline may be given to students also.
9	Students will construct wrapped plackets and work metal hooks with metal eye as well as thread eye, pant hook and eye, snap buttons, fancy buttons, shirt buttons, horizontal and vertical button holes, creating fabric/cord loops or rouleau etc. samples of various zipper attachments like centered, lapped and invisible zipper will be done on samples.

NOTE: Practical work will include working on samples prescribed in the syllabus. All the samples will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 10marks under internal assessment; the division of 10 marks is as follows; Attendance- 01 mk, punctuality in submission- 01 mk, neatness & Presentation of work – 03 mks and Completion of journal- 05 mks. The remainder of the PPA i.e. 40 mks will include regular class work.

ESP will be as per the marking scheme and 10 marks will be for journal as assessed by the External examiner (Practical examination will be for minimum 4 hrs).

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Anna Jacob Thomas	The Art of Sewing	
2.	Harper & Row	Vogue Sewing	
3.		Surged Garments & Materials	
4.	Ann Ladbury Mitchell Beazley Publications	The Sewing Book- A Complete Practical Guide	
5.	Cy De Cosse Incorporated, Minnetonka Minnesota, USA.	Singer – Sewing Step by Step	
6.	Anne Allen & Julian Seaman	Clothing (Fashion, Fabric, Construction)	
7.	Jeanette Weber, Bennett & Me Knight Publishing Co, Peoria, Illinois.	Fashion Illustration – Basic Techniques	

(GT 103) EMBROIDERY

1. RATIONALE: A basic idea of several basic stitches along with motifs, tools etc. will be studied by the students. A brief focus on different embroideries practiced traditionally in various parts of India will be given to the student, to help him/her implement the same in their garment designs.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)				Total Credit	Examination Scheme			
						Theory Marks		Practical Marks	
(GT 103) EMBROIDERY	L	T	P	C	TH	TM	TW	PR/ OR	100
	2	-	4	6	-	-	50	50	

*Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.*

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

<p>Unit 1 EMBROIDERY TOOLS:</p> <ul style="list-style-type: none"> - Introduction and importance of embroidery, needles, threads, scissors, trimmers, pencils, frames & materials suitable for embroidery.
<p>Unit 2 MOTIFS:</p> <ul style="list-style-type: none"> - Choice of motif for embroidery. Enlarging and reducing motifs for embroidery. Transferring designs or motifs on to fabrics.

Unit 3 BASIC EMBROIDERY STITCHES:

- Running stitch, double running, threaded running stitch, back stitch, stem stitch, basic blanket stitch, button hole stitch, basic chain, lazy daisy stitch, basic couching stitch, herringbone stitch, cross stitch, feather stitch, open Cretan, Rumanian stitch, fly stitch, seeding, French knot, bullion, satin (basic, slant & padded), and long & short stitch.

Unit 4 INDIAN EMBROIDERY:

- Study of embroideries, stitches, threads used, colours, motifs, fabrics etc. from different states of India like kashida of Kashmir, kantha of Bengal, Manipuri from Manipur, chamba rumals from Himachal Pradesh, phulkari of Punjab, chikan kari from Uttar Pradesh, kasuti from Karnataka, kutch from Gujrat, Kathiawar from Sindh and Zardozi will be studied.

4. COMPETENCIES TO BE DEVELOPED:

1. Students will be able to create different designs and finish them with appropriate hand embroidery stitches.
2. Students will be able to identify and create traditional embroideries practiced in the various parts of India.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	A brief description along with pictures of the various tools and equipment used along with fabrics, thread etc. will be recorded in the journal.
2	Sheets will be made of enlarging and reducing a motif as well as different ways of transferring a motif.
3	A checkered 24 x 24cms rectangle consisting of 2cms x 2cms blocks may be created with running stitches and alternate blocks may be with all the basic stitches. 6 samples using a combination of stitches learnt or alternately an article like; dressing table set/cushion covers/dress yoke/belt/scarf can be embroidered using several combinations of stitches as a self study home assignment.
4	Students will choose any 5 different embroideries to work on as samples of 15cms x 15cms.the remaining stitches and embroideries will be demonstrated and worked on as a project.

NOTE: Practical work will include working on samples prescribed in the syllabus. All the samples will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 10marks under internal assessment; the division of 10 marks is as follows; Attendance- 01 mk, punctuality in submission- 01 mk, neatness & Presentation of work – 03 mks and Completion of journal- 05 mks. The remainder of the PPA i.e. 40 mks will include regular class work.

A journal consisting of all practical work may be maintained along with pictures & ready embroideries/ photographs etc. of demonstrated embroideries.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Anne Mouelle B.T. Batsford Ltd Fitzharhinge Street, London with Oah	The Techniques of Indian Embroidery	
2.	Thomasina Beck David & Charles, Brunel House, Newton Abbott, Devon	The Embroiderer's story- Needlework from the Renaissance to the present day	
3.	Caroline – David & Charles, Brunel House, Newton Abbott, Devon.	World embroidery- 25 Original Projects from traditional Designs	
4.	J.B, Fairfax Press Pty Ltd.80-82.	Creative Embroidery & Quilting- step by step Techniques Projects & Patterns included	

(GT 104) PATTERN MAKING

1. RATIONALE: Students will be first taught to take measurements followed by using the measurements to construct basic upper & lower garment blocks. A basic understanding of layouts, cutting & marking will be imparted.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				
	L	T	P		TH	TM	TW	PR/ OR	Total Marks
(GT 104) PATTERN MAKING	0		6	6			50	50	100

Minimum passing %: Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

<p>Unit 1 MEASUREMENTS:</p> <ul style="list-style-type: none"> - Introduction and importance of embroidery, needles, threads, scissors, trimmers, pencils, frames & materials suitable for embroidery.
<p>Unit 2 Understanding fabric grain lines, print direction, right & wrong side of fabrics, fabric widths and shrinkage.</p>
<p>Unit 3 BLOCKS:</p> <ul style="list-style-type: none"> - Materials used for drafting. Important tips on flat patterns. - Basic one dart Bodice block:- drafting of basic one dart bodice block till hip on standard measurements. Practicing the basic bodice block with self measurements & measurements of 2 different sizes.

<p>Unit 4 BASIC ONE DART BODICE BLOCK:</p> <ul style="list-style-type: none"> - Drafting of basic one dart bodice block till hip on standard measurements. Practicing the basic bodice block with self measurements & measurements of 2 different sizes.
<p>Unit 5 BASIC SLEEVE BLOCK:</p> <ul style="list-style-type: none"> - Drafting of basic sleeve block (shaped & unshaped) on standard measurements. Practicing basic sleeve block with self measurements & measurements of 2 different sizes.
<p>Unit 6 BASIC SKIRT BLOCK:</p> <ul style="list-style-type: none"> - Drafting of basic skirt block on standard measurements. Practicing the basic skirt draft with self measurements & 2 other different size measurements.
<p>Unit 7 PLACEMENT & CUTTING:</p> <ul style="list-style-type: none"> i) Brief introduction into layouts & folds for cutting. An assignment each on the following folds using 1/4th scale drafts. 36'' width fabric standard lengthwise fold on plain fabric. ii) 45'' width fabric partial lengthwise fold on 2 directional printed/woven/napped fabrics. iii) 54'' width fabric double lengthwise fold on nap/one directional fabric/velvet. iv) 45'' width fabric bias fold layout.

- 4. COMPETENCIES TO BE DEVELOPED: Students will be able to;**
- 1. Take different body measurements required for drafting.**
 - 2. Create basic upper and lower garment blocks.**
 - 3. Understand different layouts, placement and cutting for various garments.**

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Sheets with brief description of various tools and equipments used for drafting along with pictures. Terminology of different measurements, short forms, conversions from cms to inches and vice-a-versa. Measuring tips. Preparing a chart by taking measurements of 2 other students and getting self measurements taken. Preparing a measurement sheet using proportionate measurements. Standard measurement charts used internationally.
2	Testing the grain line, identifying right and wrong side of the fabric, market survey with samples of various widths of fabric.
3	Preparing full size and 1/4 scale drafts using standard measurements of basic one dart bodice block till hip.

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4	Full size bodice blocks till hips of self and 2 other students (with/ without dart).
5	Drafting a full size basic sleeve (shaped & un-shaped) using standard measurements as well as ¼ scale block. Full size basic sleeve blocks of self and 2 other students.
6	Constructing a basic straight skirt (full size & ¼ scale) draft with dart using standard measurements. Full size basic straight skirt of self and 2 other students (with / without dart).
7	Sheets will be prepared of various folds for cutting designer wear fabrics. ¼ scale drafts of basic bodice block, skirt and sleeve will be drafted of given measurements and layout prepared using 36'' width fabric (1/4 scale) and standard lengthwise fold (facings, hems, seam allowances to be included). A two directional printed/woven/napped fabric (45'' ¼ scale) will be used to prepare a partial lengthwise fold layout using ¼ scale draft of given pattern of blouse with sleeve and skirt (facings, hems, seam allowances to be included).
8	A 54'' ¼ scale layout using blocks prepared from given pattern of bodice, skirt and sleeve on double lengthwise fold of one directional/ napped/ velvet fabric (facings & hems included).
9	A waist length bodice block without opening will be prepared of ¼ scale and a bias layout using 45'' width fabric (¼ scale) will be done.
10	A self study assignment on a layout on checks/stripes may be given.

NOTE: - Practical work will include working on samples prescribed in the syllabus. All the samples will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 10marks under internal assessment; the division of 10 marks is as follows; Attendance- 01 mk, punctuality in submission- 01 mk, neatness & Presentation of work – 03 mks and Completion of journal- 05 mks. The remainder of the PPA i.e. 40 mks will include regular class work.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Esmond	Pattern Making Manual	
2.	Shri. K.R. Zarapkar, Navneet Publications Ltd.	Zarapkar System of Cutting	
3.	Winifred Aldich Blackwell Science.	Fabric, Form & Flat Pattern Cutting	
4.	Sherie Doongaji, Raushni Deshpande, Unique Educational Books, Raaj Prakashan, Bengali Mkt., New Delhi.	Basic Processes & Clothing Construction	
5.	Ether Wyllie, Glencoe Publishing Co. Bennett & Me Knight Division 15319, Chatsworth Street, Mission	Today's Custom Tailoring	

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	Mills, California 91345		
6.	Elvina Caastellinoti	Shortcuts To Sewing	

(GT 105) TEXTILE FIBRES

1. RATIONALE: The course aims at helping students to gain knowledge of different fibres, their classification, manufacturing process, properties and uses. Also help them in identification of fibres, and yarns.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)				Total Credit	Examination Scheme				Total Marks
						Theory Marks		Practical Marks		
(GT 105) TEXTILE FIBRES	L	T	P	C	TH	TM	TW	PR/ OR	125	
	4	-	2	6	75	25	25	-		

Minimum passing %: Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks; PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 INTRODUCTION AND CLASSIFICATION OF FIBERS.	(Th-2hrs) (Pr-1hr) (3mks)
Unit 2 NATURAL FIBERS: Introduction & types of fibers.	
i) <u>Cellulosic fibers</u> : - Cotton, jute, linen.	(Th-12hrs) (Pr-2hr) (12mks)
Origin, cultivation, manufacturing/ extracting process through flow chart, important properties and uses. -Minor vegetable sources & uses: Fibers like Kapok, Pina, Banana, Hemp, and Bamboo in brief. -Recent development in cellulosic fibers:-information & assignment	
ii) <u>Animal fibers</u> :- Major fibers like wool and silk.	(Th-08hrs) (Pr-2hr) (12mks)
Origin, cultivation, manufacturing/ extracting process through flow chart. Important properties and uses. Minor animal fibers: Types (Mohair, camel, Alpaca, Goat), information in brief. Recent development in animal fibers: - assignment & information.	

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i)	Mineral fibers: Glass & asbestos in brief. Understanding fabric grain lines, print direction, right & wrong side of fabrics, fabric widths and shrinkage.	(Th-2hrs)	(6mks)
Unit 3	MANMADE FIBERS: Viscose Rayon and Acetate.	(Th-4hrs)	(6mks)
Manufacturing processes through flow chart, important properties and uses.			
Unit 4	SYNTHETIC FIBERS: MAJOR FIBERS: Nylon, Polyester and Acrylic.	(Th-10hrs)	(Pr-2hr) (10mks)
Synthesis of fibers, through flow chart, properties and uses of fibers Minor and recent developments in synthetic fibers:- Assignment.			
Unit 5	IDENTIFICATION OF TEXTILE FIBERS:	(Th-8hrs)	(Pr-12hr) (10mks)
i) Non Technical tests: Feeling and burning tests- introduction and method of testing in laboratory.			
ii) Technical tests: - Microscopic test and Chemical test.			
Introduction, method of testing in laboratory			
Unit 6	TEXTILE FINISHES:	(Th-18hrs)	(Pr-8hr) (16mks)
Introduction, classification of finishes definition & use.:			
i) Preparatory finishes: Examples, singeing, gassing, and bleaching.			
ii) Stabilizing finishes: Mercerizing, Shrinkage, fulling, tentering, crabbing.			
iii) Textural finishes: method and examples: Temporary/permanent stiffening, weighing, calendaring, embossing, beetling, raising, napping, shearing, crinkle and crepe effect.			
iv) Functional finishes: Examples: water repellency, wrinkle resistance, water proofing, shape retentive, flame retardant, moth proofing, anti-bacterial, antistatic wash and wear finish.			
v) Recent development in fabric/textile finishes based on current research.			

PRACTICAL DETAILS: - Practical's shall be based on the prescribed content and should be recorded in the journal.

CHAPTER	CONTENTS	MARKS
01	Classification of fibers chart.	05
02	Samples collection of natural fibers/fabrics. Assignment on recent development on natural fibers.	10
03	Samples collection of man- made fibers/yarns/fabrics.	05
04	Samples collection of synthetic fibers/yarns/fabrics. Assignment on recent development in synthetic fibers.:	10

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05	Carrying out of both technical and non-technical tests of different fibers and compiling of results in the journal.	20
06	Collection and identification of different finishes on fabrics. Note on recent development in textile finishes	10

EVALUATION :

1. Student will be evaluated on daily progressive assessment basis.
2. Written exam to be conducted during the term to evaluate the student's knowledge and understanding on the subject matter. Marks will be given on time to time complete assignments.
3. Bonus points for punctuality and right attitude of the student.
4. Journal: - Marks will be kept for timely submissions, neatness and completion .

4. COMPETENCIES TO BE DEVELOPED: Students will;

1. Have knowledge of different natural and synthetic fibres which already exist.
2. Acquire knowledge on recent development in Textile fibres.
3. Learn to identify different types of fibres by testing.
4. Have knowledge of the different finishes used on fabrics.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Introduction and classification of fibers.	02	03
2	Natural fibers:	22	30
3	Manmade fibers: viscose rayon and acetate	04	06
4	Synthetic fibers: major fibers: nylon, polyester and acrylic.	10	10
5	Identification of textile fibers:	08	10
6	Textile finishes:	18	16
	Total		75 mks

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Norma Hollen, Jane Saddler, Anna L. Langford, Sara J. Kadolph Mac Millan Publishing Co.,New York 866, 3 rd Avenue N.Y-10022	Textiles- 6 th Edition	
2.	A.J. Hall Butterworths Publication	The Standard Book of Textiles	
3.	Bernard P. Cobman- Gregg Division Mc Graw Hill Book Co.	Textiles- Fibre to Fabric	
4.	Susheela Dantyagi, Orient Longman Ltd.,1/27 Asaf Ali Road, New Delhi 11002	Fundamentals of Textiles & their Care	
5.	Dr. V.A. Shenai	Textile Fibres – Techniques of textile processing	

GN 101 COMMUNICATION SKILLS

1. RATIONALE

This course deals with Student's proficiency in English by developing their skills in reading, writing and speaking. They will be able to appreciate the usage of grammar. Acquiring proficiency in English is absolutely essential for effective communication while serving on the job. It also deals with applications of the concepts and principles learnt. Using visuals in written communication and body language in oral communication highly enhances the effectiveness of the communication process. These and some other important aspects are discussed in this course. The practice-feedback-practice cycle is of utmost important for developing the communication competencies/skills.

2. TEACHING AND EXAMINATION SCHEME

Course Code & Course Title	Periods/ Week (In Hours)			Total Credits	Examination Scheme				Total Marks
					Theory Marks	Practical Marks			
GN-101	L	T	P	C	TH	TM	TW	PR/OR	100
Communication Skills		-	2	2	-	-	50	50	

Minimum passing % : Practical 40%

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks:

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 - Fundamental of Communication skills

Definition, components (message, sender, receiver, transmission medium and protocol), types(verbal & no-verbal, technological & non-technological, etc), importance of communication skills, effective communication skills (phatic stage, personal stage and intimate stage), barriers in effective communications(verbal, non-verbal), barriers while speaking, other barriers (individual's viewpoints, emotional block, etc.) methods of and hint to increase communication skills, body language.

Unit 2 – Presentation Skills

Methods and styles of presentations (seminars, speeches, etc), the plan, objectives, audience, structure (sequential, hierarchical, question oriented pyramid, meaty sandwich), tips for good beginning and end, aids to presentation (visual, verbal), delivery style (eyes, voice, expression, appearances, stance, etc), techniques for a good speech (repeat, draw (signs, pictures), jokes, etc).

Unit 3 - Technical Reports, Letter Writing, CVs

Functions of Reports (information, initiate action, recommend new procedures, recording, coordinating project), techniques (basic format, steps, appendices), types of reports (emphasis on progress reports, industrial visit reports, inspection reports, accident reports, survey report, report on seminars, workshop, technical gathering, etc).

Types of letters, format function, qualities of a good letter, examples of job applications, leave applications, complaints, purchase orders, enquiries replies etc.

Brief mention of importance of etiquette in email communication, importance of careful proofing the documents sent.

Curriculum Vitae – definition, sample, tips for a good CV, covering letter

Unit 4 - Soft Skills

Importance of values, attitude and etiquettes in communication, ethics and manners, courtesy, honesty and reliability; personal integrity, flexibility – adaptability, team skills – cooperation; ability to follow regulations; willingness to be accountable; Ability to relate to co workers in a close environment, non verbal communication, leadership skills – self directed, ability to direct and guide others, self-supervising; ability to relate to co workers in a close environment; positive attitude; positive work ethic, written communication Skills- basic spelling and grammar; reading and comprehension, personal hygiene and energy, interpersonal skills – communication skills with public, fellow employees, supervisors, and customers, motivation – willingness to learn; caring about seeing the company succeed; understanding what the world is all about; commitment to continues training and learning; critical thinking skills, grooming – good personal appearance.

Unit 5 - Language Workshop

The Reading, Listening, Writing, Speaking Skills will be tested

1. Reading Skills:

Articles from the newspapers, magazines, journals etc. will be given to the students to read aloud thus checking their pronunciation, clarity and their style of reading.

2. Listening Skills:

Passages, Topics, Stories, Speeches of eminent people will be read or played. The students have to listen and their listening skills will be tested.

3. Writing Skills:

- a) Students to write on any given topic
- b) Students to compose their own stories
- c) Students will be given a particulars situation i.e. accident, college gathering etc. and asked to write a report

4. Speaking Skills:

- a) Students to speak on any given topic
- b) Narrate a story written by them.

Group discussions in the classroom. This could include debates, discussion on current issues, role-playing.

4. List of Experiments :

- Oral presentation about technical products for five minutes.
- Seminar Presentation/Report writing and presentation on identified topics from science and technical subjects for short duration.
- Group discussion on science and technical topics.
- Organise mock interviews.
- Organise debates.
- Extempore speech for three minutes on a topic.
- Observe a process and reproduce orally in own words for three to five minutes.
- Arrange video recording of presentations for self-feedback.

5. SUGGESTED LEARNING RESOURCES

S.No.	Author	Title of Books	Year of Publication
1	Wren and Martin	Practical English Grammar	1992
2	John Sinclair (ed.),	Collins Cobuild English Grammar	William Collins & Sons Cp., London 1990
3	Krishna & Mohan,	Effective English Communication	Tata McGraw Hill, New Delhi 2000
4	Randolf, Quirk & Sidney Greenbaum	University Grammar of English	1993
5	Tiwari, N.P. et al ,	Communication Skills for Technical Students – Book	Somaiya Publications, 1995
6	Tiwari, N.P. et al,	A Communicative Grammar of English	Somaiya Publications, 1989

SEMESTER II

(GT201) TEXTILE DESIGNING

1. RATIONALE:

- Students are made to understand and are able to identify the basic difference between self woven, printed and dyed fabrics.
- Students are taught and have to create the different types of fabric surface designs along with the special techniques understanding in relation to colour and end use of fabrics.
- Student is taught to appreciate and develop her/his own values and design concepts in traditional and contemporary processes, using her/his resourcefulness and imagination.
- Printing and weaving, the two options in Textile Designing provide systematic training in surface designs and fabric structure.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
(GT201) - TEXTILE DESIGNING	2	-	4	6	-	25	25	50	100

Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; **T** - Tutorial; **P** - Practical; **C**- Credit; **TH**- End Semester Theory; **TM** – Test Marks; **PR/OR** - End Semester Practical / Oral Examinations; **TW**- Term Work

3. DETAILED COURSE CONTENTS

Unit1 INTRODUCTION TO TEXTILE DESIGN:

What is Textile designing and its importance.
Role of a textile designer, Skills needed.
Importance of colors as per the end use of fabrics.
Basic difference in printed fabrics and woven fabrics.
Collect and understand different types of surface design fabrics (woven, knitted, non-woven etc)

Unit 2 MOTIFS, LAYOUTS AND REPEATS

What is a motif, different motifs. Relation of motifs and application

Layouts: - Importance of layouts

Spaced, closed, one directional, non-directional, two directional, tossed, landscape.

Repeats: - Full scale repeat, 1/2 drop repeat, square repeat.

Importance of repeat and graded repeats.

Unit 3 TYPES OF DESIGNS:

Floral, landscape, geometric, conversational, nursery, ethnic, stylized, abstract.

Traditional Woven designs: - Ekat, brocade, jacquard designs

Designs on Indian saris: - Pochampalli, Bandhani, Paithani, Manipuri, Kanjeevaram, Jamdhani. Irkal, Banarasi, Sungudi, Sambalpuri, (collect samples and reproduce any 5)

Unit 4 SPECIAL DESIGN TECHNIQUES:

Splatter, stippling, spray, sponge, dry brush tec. (on grey fabric and printed fabric).

Unit 5 PRINTING:

Explain roller printing, block and table screen printing, rotary screen printing(theory)

Samples on vegetable printing, block printing, stencil printing.

Unit 6 NEW TECHNIQUES OF FABRIC DESIGNING, IMAGE TRANSFER

All designs to be reproduced on fabrics or paper.

4. COMPETENCIES TO BE DEVELOPED: Students will be able to;

- 1. Recognize and categorize different classes of prints of Textile fabrics**
- 2. Master the art of different techniques of surface ornamentation of fabrics.**
- 3. Differentiate between different Indian sarees in terms of weave and prints.**
- 4. Understand the different ethnic motifs from regional point of view**

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Student will be given assignments based on each topic and sub- topic to be maintained in a journal.
2	Student will have to develop their own designs on fabrics, paper and show their creativity, skills and applicability.
3	Students will have to collect study and understand different types of

	fabric with surface designs.
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LEARNING ACTIVITIES :

- Student will be given assignments based on each topic and sub- topic to be maintained in a journal.
- Student will have to develop their own designs on fabrics, paper and show their creativity, skills and applicability.
- Students will have to collect study and understand different types of fabric with surface designs.

EVALUATION :

1. Student will be evaluated on daily progressive assessment basis.
2. Written exam to be conducted during the term to evaluate the student's knowledge and understanding on the subject matter. Marks will be given on time to time complete assignments.
3. Bonus points for punctuality and right attitude of the student.
4. Journal: - Marks will be kept for timely submissions, neatness and completion .During the final Practical exam the External examiner will mark the journal too.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Carol Joyce	Textile design: The complete guide to printed textiles for apparel and home furnishings.	
2.	K. Prakash	Impressions A Classic collection of Indian Textile Designs	
3.	K. Prakash	Textile Designs Traditional & Floral	
4.	L. Haden Guest	Indian Ethnic Textile Designs	
5.	Alex Russell	Fundamentals of Printed Textile design	
6.	Susan Meller	Textile designs	

(GT 202) DYEING TECHNIQUES

1. **RATIONALE:** On completion of this subject, student will acquire the skills of choosing the correct dyes for the different fabrics. Students will also gain basic idea of dyeing fabric with natural & synthetic dyes (hot & cold) using various techniques. A brief experimentation into skill of batik will also be included for the purpose of creating novel designs in fabrics.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)				Total Credit	Examination Scheme			
	Theory Marks		Practical Marks			Total Marks			
(GT 202) DYEING TECHNIQUES	L	T	P	C	TH	TM	TW	PR/OR	100
	2	-	4	6			100		

Minimum passing %: Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks; PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 INTRODUCTION:- Basic classification of fabric and suitable dyes. Fastness properties of different dyes.</p>
<p>Unit 2 FOLDS FOR TIE & DYE: Different types of folds given to fabric to obtain various designs of tie & dye in fabric.</p>
<p>Unit 3 EQUIPMENT & TOOLS: various types of equipment & tools like vessels, bowls, buckets, burner, drying racks etc. along with various tying equipment like threads, rubber bands, twine, stones, glass beads, rope, pegs etc. used for tie & dye.</p>
<p>Unit 4 SHADE CARD & PERCENT SHADE: - Concept of preparing a shade card & calculation of quantity of dyes & liquor required for dyeing.</p>

<p>Unit 5 DYEING WITH NATURAL DYES: Various sources of natural dyes. Student will do a self study assignment on 5 different natural dyes available in their surroundings.</p>
<p>Unit 6 DYEING WITH HOT DYES:- Dyeing with Direct, reactive, Vat, acid, basic and other hot dyes. Preparing samples of techniques like Leheriya, Net effect, Chequered, Knotting, Folding, Bandhani, Rouching, Pegs, Concentric circles, sunburst and machining.</p>
<p>Unit 7 DYEING WITH COLD DYES: Dyeing with cold reactive and azoic dyes. Preparing samples like tritik and marbling.</p>
<p>Unit 8 BATIK:- Tools and equipments for batik, application of wax, dyeing and de-waxing procedures. Samples using coir effect, cracked effect, candle drop techniques, rope effect and one colour batik may be done. Techniques for multi-colour batik will be explained.</p>

4. COMPETENCIES TO BE DEVELOPED:

1. Students will gain knowledge on the techniques of dyeing and printing.
2. Students will be able to use the various methods of dyeing and printing to create their own designs on textiles and garments.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	An assignment on light and wash fastness of fabric can be done as a self study assignment.
2	Various folds using paper samples may be done and sheets will be prepared based on samples of folds.
3	Collection of pictures of different equipments required for dyeing will be made and sheet prepared using the same. A collection of various tying equipments, pictures of the same may be used to create a collage.
4	Students will prepare a shade card of fabric swatches dyed in class. Worksheets of dye and dye liquor calculations will be made.
5	A self study assignment through experimentation on various house hold natural dyes will be made using at least 5 different natural dyes.
6	Samples of Leheriya, Net effect, Chequered, knotting and machining effect will be done using direct dyes.
7	Samples of sunburst, folding, Bandhani and Rouching will be done using hot reactive dyes.

8	Samples of Pegs and Concentric circle will be done with Vat dyes.
9	A dupatta/ stole/ scarf, can be made as self study assignment.
10	Using cold reactive dyes students will prepare samples of marbling in two colours.
11	Using Azoic dyes samples of tritik will be made by students.
12	A ready garment can be dyed with cold dyes.
13	Samples of coir, cracked, candle drop and rope effect will be made using the technique of batik.
14	A free hand design using one colour will be made using Batik techniques.
15	An unstitched garment can be created as a self study assignment.

NOTE:- Practical work will include working on samples prescribed in the syllabus. All the samples will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 10marks under internal assessment; the division of 10 marks is as follows; Attendance- 01 mk, punctuality in submission- 01 mk, neatness & Presentation of work – 03 mks and Completion of journal- 05 mks. The remainder of the PPA i.e. 40 mks will include regular class work.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	R.R. Chakravrthy & S.S. Trivedi Mahajan Brothers, Supermarket Basement, Ashram Road, Ahmedabad-09	Techniques of Bleaching & Dyeing Textile Fibres	
2.	R.S. Prayag, Court Presses Job Branch, Salem- 01	Dyeing of wool, silk & Man Made fibres	
3.	Hans Edvard Heiz David & Louis Blangey- Interscience Publishers Inc N.Y.,215, 4 th Avenue, N.Y.- 3N.Y.	Dye Chemistry	
4.	The Thames & Hudson Manual Joyce Storey, Thames & Hudson Ltd., London	Dyes & Fabrics	
5.	Joyce Storey, Thames 7 Hudson Ltd., London.	Textile Printing	
6.	Maohaau Oyabu- Mahajan brothers, Textile Book Publication, Supermarket Base, Ashram Road, Ahmedabad.	A Guide to Printing Techniques	
7	Nora Proud, Arco Publication Co. Inc N.Y. 219 park Avenue South, N.Y., N.Y	Textile Dyeing Simplified	

	10003.		
8	Ann Milner, B.T. batsford Ltd., London.	The Ashford Book of Dyeing	

(GT 203) CHILDREN'S GARMENTS

1. RATIONALE: Students will be initially introduced to the classification of different age groups in children's clothing along with suitability of fabric, print, colours etc. based on the age groups various bodice blocks will be developed and garments with suitable embellishment ranging from infant wear to party wear will be designed and stitched.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)				Total Credit	Examination Scheme			
	L	T	P	C		TH	TM	TW	PR/OR
(GT 203) CHILDREN'S GARMENT	0	-	6	6			50	100	150

*Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.*

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks:
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

<p>Unit 1 INTRODUCTION TO CHILDREN'S GARMENTS: Choosing of children's fabrics, prints, embellishments, trimmings on children's garments.</p>
<p>Unit 2 BASIC BODICE BLOCKS FOR CHILDREN- Basic bodice blocks for infants, toddlers, Pre- school children & school going children.</p>
<p>Unit 3 INFANT/ NEW BORN BABY CLOTHES: Drafting & stitching of a zabla, wrapper & nappy and embellish the infant clothes suitably.</p>
<p>Unit 4 BABY DRESS & ELASTICATED BLOOMER:- Drafting of a baby dress for a toddler with round/straight yoke and gathered/ pleated A-line bodice. Yoke will be embellished with tucks and hemline finished with a ruffle/ frill of lace</p>

& ribbon trimmings. Waistline of bloomer will be finished with an inch of elasticized shirring.

Unit 5 BOYS BUSH-SHIRT & SHORTS:- (PRE-SCHOOLER)

Drafting & stitching boys bush-shirt with patch pocket. Drafting and stitching of boys shorts with back elasticated and front hip pocket.

Unit 6 PARTY DRESS WITH PUFF SLEEVES/ BELL CIRCULAR FLOUNCE:

Drafting & Stitching of a party dress with bodice up to waistline or low waist with gathered/ circular skirt with net/ can- can underskirt & embellished suitably.

- 4. COMPETENCIES TO BE DEVELOPED: Students will have the knowledge**
- 1. To identify and use different fabrics and trimmings for children’s garments.**
 - 2. To construct and use tucks, ruffles, yokes and pockets on garments.**
 - 3. Draft and construct various patterns.**
 - 4. Assemble different parts of the garment stitch it.**

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	A market/Internet study will be done by the student on various fabrics, prints, embellishments and trimmings used on Children’s garments (i.e. infants, toddler, pre-schooler, school going).
2	Basic bodice block full size with sleeves will be made by students and recorded in journal (infants, toddler, pre-schooler, school going).
3	Drafting and stitching of embellished zabra.
4	Stitching of wrapper, nappy and embellishing wrapper.
5	Drafting & stitching of cotton baby dress for toddler with round/ straight yoke, gathered/ pleated A-line bodice and yoke embellished with tucks and hemline finished with ruffle/frill of lace and ribbon trimming.
6	Drafting & stitching of bloomer finished with elasticized shirring
7	Drafting & stitching of boy’s bush shirt with patch pocket for pre-schooler.
8	Drafting & stitching of boy’s shorts with back elastication and front hip pocket.

9	Drafting & stitching of the Party dress well embellished & finished; Designing
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NOTE:- Practical work will include working on samples prescribed in the syllabus. All the samples will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 10marks under internal assessment; the division of 10 marks is as follows; Attendance- 01 mk, punctuality in submission- 01 mk, neatness & Presentation of work – 03 mks and Completion of journal- 05 mks. The remainder of the PPA i.e. 40 mks will include regular class work.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Winifred Aldrich, Blackwell Science	Metric Pattern Cutting for children's wear	
2	Bay Books, Harpu colliers publishers	The Best of Easy Sewing for Tiny Tots	
3	Gloria Mortinu Darn B. T. Batsford Ltd. London	Pattern Design for Children's Clothes	

(GT 204) COLOUR AND GARMENT DESIGN

1. RATIONALE:

With the basic knowledge in design the student will now be given an understanding into various important aspects like colour concepts and also an in depth know how of garments and its parts.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				
	L	T	P		TH	TM	TW	PR/OR	Total Marks
(GT 204) COLOUR AND GARMENT DESIGN		2	4	6			50	100	150

*Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.*

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

Unit 1 COLOUR CONCEPTS:

- a. Dimensions of Colour- Terminologies used to describe colours (hues, intensity etc.)
- b. Tints and Shades- Value in colour
- c. Grey Scale
- d. Colour Schemes based on the colour wheel(monochromatic, analogous , complimentary, split complimentary, double split complimentary, triads, tetrads etc.)
- e. Neutral Colour Schemes
- f. Warm and Cool Colour Scheme
- g. Pastel Colours
- h. Neons/Brights
- i. Dark/Deep Colours

Unit 2 FACIAL FEATURES, HANDS AND FEET ILLUSTRATIONS USING VARIOUS ILLUSTRATING MEDIUMS.

<p>Unit 3 GARMENT PARTS</p> <ul style="list-style-type: none"> a. Collars b. Necklines c. Cuffs d. Pleats e. Pockets f. Sleeves g. Waistlines h. Skirt Hemlines i. Trouser Hemlines j. Yokes k. Opening on Garments
<p>Unit 4 STANDARD UPPER GARMENTS- WESTERN AND INDIAN (MALE & FEMALE).</p>
<p>Unit 5 STANDARD LOWER GARMENTS- WESTERN AND INDIAN (MALE & FEMALE).</p>

4. COMPETENCIES TO BE DEVELOPED: Students will be able to;

1. Gain thorough knowledge of the colour wheel and be able to produce different colour use by playing with colours.
2. Understand colour psychology and its relation to garments.
3. Understand the cuts and styles of garment parts.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	<ul style="list-style-type: none"> *Creating in paint medium the various dimensions of colour and its relevance in costume design. *Identifying through paper/ magazine cut outs the dimensions of colour as is seen or used on garments. *Creating tints & shades of various colours and applying the same on costumes keeping in mind the principles of design. *Identifying the value system of colour use in costumes. *Creating a grey scale and applying the same in costume keeping in mind the principles of design. *Creating the colour wheel and identifying the various colour schemes derived from the colour wheel.

	<ul style="list-style-type: none"> *Application of various colour schemes on costumes. *Identifying the basic neutrals generally seen/used. *Creating a shade card of colours in neutrals and identifying with them. *Application of neutrals on costumes. *Identifying warm and cool colours in the colour wheel. *Creating a warm colour palette through a collage of magazine pictures/ fabric swatches/2D/3D objects. *Creating a cool colour palette through a collage of magazine pictures/ fabric swatches/2D/3D objects. *Identifying pastels/ soft colours and its use. *Collection of materials associated to the same and making a collage. * Identifying Neons/ bright colours and its use. *Collection of materials associated to the same and making a collage. * Identifying Dark/ deep colours and its use. *Collection of materials associated to the same and making a collage.
2	<ul style="list-style-type: none"> *Creating a proportionate face with various facial features and applying various illustrating mediums associated to each area of the face. *Learning to illustrate hands and feet at various angles, postures and giving a fleshed look.
3	<p>Collars –all basic collars to be illustrated + collage to be made to identify the basics.</p> <p>Necklines</p> <p>Cuffs</p> <p>Pleats</p> <p>Pockets (Same as above)</p> <p>Sleeves Skin tone and outline to be done</p> <p>Waistlines on all basic illustrations.)</p> <p>Skirt hemlines</p> <p>Trouser Hemlines</p> <p>Yokes</p> <p>Openings on garments</p>
4	<p>Standard Upper garments- Male- Bush-Shirt, Formal shirt,T-shirt, Waist coat, jackets, Kurtas, Sherwanis etc.</p> <p>Female- Blouse, Tops, Tank Tops, T-shirts, Kurtas, Kurtis, cholis etc.</p>
5	<p>Standard Lower garments- Male- Trousers, Shorts, Pyjamas, Dhotis, Lungis etc.</p> <p>Female- Skirts, Trousers, Gaghras, Shararah,Salwars, churidars etc</p>

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Edited by Trevor Lamb & Janine	Colour, Art and Science – Boumau	
2	Kathryn Kelvey Blackwell Science	Fashion Source Book	
3	Georgira O’Hara- Thames & Hudson Ltd.	The Encyclopedia of Fashion	
4.	Elizabeth Rouse BSP professional books	Understanding Fashion	

GN-105 - COMPUTER FUNDAMENTALS & APPLICATIONS

1. RATIONALE

The course on Computer Fundamentals & Applications will enable the students to understand the basic concepts related to computer fundamentals, Data Representation & Number Systems, Computer Languages, operating system, Computer Software and Internet Technology and will be able to apply the same in different areas of electronics engineering. Laboratory practice will help in developing the requisite skills.

2. TEACHING AND EXAMINATION SCHEME

Course Code & Course Title	Periods/ Week (In Hours)			Total Credits	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GN-105	L	T	P	C	TH	TM	TW	PR/OR	100
Computer Fundamentals & Applications	-	-	4	4	-	-	50	50	

Minimum passing % : Theory 40%

Legends:

L-Lecture; **T** - Tutorial; **P** - Practical; **C**- Credit; **TH**- End Semester Theory; **TM** – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; **TW**- Term Work

3. DETAILED COURSE CONTENTS

UNIT 1 Computer Fundamentals

1. Introduction to Computer
2. History, Evaluation, Classification and Generations of computers
3. Organisation of the Computer System
4. Hardware
 - Input device, Memory or Storage Devices, Processing Unit, Output device, Scanner
 - Printers.
5. Communication technology and evolution of communication mediums
6. Software

System software

Application Software

Shareware

Freeware

Open Source

7. Concept of Computer Viruses

Definition

Types

Preventive Measures

UNIT 2 Operating System

1. Introduction to operating system

Definition Functions , Types, Examples, Comparisons of Various Operating Systems

2. Windows Operating System-

GUI(Graphical user Interface), desktop, Start Menu, Task Bar, Status Bar, Scroll Bar, Title Bar, Toolbar, Menu Bar. File Organization: Creating, Saving, Deleting, Renaming, Cutting, Pasting, copying, moving, Searching Files and Folders. Applications: My Computer, Recycle Bin, Windows Explorer, Control Panel.

UNIT 3 Application Software

1. MS Word

- Introduction
 - Starting MS Word
 - Creating, saving and opening a document
 - Editing commands-Cut, Copy, Paste, Paste Special
 - Text Formatting, Bullets and Numbering, Borders and shading etc.
 - Tabs, Style, Views
 - Insert Table, Picture, OLE Objects, etc.
 - Checking Spelling and Grammar, Thesaurus
 - Page Layout & Printing
 - Mail Merge.

2. MS Excel

- Create, Save and open a worksheet
- Entering data – text, numbers and formulae in a worksheet, Hyperlink
- Navigating within a Worksheet and also between different Worksheets of a Workbook
- Inserting and deleting cells, rows and columns in a worksheet
- Select, copy, paste and delete cell data within the worksheet
- Using various formulae and inbuilt functions like Trigonometric, Statistical,

- Logical, Data Sorting
- Update worksheets using special tools like spell check and auto correct.
- Setup the page and margins of worksheets for printing
- Enhance worksheets using charts & graphs

3. MS Power Point

- Introduction and starting the program
- Starting a presentation
- Adding new slide
- Saving and Opening presentation
- Text formatting options
- Copy, Move and delete slides and text
- Applying designs
- Using Animations
- Slide Transitions, Hyperlink
- Insert clip art
- Viewing the presentation

UNIT 4 The Internet

Networks, Advantages of networking, Types of networks.

- History and Functions of the Internet
- Working with Internet
- Web Browsers, World Wide Web, Uniform Resources Locator and Domain, Names, Issues related to web security.
- Uses of Internet
- Search for information, Email, Chatting, Instant messenger services, News Group, Teleconferencing, Video-Conferencing, E-Commerce and M-Commerce.

Email

- Manage an E-mail Account
E-mail Address, Configure E-mail Account, log to an E-mail, Receive E-mail, Sending mails, sending files an attachments and Address Book
- Downloading Files

4. SUGGESTED LIST OF EXPERIMENTS

S. No.	Unit No.	List of Experiments
1	1	Identify Input and output devices
2	1	Calculate capacity of different storage device
3	2	Identify OS and different application software s loaded on that OS
4	3	Load Windows operating system. Configure and load relevant device drivers

Directorate of Technical Education, Goa State

5	4	<p>Practice on Windows 95/98/2000 ;</p> <ul style="list-style-type: none"> o Starting Windows, Exploring the desktop, Arranging windows, My Computer, The start button, Creating Shortcuts, Practice on moving and sizing of windows o Study of file organization: creating, copying, moving, renaming and deleting o Practice on Windows Accessories- Notepad, Word Pad and Paint o Editing document & formatting text, Previewing and printing document/Image file o Practice on Windows Explorer o Recycle bin o Shutting down windows
6	4	<p>Practice on MS-Word ;</p> <ul style="list-style-type: none"> o Create and format document o Edit and Modify text- changing font size type and style o AutoText, AutoComplete, AutoCorrect, grammar and spellchecker, Find and replace of text o Open save and print a document o Insert, modify table o Insert graphics o Mail merge
7	5	<p>Practice on Microsoft Excel</p> <ul style="list-style-type: none"> o Create, save & format worksheet o Open and save worksheet file o Edit & modify data o Use formula and functions o Split windows and freeze pans o Data sort and security features o Create, edit, modify and print worksheet. o Create and edit charts
8	5	<p>Practice on PowerPoint</p> <ul style="list-style-type: none"> o Create, edit, insert, move, slides o Open and save presentation o Insert picture, audio slide layout, action button o Apply custom animation o Present slide show
9	6	<p>Practice on:</p> <ul style="list-style-type: none"> o Identification of type of Account. o Connecting to internet o Dial up access o Web browsing o Searching websites o Information searching o Email services o Creating email accounts & Receiving and sending mails

5. SUGGESTED LEARNING RESOURCES

S.No.	Author	Title of Books	Publication & Year
1	Norton Peter	Introduction to Computers (special Indian edition)	Tata McGraw Hills New Delhi, 6 th Edition, 2005 ISBN: 0070593744
2	Kahate Atul	Information Technology	Tata McGraw Hills New Delhi, ISBN-13:9780070593718
3	Williams Stalling	Using Information technology: A Practical Introduction to Computers and Communication	Tata McGraw Hills New Delhi,
4	Curtin	Information Technology: The Breaking Wave (book only)	Tata McGraw Hills New Delhi, ISBN:0074635581
5	Ravichandran, D	Introduction to Computers and Communication	Tata McGraw Hills New Delhi, ISBN: 0070435650
7	Douglas E.	The Internet Book	Prentice Hall of India, New Delhi, 3 rd Edition, ISBN: 812032286X
8	Basanbhara S.K.	Computer Today	Nita Mehta Publications, 2003 ISBN: 8186340742

GN203 ENVIRONMENTAL STUDIES

1. RATIONALE

Due to various developmental activities carried out by man, our environment is continuously being abused and getting degraded. The air we breathe, water we drink, food we eat, land we live on, all are getting spoiled day by day. The purity of our environment is of prime importance for survival of human race on the earth. Man should not go for developmental activities at the cost of environment. This subject has been introduced in the Diploma Programme to bring about awareness towards the environmental purity amongst the students.

2. TEACHING AND EXAMINATION SCHEME

Course Code & Course Title	Periods/ Week (In Hours)				Total Credits	Examination Scheme				Total Marks
						Theory Marks		Practical Marks		
	L	T	P	C	TH	TM	TW	PR/O R		
GN203 Environmental Studies	3	-	-	3	75	25	-	-	100	

Minimum passing %: Theory 40%

Duration of Theory Paper: 3 Hrs.

3. DETAILED COURSE CONTENT

<p>Unit 1 Multidisciplinary Nature Of Environmental Studies. Definition, scope and importance. Need for public awareness.</p>
<p>Unit 2 Natural Resources Renewable and nonrenewable resources. Natural resources and associated problems.</p> <ul style="list-style-type: none"> • Forest resources: Use and overexploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. • Water resources: Use and over-utilization of surface and ground water, floods, droughts, conflicts over water, dams- benefits and problems. • Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources. Case studies. • Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer & pesticide problems, water logging, salinity, case studies. • Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies. • Land resources: Land as a source, land degradation, man induced land slides, soil erosion and desertification. <p>Role of an individual in conservation natural resources. Equitable use of resources for sustainable life styles.</p>

Unit 3 Ecosystems.

Concept of an ecosystem. Structure and function of an ecosystem. Producers, Consumers and Decomposers. Energy flow in the ecosystem. Ecological succession. Food chains. Food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of following ecosystems: (a) Forest ecosystem (b) grassland ecosystem (c) desert ecosystem (d) Aquatic ecosystems (Ponds, streams, lakes, rivers, oceans, and estuaries).

Unit 4. Biodiversity And Its Conservation.

Introduction – Definition: genetic, species and ecosystem diversity. Biogeographical classification of India. Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. Biodiversity at global, national and local levels. India as a mega-diversity nation. Hot spots of biodiversity. Threats to biodiversity: habitat loss, poaching of wild life, man-wild life conflicts. Endangered and endemic species of India. Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity.

Unit 5. Environmental Pollution.

Definition. Causes, effects and control measures of: Air pollution, water pollution, soil pollution, marine pollution, noise pollution, Thermal pollution, Nuclear hazards. Solid waste management: Causes, effects and control measures of urban and industrial wastes. Role of individual in prevention of pollution. Pollution case studies. Disaster management: flood, earthquakes, cyclone and landslides.

Unit 6. Social Issues And The Environment.

From unsustainable to sustainable development. Urban problems related to energy. Water conservation rainwater harvesting, watershed management. Resettlement and rehabilitation of people; its problems and concerns; case studies. Environmental ethics: Issues and possible solutions. Climatic change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust; case studies. Wasteland reclamation. Consumerism and waste products. Environmental protection act. Air (Prevention and control of pollution) Act. Water (Prevention and control of pollution) Act. Wildlife protection Act. Forest conservation Act. Issues involved in enforcement of environmental legislation. Public awareness.

Unit 7. Human Population And The Environment.

Population growth, variation amongst nations. Population explosion – Family welfare programme. Environment and human health. Human rights. Value education. HIV / AIDS. Women and child welfare. Role of Information technology in environment and human health. Case studies.

Unit 8. Field Work.

Visit local area to document environment assets – river / forest / grassland / hill / mountain. Visit to a local polluted site – urban / rural / industrial / agricultural. Study of common plants, insects, birds. Study of simple ecosystems – ponds, river, hill slopes,

etc. (field work equal to 6 lecture hours).

4. SPECIFICATION TABLE WITH HOURS & MARKS (THEORY)

Unit No.	Topic	Teaching Hours	Marks
1)	Multidisciplinary Nature Of Environmental Studies.	01	03
2)	Natural Resources.	10	12
3)	Ecosystems.	06	08
4)	Biodiversity And Its Conservation.	06	09
5)	Environmental Pollution.	08	12
6)	Social Issues And The Environment.	07	12
7)	Human Population And The Environment.	04	09
8)	Field Work.	06	10
		48	75

5. MANDATORY ACTIVITIES

In addition to the class room instruction, visits should be arranged in any 2 of the following areas:

1. Visit to NIO or Science Centre.
2. Visit to Selaulim/ Anjunem Dam.
3. Visit to study ecosystem (Pond, Stream, River, and Forest).
4. Visit to show Hill cuttings, mining areas.
5. Visit to show Rain water harvesting project / Vermicomposting plant / Watershed management project. (Krishi Vigyan Kendra – Old Goa)
6. Visit to water treatment/ waste water treatment plant.

6. SUGGESTED VIDEOS

In addition to the class room instruction, video films on environment may be shown.

7. SUGGESTED LEARNING RESOURCES

S.No.	Author	Title of Books	Publication
1	Erach Bharucha	Textbook of Environmental Studies for Undergraduate courses	University Press
2	P. Meenakshi	Elements of Environmental Science and Engineering	Prentice Hall of India (PHI)
3	S. Deswal & A. Deswal	A Basic Course in Environmental Studies.	Dhanpat Rai & Co.
4	Pandya and Camy	Environmental Engineering	Tata McGraw Hill
5	Asthana D.K. and Asthana Meera	Environmental Problems and Solutions.	S. Chand & Co
6	Centre for Environmental education	Video Film	Thaltej Tekra, Ahme
7	Dr. S.K. Dhameja	Environmental Studies	

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Semester III

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
GT 301	FASHION ILLUSTRATION	02	-	04	06	-	-	100	50	150
GT 302	TEXTILE CONSTRUCTION	04	-	02	06	75	25	-	50	150
GT 303	WOMEN'S PATTERN CONSTRUCTION (INDIAN)	-	-	06	06	-	-	100	50	150
GT 304	INDUSTRIAL GARMENT MANUFACTURE	03	-	01	04	75	25	-	25	125
GT 305	COMPUTER AIDED FASHION DESIGN	01	-	03	04	-	-	50	50	100
GT 306	SURFACE ORNAMENTATION	-	-	03	03	-	-	50	50	100
GT 307	GARMENT QUALITY CONTROL	02		01	03	75	25	-	25	125
	TOTAL				32					900

(GT 301) FASHION ILLUSTRATION

- 1. RATIONALE:** * Students gain knowledge about the costume industry especially in the design field.
 * Technical terms illustrating techniques and an overall knowledge of costume is achieved by the end of the programme/ course.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks	Practical Marks			
(GT 301) FASHION ILLUSTRATION	L	T	P	C	TH	TM	TW	PR/OR	150
	2	-	4	06	--	--	50	100	

*Minimum passing % : Theory 40% and Practical 40%
 Paper: 3 Hrs.*

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
 PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

Unit 1	Garment Silhouettes
	<ul style="list-style-type: none"> a. Western Male:- Shorts & Vest, Denims & T-Shirts, Bush shirt & Cargos, Formal Shirt & Trousers, 3 piece suit, Jumper/ Boiler suit. b. Western Female:- Sheath, A-line, Tent/trapeze, Fit & Flare, Tunic, Empire, Long torso, Peplum/ Mushroom, Pagoda, Caftan, Trail/ Fishtail. c. Indian Male:- Sherwani/Churidar, Bandgala/Jodhpuris, Pathani suit, Kurta, Pyjama & Bandi, Kedia, Dhoti, Lungi & Angavastaram, Angarakha. a. Indian Female:- Salwar & Kameez, Churidar & Kurta, Shararah & Kurti, Gaghara & Choli(long), Saree & Choli(Short).
Unit 2	Lingerie
	<ul style="list-style-type: none"> a) Female & Male- Regular, High cut, low waist, G-string, Panty/ Brief. b) Darted, Horizontal darts, vertical darts, sports, strapless, halter Brassieres. c) Singlet, spaghetti, camisole, tube petticoat,

Half slip, full slip, full length, Slips or Vests.	
Unit 3	<p>Garments for Special Occasions/ Functional wear (any 3 in each category)</p> <p>a. Sports: - Swimming, cycling, tracks, etc. indoor & outdoor sports.</p> <p>b. Adventure: - Skiing, paragliding, mountaineering, tracks, safaris etc.</p> <p>c. Seasons:- Autumn, winter, spring, summer, monsoons.</p> <p>d. Occupations:- Doctor, nurse, policeman, fireman, uniforms(school, college) etc.</p>
Unit 4	<p>Analyzing Clothing: Male, Female, Child.</p> <p>a. Selecting costumes from various categories formal, casual, occasional, etc. and identifying garment parts, fabrics used, embellishments used, trims used and description of costume using technical terminologies (brief description).</p>
Unit 5	<p>Rendering Clothing- Flat and Draped</p> <p>Understanding and depicting fall, folds, textures, prints, trims, fasteners used in clothing and textiles.</p>
Unit 6	<p>Accessories in Costume Industry</p> <p>a. Classification of accessories.</p> <p>b. Materials used for accessory making.</p> <p>c. Fine Jewellery .</p>

4. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	<p>Unit 1:-</p> <p>1. All four sub categories (a, b, c, d) will be illustrated on the board for students to understand how the garments mould on figure and students in turn will illustrate it in their journals.</p> <p>2. Collages to be prepared in each sub- category.</p>
2	<p>Unit 2:-</p> <p>1. Illustrations for sub- categories (a, b, c) will be done on the board and students in turn will illustrate them in their journals.</p> <p>2. Collages to be made by students for each sub- category.</p>
3	<p>Unit 3:-</p> <p>1. In each sub- category students will select 3 occasions and prepare designs keeping in mind functional and decorative aspects best suited for that occasion.</p> <p>2. A chart of fabrics, colours, prints suitable will also be sourced and submitted with design sheets.</p>

4	<p>Unit 4:-</p> <ol style="list-style-type: none"> 1. Indian and western garments for male, female, and child will be identified and a technical report for each will be prepared keeping in mind all aspects such as fabric type, print, trims, fasteners etc. 2. Brief descriptions with technical terms will be prepared for each garment. 3. Colour blocking to be done in each category and for each garment. 	
5	<p>Unit 5:-</p> <ol style="list-style-type: none"> 1. rendering various textiles like velvet, satins, cottons, tweeds, plaids, fur etc.. 2. rendering falls in various costumes like drapes, pleats, gathers, folds, prints etc.. 3. depiction of trims, fasteners, facings, piping's, embroideries, enhancements etc. used on clothing. 	R R D
6	<p>Unit 6:-</p> <ol style="list-style-type: none"> 1. preparation of a classification chart for accessories with sub divisions in each. 2. collection of common materials used for accessories. 3. identification and collection of fasteners, yarns, chains, clasps and hooks used to make accessories. 4. assignment on fine jewellery. 	P C I A
<u>Total-</u>		

- 5. Competencies to be developed:** At the end of the course the student will be able to
- 1) Illustrate different parts of garments
 - 2) Design and illustrate different types of Lingerie Garments for Special Occasions/ Functional wear
 - 3) Analyze different fabrics and do rendering
 - 4) Design accessories and fine jewellery.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Georgia O' Hara- Thames & Hudson Ltd.	THE Encyclopedia of Fashion	Latest
2.	Elizabeth Rouse BSP- Professional Books	Understanding Fashion	Latest

3.	Carol A Nunnelly- Thames & Hudson Ltd.	Fashion Illustration School- A complete hand book for aspiring designers and illustrators	Latest
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(GT 302) TEXTILE CONSTRUCTION

1. **RATIONALE:** This course will help the student to understand the process involved in making fabrics and yarns. They will be able to distinguish between different types of fabric construction namely woven, knit and non-woven. Students will be able to identify yarn construction techniques used in contemporary textiles and how these affect the hand appearance, performance and end use of textiles. aims at familiarizing students with various quality aspects, standards and specifications used in the garment industry. They will be able to inspect and rectify the garments for quality standards.

2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
(GT 302) TEXTILE CONSTRUCTION	L	T	P	C	TH	TM	TW	PR/OR	150
	4	-	2	06	75	25	50	-	

Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks; PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. **Competencies to be developed:** The student will identify yarns, construction techniques used in contemporary textiles and how these affect the hand, appearance, performance and end use of textiles.
- Student will write an evaluation of a selection of fabric swatches
 - Student will recommend textile applications for design manufacturing, marketing.

4. DETAILED COURSE CONTENTS

<p>Unit 1 Chapter 1. Fibre Construction</p> <ul style="list-style-type: none"> - - - blow-room to ring-frame for cotton - blended yarn (Polycot) - - - slub, novelty yarns - - understand the terms. <p>Practicals:</p> <ul style="list-style-type: none"> - - identify them (make a collage) - 	<p>(20 mks) 14 hrs</p> <p>Definition of spinning</p> <p>Conventional ring spinning process from</p> <p>Blending, blending of fibres to form</p> <p>What is open end spinning</p> <p>Different types of yarns like ply, cable,</p> <p>What is yarn count, fineness of yarn</p> <p>English/ District system (Tex/ Denner)</p> <p>Collect samples of different yarns and</p> <p>Identifying major spinning units and composite mills in India like Bombay Dyeing, Reliance, Raymond’s etc. and briefly studying them.</p>
<p>Chapter 2. Fabric Construction</p> <ul style="list-style-type: none"> - Definition of weaving, knitting and non- woven - Understanding and learning the difference between the 3 - Parts of the loom- shuttle, healds, heald frame, tappet, dobby, jacquard, reed backrest, warp beam, cloth roller and their functions - Mechanism of the loom namely, shedding, picking and beating. - Basic understanding of handlooms, power-looms and auto-looms. - What is balance of the cloth, EPI, PPI - What is a design, understand and construct Plain weave, Basket weave, and Rib weave and its uses - Construct twill weave, right hand twill weave, left hand twill weave, drill and herringbone and its end uses - Construct satin weave and its end uses - Construct diamond, mockleno and honeycomb and huck -a- back weave and know their end uses - What are narrow width fabrics - What is a selvedge, its purpose - Tape selvedge, fused, twill, split selvedge. <p>Practical:</p>	<p>(20 mks) 22 hrs</p>

- Collect samples of wovens, knits and non-wovens. Identify, evaluate and write their applications
- Collect samples of different selvages and identify
- Understanding the loom mechanism on the table loom practically
- Count and find EPI, PPI, using pick glass of any three different samples of woven fabrics.
- Collect samples of plain weave fabrics like chiffon, matty, voile, georgette, oxford, calico, taffeta, muslin. Twill weave fabrics like denim, drill, chambray, gabardine etc..
- Satin fabrics, pile, cut- pile like velvet, corduroy, velour, un-cut pile like terrycloth, terry velour.
- Collect samples of Jacquard fabrics like damask, brocade etc.
- Collect samples of narrow width fabrics like woven labels etc.
- Collect and make a fabric swatch sample file of the above woven fabrics and identify them.

Unit 2. Chapter 1. Knitting Technology

(15 mks) 14 hrs

- What is Knitting? – Definition
What is weft knitting, technical names of fabrics- single jersey, double jersey, what is knit, purl, miss stitch.
- What is warp knitting, technical names. Raschel and tricot.
- Difference between warp and weft knits and applications.
- Major knitting industries in India , their location etc.

Practical:

- Understand knit, purl, miss stitch, plain knit, face side, reverse side- fabric diagrams.
- Rib fabrics 1x 1, 2x2, 3x3.
- Collect samples and identify.

Chapter 2. Non-woven's

(15 mks) 10 hrs

- Definition, what is bonding, types of bonding- chemical, thermal, mechanical.
- Web formation techniques
Dry laid, Air Laid, Spun Laid, Melt blown web.
- Properties and applications of non- woven's.
- Finishing of non- woven's

Practicals:

- Collect samples and identify.

Chapter 3. Recent Developments in fabric construction viz. Eco-friendly textiles, Medico textiles, Geo textiles.

(5 mks) 04 hrs

Practicals:

- Give students assignments on any two recent developments in textiles.
- Students will maintain a journal and complete all the assignments into it.
- Students will write an evaluation of a selection of fabric swatches and recommend textiles application.
- Students will make a complete fabric profile book during the semester.

Examinations

1. A viva to be conducted at the end of the semester, where in an external examiner will test the understanding and knowledge of the student gained during the semester on the subject.
2. Examiner will set 9 questions in all
 - Q.1 will be compulsory consisting of objective type questions spread over the entire syllabus.
 - The remaining eight questions will be set from Unit 1 and Unit 2 (four from each unit).
 - Candidates are required to attempt 5 questions
 - Question 1 compulsory and remaining questions will be attempted selecting questions from each unit.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Fibre Construction	14 hrs	20 mks
2	Fabric Construction	22 hrs	20 mks
3	Knitting Technology	14 hrs	15 mks
4	Non-woven's	10 hrs	15 mks
5	Recent Developments in fabric construction eg. Eco-friendly textiles, medico textiles, geo textiles.	04 hrs	05 mks
	Total		75 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS (Practical)
1	<ul style="list-style-type: none"> - Collect samples of different yarns and identify them (make a collage) - Identifying major spinning units and composite mills in India like Bombay Dyeing, Reliance, Raymond's etc. and briefly studying them.
2	<ul style="list-style-type: none"> -Collect samples of wovens, knits and non-wovens. Identify, evaluate and write their applications -Collect samples of different selvages and identify -Understanding the loom mechanism on the table loom practically -Count and find EPI, PPI, using pick glass of any three different samples

	<p>of woven fabrics.</p> <ul style="list-style-type: none"> - Collect samples of plain weave fabrics like chiffon, matty, voile, georgette, oxford, calico, taffeta, muslin. Twill weave fabrics like denim, drill, chambray, gabardine etc.. -Satin fabrics, pile, cut- pile like velvet, corduroy, velour, un-cut pile like terrycloth, terry velour. -Collect samples of Jacquard fabrics like damask, brocade etc. -Collect samples of narrow width fabrics like woven labels etc. <p>Collect and make a fabric swatch sample file of the above woven fabrics and identify them.</p>
3	<ul style="list-style-type: none"> - Understand knit, purl, miss stitch, plain knit, face side, reverse side- fabric diagrams. - Rib fabrics 1x 1, 2x2, 3x3. <p>Collect samples and identify</p>
4	<ul style="list-style-type: none"> - Give students assignments on any two recent developments in textiles. - Students will maintain a journal and complete all the assignments into it. - Students will write an evaluation of a selection of fabric swatches and recommend textiles application. <p>Students will make a complete fabric profile during the semester.</p>

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Subhash K. Batra, Phd.& Behram Povrdey lime Phd- North Carolina, State University	Introduction to Non-woven's Technology	Latest
2.	Anbhumani	Knitting Fundamentals, Machines, Structures and Developments	Latest
3.	Cobbman	Fibre to fabric	Latest
4.	Gokarnesan	Fabric structure and Design	Latest
5.	Grosike	Watsons Textile Design and Colour- Elementary	Latest
6.		Textile Yarns Technology	Latest
7.		Cotton fibre to yarn	Latest
8.	Mahadevan	Textile Spinning, Weaving and Designing	

(GT 303) WOMEN'S PATTERN CONSTRUCTION (INDIAN)

1. **RATIONALE:** The subject aims at familiarizing students with concept of drafting of basic block, its manipulation and use of these blocks in construction of different Indian garments..

2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
(GT 303) WOMEN'S PATTERN CONSTRUCTION (INDIAN)	L	T	P	C	TH	TM	TW	PR/OR	150
	0	-	6	06		-	50	100	

*Minimum passing % : Theory 40% and Practical 40%
Paper: 4 Hrs.*

Duration of Practical

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. **Competencies to be developed:**

- The student will learn to use basic bodice draft in manipulation and creation of new patterns
- students will learn different types of Indian garments and construction of those garments.
- Students will be able to create new designs and construct the same

4. DETAILED COURSE CONTENTS

Unit 1	Introduction.	(04 hrs)
	Construction of Basic Bodice and Skirt Block using Standard Measurement.	
	Converting basic into 1/4 th scale block.	

Unit 2	Dart and dart manipulations	(16 hrs)
	<ul style="list-style-type: none"> i) Bodice one dart transfer to- Arm hole, French dart, center bust line dart ii) Bodice one dart converted in to Two darts- waistline and underarm dart, waist line and shoulder dart, waistline and armhole dart. iii) Bodice one dart converted into three darts-Three darts at waist line, three stitched tucks at shoulder, three tucks at waist line and gathers at waist line and shoulder. iv) Concealment of darts- bodice, armhole princess and shoulder princess. 	
Unit 3	Skirts	(08 hrs)
	<ul style="list-style-type: none"> - Basic one dart skirt converted into A-Line skirt - A-line skirt converted into 4 gore skirt, circular skirt, 6 gore skirt (plain and with flare), trumpet, tulip, front wrap and back flare wrap, straight yoke, round and shaped with pleats, pleated skirt round yoke, flare skirt with yoke. 	
Unit 4	Choli	(08 hrs)
	-Construction of a basic choli with 4 darts and yoke by using own body measurements. Front or Back opening, using cotton or blended fabric, option of decorative stitching	
Unit 5	Katori choli.	(12 hrs)
	- Drafting, Layout, cutting and Stitching of katori choli by using standard/own measurements and as per vogue.	
Unit 6	Indian skirts	(12 hrs)
	-Drafting of saree petticoat, shararah, lehenga. Stitching of any one by using suitable material.	
Unit 7	Salwar	(08hrs)
	- Drafting instructions of salwar(modern & plain), patiyala and dhoti. Stitching of any one.	
Unit 8	Chudidhar	(04hrs)
	- rafting instructions of Chudidhar and Cutting, stitching by using bias bag method, bias layout method.	
Unit 9	Kurta	(06hrs)
	<ul style="list-style-type: none"> -Drafting and construction of basic Kurta with plain sleeve - Length of kurta may differ according to the need and vogue. 	
Unit 10	Assignment.	(18 hrs)
	- esign draft and stitch one full Indian garment; Salwar kameez or lehenga choli for a formal occasion.	

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS (Practical)
1	Drafting of basic bodice and skirt block by using standard measurements provided and converting it into 1/4 th scale measurements.
2	Dart manipulations to be done by using 1/4 th scale measurement block of standard block
3	Concealment of darts to bodice princess using 1/4 th scale measurement block
4	Converting of basic skirt into A-line by using 1/4 th scale block. Converting of A-line skirt into different types of skirts as per syllabus
5	Drafting cutting and stitching of s Choli/ blouse using own measurements and other details as per syllabus
6	Drafting cutting and stitching of katori Choli with suitable finishes
7	Drafting cutting and stitching of skirt
8	Drafting cutting and stitching Salwar
9	Cutting and stitching of chudidhar
10	Construction of basic kurta /kameez by using one's own body measurements completed with required finishes.
11	Design draft and stitch one full Indian garment; Salwar kameez or lehenga choli
Total	

Practical work will include working on assignments prescribed in the syllabus. All the assignments will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 05 marks under internal assessment; the division of 05 marks is as follows; Attendance- 01 marks, punctuality in submission- 01 marks, neatness & Presentation of work – 03 marks. The remainder of the PPA i.e. 45 marks will include regular class work.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Natalie Bray,	Dress Pattern Design	Blackwell Science
2.	Jeanne Powell & Carol Foley	Pattern Making	Latest
3.	Labanya Mazumdar & R.Vatsala (Eds.)	Textbook of Fundamentals of Clothing Construction	Latest Blackwell Science

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4.	Pamela Stringer	Pattern Drafting For Dress Making	B.T Bats Ford London
5.	Zarapkars	Cutting And Sewing	Latest
6.	Helen Joseph- Armstrong	Pattern Making for Fashion Design	Latest
7	Padmavati .B.	Techniques of Drafting and Pattern Making	2008

(GT 304) INDUSTRIAL GARMENT MANUFACTURE

1. RATIONALE: The course introduces students to a garment industry, its functioning, the machinery and the personnel.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)				Total Credit	Examination Scheme			
						Theory Marks		Practical Marks	
(GT 304) INDUSTRIAL GARMENT MANUFACTURE	L	T	P	C	TH	TM	TW	PR/ OR	125
	3	0	1	4	75	25	25	-	

Minimum passing %: Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. DETAILED COURSE CONTENTS

<p>Unit 1 Garment classification</p> <p>Classification based on;</p> <ol style="list-style-type: none"> 1. Construction- Woven & Knit garments. 2. Production- Ready to wear made to order. 3. Production run- Semi styled and fashion garments. 4. Occasion- Casual wear, formal wear, semi-formal wear, occasional wear, loungewear, sportswear and uniforms. 5. Age- Infant, children, teenage, adult and old age garments. 6. Gender- Men’s wear, women’s wear, unisex garments. 7. Season- Spring, summer, autumn, rain and winter wear. 8. Closeness to body- Underwear, Innerwear, outwears. 	(8hrs - 10mks)
<p>Unit 2 Manufacturing Systems</p> <ol style="list-style-type: none"> 1. Understanding of merchant, manufacturer and job worker. Manufacturing units and job work units. 2. Batch work and Piece work. Advantages and disadvantages. Layout of a line in batch system. 3. Small scale and large scale industry. Advantages and disadvantages. 4. Work study- Time and motion study. 5. Layout of a factory- Difference in the layout of a woven and knit factory. 	(10hrs - 15mks)

Unit 3 Sections in a factory.

(30hrs - 50mks)

1. Sampling/Design section: working and importance of a design section. Types of samples- Regular, Actual, Dummy, Sealer, Size set and Production samples.
2. Stores and Purchase: Duties of a store keeper. Three main duties of receiving, storing and issuing. Stock level orders: speculative buying. Study of raw materials like fabric, button, thread, interlining including fusing, wadding, lace, braids, elastic, Velcro, shoulder pads, eyelets & lace, zip fasteners & labels. Stores and purchase chart, order form/purchase order.

3. Production Department:

P

a) Cutting Section: Cutting principles, production process in the cutting room. Planning, Drawing and Reproduction of a marker. Spreading- Manual, machine & computerized. Flat and stepped spread. Cutting- Manual, machine, die pressed and computerized.

Preparation for sewing machine- shade marking, numbering, ticketing, bundling. Cutting machines- Powered shears, Round knife, straight knife, band knife, servo assisted cutting, die cutting, computerized cutting, and drills. Cutting loom planning chart.

b) Stitching section:

Stitching by hand, sewing machines, mechanized workplaces.

Machinery: Single needle lock stitch machine, double needle lock stitch machine, chain stitch machine, over-lock machine, flatbed, cylindrical and post-bed machine, fusing machines, feed up of arm machine, blind stitch machine, elastic attaching machine, bar tack machine, attachments.

Mechanized machines: Chutes, trolleys, straight line conveyor belts, Progressive/ synchronic flow conveyors, UPS & QRS.

Order concentration, block planning.

c) Finishing & Packing Section:

Trimming, packing & quality control. Flat pack, semi stand pack & stand pack. Hanger packs, packing materials like tags, inner cartons, outer cartons, and poly bags. Packing charts.

Machines: Buttoning machine, button hole machine.

Pressing machines – irons, steam press, carousel under press, steam dolly, tunnel fitches, washing machines for industrial garment wash.

d) Functions of manufacturer. Production planning charts.

4. Office

a) Marketing Section:

Activities of marketing, marketing calendar.

b) Finance section:

Budgeting, CMT/labor cost, Garment costing.

- 4. Competencies to be developed:** At the end of the course the student understands the working of the factory and is able to
1. Make a layout in a line, in a batch system.
 2. Make a layout of a woven, a knit factory.
 3. Make a stores and purchase planning chart.
 4. Make a cutting room planning chart.
 5. Make an order form.
 6. Make a packing list.
 7. Make a production planning chart
 8. Cost a garment.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Garment classification	8hrs	10mks
2	Manufacturing Systems	10hrs	15mks
3	Sections in a factory	30hrs	50mks
	Total	48 hrs	75 mks

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Layout of a line in a batch system (unit 2)	(1 hr)
2	Layout of a factory- woven & knit (unit 2)	(1 hr)
3	Order form	(1 hr)
4	Swatches of raw materials a) Fabric b) Buttons c) Thread, Lace, Braid, Elastic, eyelets & lace. d) Interlining, Velcro, shoulder pad, zipper.	(2 hrs)
5	Stores & Purchase planning chart (unit 3)	(1 hr)
6	Cutting room planning chart (unit 3)	(1 hr)
7	Pictures of garment machinery (unit 3) a) Cutting machine b)	(2 hrs)

	titching machine c) inishing machine d)	F
8	Order concentration (unit 3)	(1 hr)
9	Packing list (unit 3)	(1 hr)
10	Production planning chart (basic & only forward)(unit 3)	(2 hrs)
11	Problems on CMT (unit 3)	(2 hrs)
12	Problems on costing (unit 3)	(2 hrs)

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Gary Cooklin	Introduction to garment manufacture	Blackwell Science
2.	A.J. Chuter	Introduction to Clothing Production	Blackwell Science
3.	Harold Cau & Barbara Lathan	The Technology of Clothing manufacture	Blackwell Science
4.	David J. Tyler	Material management in clothing production	Blackwell Science

(GT 305) COMPUTER AIDED FASHION DESIGN

1. RATIONALE: This course aims at training students to design garments using different software's on computers which is faster and more efficient, familiarizing students with various

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
(GT 305) COMPUTER AIDED FASHION DESIGN	L	T	P	C	TH	TM	TW	PR/OR	100
	1	-	3	4	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks; PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 Introduction (03hrs-04hrs)</p> <p>An introduction, features and limitations of softwares available for designing MS Paint, E-draw, Mac Paint, Corel Draw, CAD for drafting and designing, Optitex 3D virtual photo typing, 2D CAD CAM Pattern & Fashion design, Virtual Fashion basic, blonzewear 3D Apparel solutions like V- stitches, Reach CAD, SCL, Digital Fashion Pro for fashion illustrations, Digital fashion Pro, Beyond the basics(for spec sheets), Denim wash factory (for denim Washes), shoes and accessory design packs for accessory designs, story board creator, fashion Business creator (for business information and spec sheet) etc.</p>
<p>Unit 2 Sketching in MS Paint (04hrs-18hrs)</p> <p>Sketching & Printing using various tools and equipments of MS Paint. Drawing different garments. 8 head figure and fashion croquet. Stylized figures. Different poses for male & female. Putting on different garments on croques of one male, one female and child-swimwear, casual, formal, sports and occasional wear.</p>
<p>Unit 3 Drawing, Texturing, Scanning and tracing in Corel (02hrs-10hrs)</p> <p>Drawing and printing using different tools of Corel. Importing and Exporting files. Importing designs done in MS Paint and texturing them in Corel.</p>

Unit 4	Virtual Dressing	(01 hr – 06 mks)
<p>Scanning or clicking one’s own picture or that of another person and putting it on Photoshop. Dressing it up in different attire to check suitability using MS paint, Corel draw and Photoshop.</p>		
Unit 5	Documentation	(04hrs – 06 mks)
<p>Making spec sheets, visiting cards, letterheads, story boards, etc. using different softwares.</p>		
Unit 6	3D Printing	(02hrs – 04mks)
<p>An introduction to 3D Modeling & Printing. Project given in groups that could be for an accessory that will be printed.</p>		

4. Competencies to be developed:

After learning this subject, the student will be able to

1. Understand and use different softwares available for fashion design.
2. Draw garments figures and design various garments for casual, formal, occasional and sportswear using Paint & Corel draw.
3. Do virtual designs for clients by dressing up their photographs.
4. Make documents and office stationery that can help them in their business.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Practice on free open softwares	04
2	Illustration of 8 head figure, fashion croquet, male & female poses and stylized figure. Designing Casual, formal, sports & occasional wear	04 14
3	Importing paint files in Corel, tracing them & applying colours & texture on them	10
4	Designing clothes for self & client (Min. 2 attires- Indian & Western)	04
5	Making spec sheet, visiting cards, letterheads, storyboard, and theme board.	06
6	Field visit	02

Total-	48
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- ❖ A field visit to any company dealing with softwares/ Digital Printing/ 3D Printing.
- ❖ The journal maintained will have information and pictures collected of the latest software's available with features and assignments done by the student.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Catty Fenner & Arnie Fenner	Spectrum 20: The Best in Contemporary Fantastic Art	Latest
2.	Mark Baskinger & William Bardel	Drawing Ideas- A hand down approach for better designs	Latest
3.	Phyllis Davis & Steve Schwartz	Corel Draw for Window's- Visual Quick start Guide	Latest

(GT 306) SURFACE ORNAMENTATION

1. **RATIONALE:** The subject gives the students a thorough knowledge of different techniques and methods used for surface ornamentation of apparels and fabrics.

2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
(GT 306) SURFACE ORNAMENTATI ON	L	T	P	C	TH	TM	TW	PR/OR	100
	-	-	3	3	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.

Duration of Theory

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 Introduction to Embellishment (03hrs)</p> <p>History, types of embellishments available. The suitable use of embellishment keeping in mind end use. A survey of different new trends and materials available in the market.</p>
<p>Unit 2 Kinds of Embellishments (20hrs)</p> <p>a. Using machine: Patchwork- types and method of construction, ready ribbons, braids and other trimmings (application).</p> <p>b. Hand stitching: Appliqué- types and methods, zari/zardosi- types and methods. Tassels- making & using different techniques and application. Beads and Sequences: types of beads and sequences.</p>

Unit 3 Machine Embroidery (22hrs)

Materials, threads, fabrics, needles, frames, designs, machines etc.

Stitches: use of fashion maker for different available stitches including edgings. Free machine embroidery: Textured stitches based on free running stitch, drawing with needle, free zigzag stitch, couched, thread with looper, eyelets, whip-stitch and its variations. Free cable stitch, free-cut work with lace filling, open work, free machine lace and its variations.

Unit 4 Computerized Machine Embroidery (03hrs)

Concepts of creating design, digitizing designs using software and working with motifs. Students can create samples using machinery available or alternatively a visit to study the same may be done to a local computerized machine embroidery unit.

4. Competencies to be developed:

- i) Identifying and use of different ornamentation materials available in the market.
- ii) Learning different techniques of ornamentation and creative use of same on different ready garments and articles.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Survey to be conducted and documented on new trends and materials used for ornamentation.
2	Embellishing ready garments using ribbons, braids etc. by creating their own design.
3	12x12 cms sample of types of machine stitches
4	12 cms X 12cms sample of patchwork
5	12 cms X 12cms sample of zari work
6	Smocked sample using dotted/checked fabric.
7	Embellishing garments/articles with patchwork/zari/appliqué and tassels.
8	Collage of materials used for machine embroidery like, needles, frames, designs, machines
9	Sampler containing different machines, decorative stitches
10	Sampler of different freehand machine embroidery
11	Creating ready to stitch article using any one of machine embroidery stitches.
12	Software's available for computerized machine embroidery. Designer techniques collage and write-up.
13	Sample using computerized machine embroidery/ report on visit.

Total-

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Mildred Groves	The complete Encyclopedia of Stitchery	Ryan, Adams Publishing
2.	Julia Barton and others	The Merhust Book of Needlework	Merhorst Ltd. London
3.	Readers Digest	The complete Guide to Needle Work	

(GT 307) GARMENT QUALITY CONTROL

1. RATIONALE: The course aims at familiarizing students with various quality aspects, standards and specifications used in the garment industry. They will be able to inspect and rectify the garments for quality standards.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
(GT 307) GARMENT QUALITY CONTROL	L	T	P	C	TH	TM	TW	PR/OR	125
		2	-	1	03	75	25	25	

*Minimum passing % : Theory 40% and Practical 40%
Paper: 3 Hrs.*

Duration of Theory

Legends:

*L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;
PR/OR - End Semester Practical / Oral Examinations; TW- Term Work*

3. Competencies to be developed: The students after learning this subject are able to;

- Identify areas of quality control.
- Plan an organizational structure and choose a QUALITY CIRCLE.
- Conduct Quality Inspections.
- Choose quality standards that suit their industry and environment.
- Help the Production team to follow spec sheets.
- Identify and rectify problems in Quality Control and assure Quality.

4. DETAILED COURSE CONTENTS

Unit 1	Introduction	(10 mks)
	<ul style="list-style-type: none"> a. What is Quality Control (definition)/ objectives of Quality Control. b. Need for Quality control in any industry. c. Customer perception of quality. d. Importance and benefits of quality control e. Quality control department and its role f. 5 aspects of Quality (producing quality products, checking quality, controlling quality, managing quality& quality assurance) 	

Unit 2	Quality Standards	(15 mks)
	<ul style="list-style-type: none"> a. ISO 9000-2001 b. Six Sigma c. Quality Circles d. Verification and validation e. Quality testing Labs and its role f. BTRA g. NTRA h. CTRA i. Textile Committee 	
Unit 3	Inspection and Defects	(25 mks)
	<ul style="list-style-type: none"> a. Definition b. Different types of inspections(spot, stage, random, final inspection) c. What is tolerance d. Role of inspector in inspection. e. Important points to check for quality in lower and upper garments f. What are major/minor defects. g. Raw materials inspection and defects (raw materials- closures, thread, elastics, labels/ tags, interlining etc.) h. Fabric inspections and defects (woven/ Knit fabrics). i. In-process inspection and quality aspects to check in cutting section, stitching, finishing section and packing and warehouse. j. Internal & External inspections, advantages 	
Unit 4	Specification Sheet	(25 mks)
	<ul style="list-style-type: none"> a. What is spec sheet? How to follow and check. b. How to fix specifications- One upper garment & one lower garment c. Understanding industry related symbols used in Quality control d. Care labels e. Using Nace-rap for weaving/knitting faults, pilling, slipped stitches, stitch density, needle breakage, bobbin thread breakage, puckering, printing defects, embroidery defects, colour shading, streaks, barre bowing, holes, stains, shrinkage etc.. 	

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Introduction	04	10 mks
2	Quality Standards	08	15 mks
3	Inspection and Defects	10	25 mks
4	Specification Sheet	10	25 mks

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Unit No.	Unit	Teaching Hours / Semester	Marks
	Total	32 hrs	75 mks

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS (Practical)
1	Specification sheets- how to follow and to prepare one spec sheet and check. One upper garment and one lower garment.
2	Industry related symbols- Charts
3	Practical checking of garments - One upper garment - One lower garment
4	Pictures of identification of Quality problems- Charts
5	Nace-rap for quality problems

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Sara J. Kadolph	Quality Assurance for Textile & Apparel(2 nd Edition)	Latest
2.	Pradip Mehta	An Introduction to Quality Control for Apparel Industry	Latest
3.	Satish Bharadwaj/ Pradip Mehta	Managing Quality in the Apparel Industry	Latest

Semester IV

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
GT 401	Fashion Merchandising	03	-	01	04	75	25	-	25	125
GT 402	Draped Garments	-	-	06	06	-	-	100	50	150
GT 403	Garment Import & Export	03	-	01	04	75	25	-	25	125
GT 404	Fashion Accessories	01	-	04	05	-	-	50	50	100
GT 405	Design Appreciation	02	-	03	05	-	-	50	50	100
GT 406	History Of World Costumes & Fashion	01	-	02	03	-	-	50	50	100
GT 407	Goan Handicrafts		-	03	03			50	75	125
	TOTAL	30								825

GT 401 FASHION MERCHANDISING

1. **RATIONALE:** The course gives knowledge on merchandising skills, costing, sourcing, Production Planning and other technical aspects of merchandising.
2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks	Practical Marks			
GT 401 FASHION MERCHANDISING	L	T	P	C	TH	TM	TW	PR/OR	125
	3	-	1	4	75	25	25	-	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 Introduction</p> <p>Introduction to Fashion and Merchandising, their inter-relation. Difference between Retail Merchandising & Factory Merchandising. Fashion terms like Classic, Fad, Vogue, Contemporary, Prêt, etc. Fashion cycle. Merchandising skills, Communication, Confidence, Persuasion & making contacts, Co- ordination, team spirit, identifying customer needs and giving after sales service, Sincerity & Commitment, Positive attitude & Problem solving, Role play, Creativity & Learning, Planning & Organising, Quality control, Fashion Forecasting, etc..</p> <p>Understanding & developing skills.</p>	(12 hrs – 15 mks)
<p>Unit 2 Fashion Co- Ordination</p> <p>Importance & Role of a Fashion Co-ordination.</p> <p>Follow up from design to dispatch with the help of a production planning chart and block planning charts. Control in Production. Foreseeing and avoiding bottlenecks. Preparation of a spec sheet.</p>	(08 hrs – 12 mks)
<p>Unit 3 Sourcing</p> <p>Importance. Sources of sourcing like books, magazines, travel, fairs, Internet, etc. types of sourcing- outsourcing, In-sourcing, global, national & zonal sourcing, single, multi & open sourcing, Qualitative, Quantitative & strategic sourcing. Survey.</p>	(04 hrs – 08 mks)

Unit 4 Retail Outlets		(10 hrs – 15 mks)
	Introduction to fashion retailing. Changing dimensions- past, present & future trends. Clothes for retail. How to start & run a retail outlet profitably. Retail buying & selling- specification buying, speculative buying. Strategies of selling like discount sales, edited retailing, mail order, Internet, concessionaires franchising, MLM & network marketing. Retail branding. Types of retail stores- Departmental stores, specialty stores, boutiques, Discount clothing stores, franchise outlets. Multiple chain stores & variety chain stores, supermarkets, malls, hyper malls etc. visual Merchandising- Elements of visual merchandising. Planning of retail stores- space planning, Display area planning. Designing- windows & interiors.	
Unit 5 Pricing		(08 hrs – 15 mks)
	Importance of pricing. External & Internal factors influencing price decisions. Price strategies to make competition. Cost plus market based method of costing. Advantages & disadvantages of both. Costing for manufacturer, retailer, boutique/ fashion store, export house. Ceiling floor prices and Quotas.	
Unit 6 Documentation		(06 hrs – 10 mks)
	Making a company profile. Quotations. Invoices- Proforma, final & Consular. Challans. Working with document agents and freight forwarders. Present fashion. Forecasting for the next year/season.	
Total (48 hrs – 75 mks)		

4. Competencies to be developed: After learning this subject the student will be able to

1. Understand and use fashion terms.
2. Do job analysis.
3. Solve problems by SEAM technique and role play.
4. Use SPIN technique to identify customer needs
5. Develop creativity with the help of a few exercises.
6. Prepare spec sheets and a production Planning chart.
7. Do market research by surveys.
8. Make a Company Profile.
9. Prepare documents such as Quotations, Invoices and Challans and work with freight agents.
10. Prepare costing sheets for a garment based on different market conditions.
11. Prepare costing sheet for Manufacturer, Retailer, Boutique or export company.
12. Package Products.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Introduction	12hr	15mks
2	Fashion Co- Ordination	08 hrs	12 mks
3	Sourcing	04 hrs	08 mks
4	Retail Outlets	10 hrs	15 mks
5	Pricing	08 hrs	15 mks
6	Documentation	06 hrs	10 mks
	Total	48hrs	75 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Making a company profile	(01hr)
2	Making a Quotation	(01hr)
3	Making an Invoice	(01hr)
4	Making Challans	(01hr)
5	Make a Prediction Planning Chart	(01hr)
6	Make a Block Planning Chart	(01hr)
7	Cost plus pricing for a garment	(01hr)
8	Market based pricing	(01hr)
9	Costing one garment for local sale, export, retailer Or boutique (same garment)	(01hrs)
10	Survey of one raw material, different raw materials given to different Groups & group presentation of the same.	(01hr)
11	Survey of one market for feasibility of a product (Teacher will accompany).	(01hr)
12	Making a spec sheet	(01hr)
13	Packaging for a ready article along with a price tag	(01hr)
14	Problem solving by SEAM technique.	(01hr)
15	Problem solving by Role play.	(01hr)
16	Spin technique questionnaire.	(01hr)
Total-		(16 hrs)

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Frings, Gini Stephens Pearson Publications	Fashion- From Concept to Consumer	Latest
2.	Ellen Diamond, Pearson Publications	Fashion Retailing	Latest
3.	Mike Easey- Blackwell Science	Fashion Marketing	Latest
4.	Harold Carr & John Pomeroy- Blackwell Science	Fashion Design & Product Development	Latest
5.	Prisco Mose, John Wiley & sons	Fashion Merchandise Information- Textile & Non- Textiles	Latest
6.	Philip Koller- Hill of India Pvt. Ltd.	Marketing & Management- Analysis, Planning, Implementation & Control	Latest

GT 402 DRAPED GARMENTS

1. RATIONALE: The course gives knowledge on draping techniques, use of these techniques in construction of different designs accurately.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT 402 DRAPED GARMENTS	L	T	P	C	TH	TM	TW	PR/OR	150
	-	-	6	6	-	-	50	100	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 Introduction to Draping	(Th) (06 hrs)
<p style="text-align: center;">Drape forms, types of drape forms, materials used in drape forms, making drape forms, use of drape forms, fabrics best suited for draping, methods of draping, guidelines for draping.</p>	
Unit 2 Draping of Upper Garments	(45 hrs)
Part I	
- draping of bodice block- front and back by using woven fabric, truing of bodice block.	D
- draping of basic shoulder princess seam block.	D
- draping of armhole torso length princess seam block.	D
- draping of dart-less bodice using knit fabric.	D
- titching of basic block using woven fabric.	S
Part II	

- raping of kimono sleeve bodice.	D
- raping of raglan sleeve bodice.	D
- raping of cowl neckline using sheer fabric.	D
- raping of cowl armhole using sheer fabric.	D
Part III	
-Draping and stitching of bustier foundation and halter neckline bodice.	
Unit 3 Draping of Lower Garment	(30 hrs)
- raping of basic straight skirt using woven fabric. Truing of basic skirt drape.	D
- raping of A-line skirt block.	D
- raping of six gore skirt.	D
- raping of gathered skirt.	D
- raping of circular skirt	D
- raping of gathered/ pleated skirt with yoke	D
- titching of 1 self designed skirt with necessary finishes.	S
-	
Unit 4 Couture Finishes	(15 hrs)
<u>Hems</u>	
- Plain couture hem or blind hem	
- Full hem for eased, flared, pleated skirts	
- Mitered hem corners	
- Interfacing hem	
- Faced hem	
- Narrow hand rolled hem	
- Hong Kong hem	
- Weighted hem	
- Double stitched hem	
- Horse hair braid hem	
<u>Seams</u>	

<ul style="list-style-type: none"> - Narrow plain seam - False French seam - Self bound seam - Whipped seam - Appliqué seam(lace on lace/ lace on fabric appliqué) - Abutted seam - Hand-over casting
Total (96 hrs)

- 4. Competencies to be developed:** At the end of the course the students learn and understand methods of draping and will be able to
- a. Drape different types of garments.
 - b. Adopt basic draping methods in various designs.
 - c. Able to finish garment hems & seams by using couture finishes.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Pictures on types of drape forms and list of fabrics suitable for draping.
2	Preparation of drape form for draping.
3	Basic bodice block- drape using woven fabric and truing of basic block to make paper pattern.
4	Draped shoulder princess seam block.
5	Draped armhole torso length princess seam block.
6	Dart less bodice using knitted fabric.
7	Stitching of basic bodice block using trued block in woven fabric.
8	Draped Kimono sleeve bodice.
9	Draped Raglan sleeve bodice.
10	Draped Cowl neckline and armhole bodice.
11	Stitching of basic bustier.
12	Stitching of bodice with halter neckline.
13	Draped basic straight skirt.
14	Draped A-Line and six gore skirt.
15	Draped gathered skirt.
16	Draped circular skirt

17	Draped gathered pleated skirt with yoke.
18	Designing and stitching any one skirt.
19	Couture finishes- sample size 10 X 10 cms (finished) using appropriate fabrics.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Connie Crawford	The Art of Fashion Draping	Latest
2.	Hilde Jaffe& Nurie Relis	Draping for Fashion Design (5th Edition)	Latest
3.	Helen Joseph Armstrong	Draping for apparel design	Bloomsbury Latest
4	<i>Hill house & Mansfield's</i>	<i>All-Time Best Book on Draping & Flat Pattern: Dress Design</i>	
5	<i>Anette Fischer</i>	<i>Basics Fashion design Construction</i>	AVA Publishing SA Switzerland
6	Jeanne Price and Bernard Zamkoff	Sewing Pattern Making and Draping	
7	Basheer	Draping: Art And Craftmanship In Fashion Design	Book Web Singapore
8	Karolyn Kiisel	Draping: The Complete Course [With DVD]	Laurence King

GT 403 GARMENT EXPORTS & IMPORTS

- 1. RATIONALE:** The course aims at giving knowledge about the scope for exporting Indian products & products that need to be imported and the exports And Imports procedures enabling the students to work in an export house or start export business.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT 403 GARMENT EXPORTS & IMPORTS	L	T	P	C	TH	TM	TW	PR/OR	125
	3	-	1	4	75	25	25	-	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. DETAILED COURSE CONTENTS

<p>Unit 1 Introduction (06 hrs – 09 mks)</p> <p>Introduction to Export & Import and what is better for any country. History and future trends.</p> <p>Types of organizations: Merchant export units, Manufacturing Export units, Joint Ventures, Buying Agents, Franchisers and E.O.U's.</p> <p>Mode of transport for Exports: Road, sea and air consignments. Advantages & disadvantages of each.</p>
<p>Unit 2 Market Research (08 hrs – 12 mks)</p> <p>Exploring India and the world (important countries) for what can be exported and what needs to be imported.</p> <p>A study: In India, a list of all states with what is available and popular and what are the potential export items. In countries around the world a study on the type of people- average height, weight , colour, preference of clothing, currency used, existing industry and market potential.</p>

Unit 3 Policies & Procedures **(14 hrs – 22 mks)**

Procuring orders: Payment terms- Advance payment, open a/c system, consignment sale and Documentary.
 Collection: D.A., D.P. and L/C. Revocable & Irrevocable L/C.
 Import/Export by post. Methods of transferring funds- cash, D.D., T.T., Money exchangers and SWIFT transfers. Government rules and restrictions in using these.
 Government Policies- Trade barriers, Schemes and incentives.
 Trade Barriers- Tariff and non tariff barriers. Protective & Revenue tariff. Reasons for barriers on export and import. Garment categories.
 Government schemes- Duty Exemption, EPCG, EPZ, Deemed exports, special category scheme, DEPB scheme, Rupee convertibility and Duty drawback scheme.
 Licenses- Advance license, Advance Intermediate License, special/imprest license, CCP and REP.
 Incentives- Loans, subsidy, Duty drawback and awards.
 Government Organisations that help export and imports- SSIDC, EDC, CCI, DOI, EPC and textile Committee. Their role and important functions. Important private organizations like CMAI, CIAE and AEMA.

Unit 4 Documentation **(12 hrs – 22 mks)**

Registrations required for an export firm.
 Important steps for processing an order at
Pre- Shipment stage- entering into contact, Order scrutiny, Procuring and Processing goods as per specs, Booking shipping space, Central excise clearance, Pre- shipment clearance, shipping instructions to freight forwarders, Dispatching to proper port, Port & Customs clearance, Obtaining documents from freight forwarder, Certificate of Origin, Advising importer and submitting documents to bank for collection. ADS.
Final Export documents- Commercial and Regulatory.
 Commercial Principle Documents- Commercial Invoice, Packing list, Bill of Lading, Certificate of inspection, Certificate of Insurance, Certificate of Origin, Bill of Exchange and shipment advise.
Auxiliary Commercial documents- Proforma invoice, Intimation for Inspection, Shipping Instructions, Insurance declaration, shipping order, Mate's receipt, Application for certificate of Origin, Letter to bank for negotiation.
Regulatory Documents- Central excise invoice, AR4, shipping bill, Export Application, Receipt for payment of port charges, vehicle ticket, Exchange control declaration form, Freight payment certificate and Insurance payment certificate.
 Documents such as Quotation, Invoice, Order form, Delivery challan, Debit & Credit notes and Accounts statement.

Unit 5 Abbreviations and Terms used **(08 hrs – 10mks)**

Ex- Factory, F.O.B, C&F, CIF, Ex- ship/Quay, DDP, MODVAT, ICD, IGM/EGM, COFEPOSA, ADB, WB, GATT, ASEAN, CESS, DTA & MFA.
 B/E, CONTAINERISATION, WARE HOUSING, MANUFACTURING, IN BOND, PROJECT IMPORTS, TRANSSHIPMENT CARGO, FULL EXPORT VALUE, SHOW CAUSE NOTICE, CONSULAR INVOICE,

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DISTRIBUTION CHANNELS, CANALISATION, END USE BOND, DETENTION CERTIFICATE.

Total (48 hrs – 75 mks)

4. Competencies to be developed: At the end of the course the students are able to,

1. Decide what to export and what needs to be imported.
2. Understand different types of organizations and start one that suits.
3. Decide on mode of transport for each consignment.
4. Decide on payment terms to be agreed upon.
5. Understand different schemes & policies of the government and take advantage of the same.
6. Prepare documents at Pre- shipment stage and final stage.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Introduction	06 hrs	09 mks
2	Market Research	08 hrs	12 mks
3	Policies & Procedures	14 hrs	22 mks
4	Documentation	12 hrs	22 mks
5	Abbreviations and Terms used	08 hrs	10 mks
	Total	48 HRS	75 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

7. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Presentation of scope for exports(students in groups will do study On one country and present)	(02hrs)
2	Presentation of Govt. Organisations (Role play)	(02hrs)
3	Commercial Invoice and Proforma Invoice	(01hr)
4	Packing list	(01hr)
5	Bill of lading and Mate's receipt	(01hr)
6	Certificate of Inspection and Invitation for Inspection	(01hr)
7	Certificate of Insurance and Insurance declaration	(01hr)
8	Certificate of origin and Application for certificate of origin	(01hr)
9	Shipment advise and shipping instructions	(02hrs)
10	Quotation and Order form	(01hr)
11	Delivery challan, Debit and Credit notes	(01hr)

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12	Accounts statement	(01hr)
13	Shipping order and letter to Bank for negotiations	(01hr)
Total- (16 hrs)		

8. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Ila Kantilal, National Info. Centre for Textile and Allied subjects	The Apparel Industry in India	Latest
2.	Darlie O' Koshy, PHI learning Pvt. Ltd.	Garment exports- Winning Strategies	Latest
3.	Prashant P. Deshpande, APH Publishing	Garment Export Industry of India	Latest

GT 404 FASHION ACCESSORIES

- 1. RATIONALE:** Students are taught to make a collection of accessories. The course covers inspiration sources, design development, range planning and illustrations. This course prepares the student for a successful career as an accessories designer and developer.

All the articles should be created keeping in mind the market, sale ability, cost, designing and paying attention to construction and materials targeting a certain type of market.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
GT 404 FASHION ACCESSORIES	1	-	4	05	--	--	50	50	100

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. DETAILED COURSE CONTENTS

	(Th- Pr)
<p>Unit 1 Introduction to Fashion Accessories</p> <ul style="list-style-type: none"> - Importance of fashion accessories. - Fashion Accessories business - What influences accessories - Accessories and Fashion - Different types of market for sale ability. 	(02 hrs- 10 hrs)
<p>Unit 2 Materials of Fashion Accessories</p> <ul style="list-style-type: none"> - textile varieties and Trims - leather/fur/ metal/ stones/ and other materials of ornamentation. - 	(03 hrs- 10 hrs)

Beads, fringes, piping, sequins, stones, studs, tassels, tubes etc..	
Unit 3	Classification of each of the below accessory (05 hrs- 22 hrs) - One collage preparation of each - One article to be made in each or to embellish one article. - Learn the finishes used in making the accessory. - Belts - Bags - Footwear - Scarves - Ties - Hats - Head gears / Hair ornaments.
Unit 4	Classification of Jewelry (04 hrs- 12 hrs) - Pure classic, Modern, junk etc. - Earrings - Neckpieces - Rings - Bracelets - Anklets - Armlets etc.
Unit 5	Monitoring the trends used for ramp and theme based events (02 hrs- 10 hrs) - A set to be made on one theme along with costing.
Total (16 hrs- 64 mks)	

4. Competencies to be developed:

1. Orientation to fashion accessories, appreciation and insight of various accessory types.
2. Development of skills and basic understanding of materials and processes, construction principles.
3. Orientation to Indian as well as global in the context of fashion, trends, consumers and market. Application of learning through basic design projects.
4. Capability to develop realistic design within limited constraints in accessory products.
5. Develop competence in handling marketing and retail environment.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Create a collage of accessories.
2	Collection of samples and creating a collage.
3	Create a collage of each of the above and make an article of each type.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Dior	Fashion, jewelry and perfumes	Latest
2.	John Lace	Designing accessories Exploring the Design and construction of bags, shoes, hats, and jewelry.	Latest
3.	Jane Schaffer, Sue Sanders	Fashion Design course: Accessories, Design, Practice and Processes for Creating Hats, Bags, Shoes and other Fashion Accessories.	Latest
4.	Asharani Mathur	A Jeweled Splendor- the tradition of Indian Jewelry	Latest
5.	Rita Devi Sharma	Handcrafted Indian Enamel Jewelry	Latest
6.	Gopa Chakrabarti	Alankar: Ornaments of the Tribes	Latest
7.	Jasleen Dalmiya	Indian Folk Arts & Crafts	Latest
8.	Pranay Utsav	Indian Gold Jewelry Design books	Latest
9.	Nancy	Sew Amazing Scarves	Latest

GT 405 DESIGN APPRECIATION

1. **RATIONALE:** Students are exposed to creative thinking which in turn will enable them to put these thoughts into garment illustrations and eventually into high fashion costumes.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT 405 DESIGN APPRECIATION	L	T	P	C	TH	TM	TW	PR/OR	100
	2	-	3	5	-	-	50	50	

Minimum passing %: Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

(Th-Prac hrs) Mks

Unit 1	Ancient Clothing and Accessories of Prominent Civilizations/ Dynasties World over.	(06hrs-10hrs)
Unit 2	Costumes from Continents of the World Prominent costumes from each continent will be studied and analyzed.	(06hrs-10hrs)
Unit 3	Traditional Indian Costumes A. State costumes and their significance (North, South, East, West & central India). B. Dance and festival costumes of India.	(06hrs-10hrs)
Unit 4	Prominent Religious Costumes of the World A prepared list will be circulated amongst students and brief on each will be discussed.	(08hrs-10hrs)
Unit 5	Theme Costumes Students will be given a brief on theme costumes (cartoons, books, game, boards, theatre etc.)	(06hrs-08hrs)
Total		(32hrs-48hrs)

4. Competencies to be developed:

Students will be able to;

1. Understand and design clothing and accessories of ancient civilization.

2. Study and analyze costumes from all the continents in the world.
3. Understand the traditional costumes of India and know their significance based on the different cultures, festivals etc.

4. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	<p>Ancient Clothing and Accessories of Prominent Civilizations/ Dynasties World over.</p> <p>A prepared list of the same will be introduced in class and each student will select 04 from them and do a study and presentation of the same.</p>
2	<p>Costumes from Continents of the World</p> <p>Students will take inspiration from these costumes and re-invent modified versions of their own.</p>
3	<p>Traditional Indian Costumes</p> <p>In each category (A&B) 6 costumes will be studied/selected by each student and presentations in the form of display/drape etc. will be exhibited and assessed.</p>
4.	<p>Prominent Religious Costumes of the World</p> <p>Students will select any 4 for further analysis and presentations on power point. A copy (printed) will be made for the journal assessment and documentation.</p>
5.	<p>Theme Costumes</p> <p>Students will select any 2 themes and prepare costume designs/garment illustrations of at-least 4 sketches in each theme along with mood boards and brief information of each theme selected.</p>

- ❖ **Note: Visit to events, theatre, movies, documentaries, museums related to any of the above chapters is compulsory.**
Reports will be prepared after every such Visit.

5. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	R. Tuener, Wilcon Charles & sons	The Mode in Costumes	Latest
2.	Ann Alu fold, Fairchild Publications	One World of fashion	Latest
3.	Claudia Muller, Thames & Hudson Ltd.	The Timeline of World Costumes	Latest
4.	Anne Marshall, David Bound & Guinness Publications Ltd.	The Guinness guides to 20 th Century Fashions	Latest
5.	Albert Racinet, Studio &	The Historical Encyclopedia of	Latest

	Editions Ltd.	Costumes	
6.	Haves Kennett, Reed Books Ltd.	World Dress	Latest
7.	G.S. Ghuray, Popular Prakashan Pvt. Ltd.	Indian Costumes	Latest

GT 406 HISTORY OF WORLD COSTUMES & FASHION

1. **RATIONALE:** the course enables the student to understand the psychology and logic behind the costumes of the past that helps them in forecasting for future and design better for the present.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
GT 406 HISTORY OF WORLD COSTUMES & FASHION	L	T	P	C	TH	TM	TW	PR/OR	100
	1	-	2	3			50	50	

Minimum passing %: Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks:

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. DETAILED COURSE CONTENTS

(Th hrs)

Unit 1 Pre- Historic & Ancient Clothing (up to 5th Century A.D.)	(06hrs)
Origin of clothing: Ancient India, China, Babylonian, Egypt, Greece, Rome.	
Unit 2 Medieval to Transition (up to 17th Century A.D.)	(06hrs)
India, Byzantium, France, Italy, England, Spain.	
Unit 3 French Revolution (1661 to 1512)	(01hr)
Louis XIV to XVI. The Revolution. Directoire Period and Romantic Period. Its influence on world costumes.	
Unit 4 Industrial Revolution (1900 to 1940)	(01hr)

Its influence in India and the world.	
Unit 5 Modern Period (50's till date) 50's, 60's, 70's, 80's, 90's, 2000 till date.	(01hr)
Unit 6 Fashion Forecast Present fashion. Forecasting for the next year/season.	(01hr)
Total (16hrs)	

4. **Competencies to be developed:** The subject will have theoretical knowledge given to students by books, presentations, downloads and practical illustration of costumes inspired by the historical costume.
After studying this subject the student will be able to
- 1) Design costumes for the past era as they existed.
 - 2) Design present day costumes by taking past inspirations.
 - 3) Forecast Fashion.

5. SUGGESTED SPECIFICATION TABLE WITH HOURS

Unit No.	Unit	Teaching Hours / Semester
1	Pre- Historic & Ancient Clothing (up to 5th Century A.D.)	(06hrs)
2	Medieval to Transition (up to 17th Century A.D.)	(06hrs)
3	French Revolution (1661 to 1512)	(01hr)
4	Industrial Revolution (1900 to 1940)	(01hr)
5	Modern Period (50's till date)	(01hr)
6	Fashion Forecast	(01hr)
Total		(16hrs)

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Designing garments for the present by taking influence of Pre- historic clothing.	(02hrs)
2	Designing garments for the present by taking influence of Ancient Indian clothing.	(02hrs)
3	Designing garments for the present by taking influence of Ancient Chinese & Babylonian clothing.	(02hrs)
4.	Designing garments for the present by taking influence of Ancient Egyptian clothing.	(02hrs)

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5.	Designing garments for the present by taking influence of Ancient Greek & Ancient Roman clothing.	(02hrs)
6.	Designing garments for the present by taking influence of Medieval Indian clothing.	(02hrs)
7.	Designing garments for the present by taking influence of Medieval Byzantine clothing.	(02hrs)
8.	Designing garments for the present by taking influence of Medieval French clothing.	(02hrs)
9.	Designing garments for the present by taking influence of Medieval Italian clothing.	(02hrs)
10.	Designing garments for the present by taking influence of Medieval English clothing.	(02hrs)
11.	Designing garments for the present by taking influence of Medieval Spanish clothing.	(02hrs)
12.	Designing garments for the present by taking influence of the French Revolution.	(02hrs)
13.	Designing garments for the present by taking influence of the Roman Period.	(02hrs)
14.	Designing garments for the present by taking influence of the Industrial Revolution.	(02hrs)
15.	Designing garments for the present by taking influence of the 50's & 60's Period & the 70's & 80's Period.	(02 hrs)
16.	Designing garments for the present by taking influence of the 90's to 2000 & 2001 till last year.	(01hr)
17.	Fashion Forecast for male & female for next year.	(01hr)
Total-		(32 hrs)

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	R. Tuener, Wilcon Charles & sons	The Mode in Costumes	Latest
2.	Ann Alu fold, Fairchild Publications	One World of fashion	Latest
3.	Claudia Muller, Thames & Hudson Ltd.	The Timeline of World Costumes	Latest
4.	Anne Marshall, David Bound & Guinness Publications Ltd.	The Guinness guides to 20 th Century Fashions	Latest
5.	Albert Racinet, Studio & Editions Ltd.	The Historical Encyclopedia of Costumes	Latest
6.	Haves Kennett, Reed	World Dress	Latest

Directorate of Technical Education, Goa State

	Books Ltd.		
7.	G.S. Ghuray, Popular Prakashan Pvt. Ltd.	Indian Costumes	Latest

GT 407 GOAN HANDICRAFTS

1. RATIONALE: To impart knowledge and skill on the art of crafts of Goa, related to textiles. To preserve the cultural assets, traditions and values passed on generation wise.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks	Practical Marks			
	L	T	P	C	TH	TM	TW	PR/OR	
GT 407 GOAN HANDICRAFTS	-	-	3	03	-	-	75	50	125

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

4. DETAILED COURSE CONTENTS

Unit 1	Identifying different sectors of handicrafts in Goa	(10 hrs)
	<ul style="list-style-type: none"> - Create a mapping system and locate areas and communities involved in craftsmanship in Goa. - Mainly Bicholim, Pernem, Tiswadi, Canacona, Bardez, Ponda, Sanguem Taluka-wise. - Documentation and data collection. - 	
Unit 2	Textile Crafts	(10 hrs)
	<ul style="list-style-type: none"> - identify one textile craft from the above data and learn the skill involved in making the same preferably from local artisans; i.e. either Knitting Crochet Tatting Macramé Quilting/Patchwork Flower Making Appliqué Braiding And identify products(series) of that skill. 	I

Unit 3	Innovation in Design & Processes	(22 hrs)
	<ul style="list-style-type: none"> - Develop their creativity and innovation skills - Will make series of samples of that one skill like, wall hanging, doormats, doll making, cushion covers, diwan set, shell embellishment, soft toys, jute products, toran etc. <p>Minimum 6 articles to be made.</p> <p style="text-align: center;">-</p>	
Unit 4	Costing and Marketing	(06 hrs)
	<ul style="list-style-type: none"> - Cost the product and find /tap the market. 	
Total (48 hrs)		

- Exhibition cum sale of the products.
- Field visit to any 2 handicraft centers/ industries preferably related to textiles in Goa, understanding their skills, working styles and methods etc.

Evaluation:-

- Marks for journal i.e. data collection and articles.
- Viva/Orals- on skills learnt during the term of the course.

4. Competencies to be developed:

- To understand the critical role of the crafts community.
- To understand the relationship between economics, culture and aesthetics.
- To understand the processes of creating a craft object from start to finish.
- To equip students with the tools to extend craft traditions to widen applications through applied crafts.

5. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Jill Blake	Complete book of Handicrafts Embroidery/Sewing/Knitting	
2.	Aditi Rajan/M.P. Rajan	Hand Made in India- a geographic encyclopedia of Indian Handicrafts	
3.	Vedams Books	Exquisite Collection of Indian Ethnic Designs	
4.	Bijoy Chandra Mohanty	Block printing and Dyeing of Bagru Rajasthan	
5.	Sukadas	Fabric Art: Heritage of India	

Semester - V

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
IT501	Industrial Training	-	-	16	16	-	-	30	70	Grade
GT501	Fashion Industry	3*	-	2*	5	75	25	-	50	150
GT502	Gents Garments	-	-	4*	4	-	-	50	50	100
GT503	Women's Pattern Construction (Western)	-	-	4*	4	-	-	50	50	100
GT504	Fashion Event Management	-	-	2*	2	-	-	50	50	100
CS501	Entrepreneurship Development	-	-	2*	2	-	-	-	50	50
TOTAL		3		30	33	100		400		500

***Workload shall be doubled**

Semester - VI

Course Code	Name of Course	TEACHING SCHEME				EXAMINATION SCHEME				Total Marks
		L	T	P	C	Theory Marks		Practical Marks		
						TH	TM	Pr/Or	TW	
GT601	Fashion Show	-	-	10	10	-	-	-	150	150
GT602	Fashion Business Management	3	-	1	4	75	25	-	25	125
GT603	Portfolio Development	-	-	4	4	-	-	50	50	100
GT604	Knitwear	-	-	4	4	-	-	100	50	150
GT605	Project Work	-	-	4	4	-	-	50	75	125
E2	Elective II	3	-	2	5	75	25	25	25	150
TOTAL		6		25	31	200		600		800

Elective II

GT611-Clothing Psychology

GT612-Fashion Journalism

GT613-Special Needs Clothing

GT614-Uniforms

IE6**-Institutional Elective

SEMESTER V

(GT501) FASHION INDUSTRY

1. RATIONALE: On Completion of this course a student is empowered with all round knowledge of the world of fashion, local, national and international.

A student can now chalk out a path he/she wishes to choose as a career in the fashion world.

The course teaches a student the ins-out of the fashion industry.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
GT501 FASHION INDUSTRY	3	-	2	5	75	25	50	-	150

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

	Mks (Pr - Th)
Unit 1 The Fashion Industry - Levels of fashion - Fashion Cycles and forecasting - Iconic influences through the ages - Fashion Centers of the world - Well known schools of fashion (Indian & International) and what they offer.	(15mks)(06 hrs – 10 hrs)
Unit 2 Fashion Designers and their Contribution/Influences - International - National } country of origin, work style/trade mark, appreciation of - Local } their designs	(10mks)(08 hrs –08 hrs)

Unit 3 Current Trends in Displays	(20mks)(06 hrs –10 hrs)
<ul style="list-style-type: none"> - Sales Ideas- need for display - Interior & Exterior displays - Types of displays (point of purchase, retail store, interactive, freestanding, motion, light & sound etc.) - Key aspects in display (flooring, lighting, surfacing, fixtures, signage, graphics, visual props, mannequins & in-store technology etc.) 	
Unit 4 Thematic Displays	(10mks)(06 hrs –08 hrs)
<ul style="list-style-type: none"> - Creation of themes - Mood boards based on themes - Actual display of theme (using space, key aspects, slogan/caption etc. to promote theme) – Group display. 	
Unit 5 Fashion Careers	(20mks)(06 hrs –12 hrs)
<ul style="list-style-type: none"> - Manufacturing - Retailing - Free lancing - Photography - Journalism - Entrepreneurship - Stylist/ Model coordinator - Choreography - Event coordinators - Teaching - Assistant Designer - Accessory designing - Designer exhibitor - Image consultants etc. - Virtual online retail 	
Total (32+48 hrs – 75 mks)	

4. Competencies to be developed:

- **Student gets acquainted with various aspects in the fashion industry (fashion centre, designers, displays etc.).**
- **Student learns the various options he/she can choose on completion of the diploma programme. (job prospect & profile of each job)**

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	The Fashion Industry	06+10 hrs	15mks
2	Fashion Designers and their Contribution/Influences	08+08 hrs	10mks
3	Current Trends in Displays	06+10 hrs	20mks
4	Thematic Displays	06+08 hrs	10mks
5	Fashion Careers	06+12 hrs	20mks
	Total	32+ 48 hrs	75 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Unit 1:- - researching fashion trends in the past 10- 15 years, preparing a document of the same - identifying fashion icons through the ages and documenting their individual trend. - sourcing fashion schools/ institutes both Indian & International and identifying what they offer in terms of specializations, streams etc.
2	Unit 2:- - creating a portfolio of various designers (world over), established and up-coming & identifying with their style of work.
3	Unit 3 & Unit 4:- - visit to various outlets (local) to get a visual glimpse of methods, types and inspirations that contributes to the display- Interior and Exterior displays. - group presentation of chosen theme
4	Unit 5:- - preparing a document on the various careers one can opt for in the fashion industry with the following-

	<ol style="list-style-type: none"> 1. Qualification required 2. Job profile 3. Skills required etc. 	<p>C</p> <p>J</p> <p>S</p>

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Florence Muller	The Fashion Game Book	
2.	Nina Garcia	The Little Black book of style	
3.		Fashion: The Definitive	
4.	Julia Yates	The Fashion Careers Guide book	
5.	Peter Vogt	Career Opportunities in the fashion Industry	

(GT502) GENTS GARMENTS

1. RATIONALE: The course develops in a student the skill for designing, drafting, cutting and stitching of Gents garments. It will also help them to deal with design variations in the market.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT502 GENTS GARMENTS	L	T	P	C	TH	TM	TW	PR/OR	100
	-	-	4	4	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 Introduction	(04hrs)
Introduction to Gents garments. Types prints used and Fabrics suitable. Understanding standard measurements of gent’s garments & developing skills of taking measurements. Drafting basic blocks for Gents garments using standard and actual body measurements.	
Unit 2 Kalidhar Kurta.	(12 hrs)
Kurta consisting of Kurta Placket and Pocket.	
Unit 3 Formal Shirt	(12 hrs)
Consisting of Shirt collar, patch pocket, Concealed front and back yoke, Placket and standard Cuff.	
Unit 4 Trouser	(14hrs)
Consisting of Waist band, Fly front opening, Darts and Pleats, Inseam and Welt/ bound pocket.	
Unit 5 Sleeveless Nehru Jacket	(08hrs)
Reversible waist coat with Stand collar and welt and bound pocket.	
Unit 6 Formal Blazer/Jacket with Lining	(14hrs)

Total (64 hrs)

4. Competencies to be developed:

1. The student will have the basic concept of fabrics used in Gents garments.
2. The student will learn to take gents measurements and use them in drafting.
3. Students will learn different types gents garments and construction of those garments.
- 4. Students will be able to create new designs and construct the same using basic drafts provided

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Assignment on types of fabrics, prints used for Gents garments. Fabric swatches to be collected. Chart of standard measurement and actual measurements. (02hr)
2	Drafting of Basic bodice block of standard and actual measurements. (02hr)
3	Stitching of reversible Jacket using standard measurements (Option of using different coloured fabric on either side) . (06hrs)
4	Instructions and stitching kurta along with Kurta pocket and placket (8hrs)
5	Drafting of formal Shirt. (04hr)
6	Stitching of shirt using standard measurement using all details as mentioned. (12 hrs)
7	Drafting of trouser using standard measurement. (04 hrs)
8	Instruction and stitching of trouser with front hip/side seam pocket, bound pocket at back. Pleats/darts in front, darts behind, Fly front opening with zipper (14hr)
9	Drafting of formal blazer/Jacket with Two piece sleeve using standard measurements (06hr)
10	Field Visit to a unit manufacturing jackets (08hr)
Total- (64 hrs)	

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Roberto Cabrera Patricia Flaherty Meyes	Classic Tailoring Techniques – A construction guide for men’s wear	1983
2.	Tanya Dove	Men’s wear Pattern cutting	
3.		Pattern Drafting	
4.	Winifred Aldrich	Metric Pattern cutting for Menswear	
5.	Gareth Kershaw	Pattern Cutting for Menswear	
6.	Steven Voges, Nicholas S.C. Gordon	Contemporary Menswear – A Global guide to independent Men’s Fashion	

(GT503) WOMEN'S PATTERN CONSTRUCTION

1. RATIONALE: The subject aims at understanding Women's western garments and its parts like various sleeves and collars used in western patterns. An emphasis on 2 dart bodice block construction, its fitting and manipulation will also be a part of the subject.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT503 WOMEN'S PATTERN CONSTRUCTION	L	T	P	C	TH	TM	TW	PR/OR	100
	-	-	4	4	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%

Duration of practical Paper: 4 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1	Introduction	(02 hrs)
	- Understanding western garments, parts of the garments such as sleeves, collars, necklines and various cuts used in western wear.	
Unit 2	Sleeves	(06 hrs)
	-rafting of Raglan, Dolman, Kimono and Magyar sleeves to ¼ th scale. Stitching a sample of Raglan and Kimono sleeve.	
Unit 3	Collars and Necklines	(10 hrs)
	- Drafting and stitching of samples of Peter-pan, Convertible roll collar, shawl collar and raised neckline. Drafting of cowl neckline.	
Unit 4	Two Dart Bodice Block	(18 hrs)
	- Drafting of a two dart bodice block as per standard measurements and as per self measurements.	
	- Drafting of plain sleeve for two dart bodice block.	
	- Stitching of the self measurement two dart bodice block and sleeve in khora/grey fabric.	
	- Understanding concept of fitting and alterations in blocks as per figure	

requirements.		
Unit 5	Strapless/Halter Dress - Manipulating the two dart bodice block into a strapless /halter dress and cutting and sewing the same using lining.	(16 hrs)
Unit 6	Bias Cut Skirt - Drafting, cutting & sewing of low waist bias fitted skirt of calf length.(Pattern will be drafted, seam line will be stitched/basted and then cut as for bias cut garments) Garment will be finished with suitable seams and fasteners	(12 hrs)
Total (68 Hrs)		

4. Competencies to be developed:

- Students will learn to draft and stitch various basic types of sleeves, collars and necklines.
- Students will understand the construction and manipulation of the two dart bodice block.
- A basic knowledge into the concept of fitting and alterations in western wear will be obtained by students.
- Students will be able to create new designs and construct the same.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS (Practical)
1.	Preparation of sheets of various types of collars, sleeves, necklines and cuts used in western garments.
2.	Drafting of Raglan, Dolman, Kimono and Magyar sleeve to 1/4 th scale
3.	Stitching of a sample of Raglan and Kimono sleeve.
4.	Drafting, cutting and sewing a sample of Peter-pan collar, Convertible collar, roll collar, shawl collar and raised neckline, and draft of cowl neckline.
5.	Drafting of two dart bodice block using self measurements.
6.	Drafting of two dart bodice block using self measurements and stitching the same in khora/grey fabric.
7.	Drafting, cutting and stitching of a strapless or halter dress with lining.

8.	Drafting, cutting and sewing of bias cut skirt as per syllabus details.

Note: Practical work will include working on assignments. Practical work will include working on assignments prescribed in the syllabus. All the assignments will be marked on the basis of work done in class. A journal will be maintained of class work and marked for 05 marks under internal assessment; the division of 05 marks is as follows; Attendance- 01 marks, punctuality in submission- 01 marks, neatness & Presentation of work – 03 marks. The remainder of the PPA i.e. 45 marks will include regular class work.

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Natalie Bray- Blackwell Science	Dress Pattern Designs	
2.	Natalie Bray- Blackwell Science	More Dress Pattern Designs	
3.	Natalie Bray- Blackwell Science	Dress Fitting	
4.	Ann Hagggar- Blackwell Science	Pattern Cutting For Lingerie, Beachwear, and Leisure wear	
5.	Gerry Cooklin, Blackwell Science	Pattern Cutting For Women's Outer wear	
6.	Pamela Stringer, B.T. Bats Ford, London	Pattern drafting for dress making	

(GT504) FASHION EVENT MANAGEMENT

1. RATIONALE: This course aims at enabling students to study and understand fashion as an event.

Various fashion related concepts are learnt which eventually are applied to create a range of designs based on a theme.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT504 FASHION BUSINESS MANAGEMENT	L	T	P	C	TH	TM	TW	PR/OR	100
	-	-	2	2	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1	World of Fashion	(02 hrs)
	<ul style="list-style-type: none"> - Background of Fashion - Fashion vocabulary in event - Business of Fashion 	
Unit 2	Developing Design Ideas	(06 hrs)
	<ul style="list-style-type: none"> - Identifying Inspirations - Utilizing inspirations to create design concepts - Preparing mood/theme boards from inspirations 	I U P

Unit 3	Planning and co-ordination of event	(04 hrs)
	- logistics involved in the event- budgeting, venue, invites, brochures, dates, sponsorships, advertising and promotion, guest list, stage, model hunt, sound, light, backdrop, green room, hair & make-up, photography, choreography, trials, ramp/ rehearsals etc.	
Unit 4	Human Resource Management for Event	(04 hrs)
	- Recruiting & Staffing (helpers back stage, model hunt etc.) - Advertising and promotion (publicity of event) - Rehearsals and Trials	
Unit 5	Evaluation of Events	(04 hrs)
	- Methods of evaluation - Feed back/ checklists - Press notes/ Reports(Pre/ Post Event)	
Unit 6	Selection of Theme for the Event	(12 hrs)
	- Brain storming sessions on various themes - Short listing of themes and discussion on each - Finalizing one theme - Mood boards for final theme - Designing Wearable Garments based on mood boards (front and back illustrations, descriptions of garment details, fabric swatches suitable, colour palette etc.)	
Total (32 hrs)		

4. Competencies to be developed:

- The student learns how to organize an event (logistics of an event).
- The students are enabled with creative knowledge and knowhow of managing a fashion show based on a specific theme).

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	Unit 1:- -

	<ul style="list-style-type: none"> - collection of information on how fashions started the world over, promoters of fashion etc. - collection of common terminologies used in the fashion industry with regard to fashion ramp show, cut/style/silhouette, fashion etc. and their meanings - fashion as a business today- how to promote and bring awareness of fashion to oneself and others.
2	<p>Unit 2:-</p> <ul style="list-style-type: none"> - sourcing existing inspirations and their applications - creating a collection of the same in collage form- at least 4-5 themes with inspirations in clothing/accessories/textile. - creating ones own mood boards from inspirations (2-3 themes)
3	<p>Unit 3:-</p> <ul style="list-style-type: none"> - preparing a budget for the event - invites & brochure formats - preparing advertisements/pamphlets/posters for event - setting/sourcing venues, sound & light, hairdressers, make-up artists, models etc. and compiling information
4	<p>Unit 4:-</p> <ul style="list-style-type: none"> - preparing a list of workforce needed for the event and chalking down their duties and getting to know each ones job profiles and charges/rates. - preparing a list of press persons/institutes and advertising agencies and what they have to offer. - preparing time, date and workforce allotted for rehearsals and trials along with details from designers.
5	<p>Unit 5:-</p> <ul style="list-style-type: none"> - preparing a feedback form with the help of existing ones (Suitable

	<p>for Occasions.)</p> <p>- reparing of press releases/notes, covering the event and details of the same.</p>
6	<p>Unit 6:-</p> <p>- ood boards based on selected theme (Wearable garments).</p> <p>- esign inspirations (colour) with complete look (accessories, fabric swatches, description at least 4-5 designs in each theme.</p>

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	GangaSagar Singh & Devesh Kishore, Har-Anand Publications Pvt. Ltd.	Event Management a Booming Industry and an eventful career	
2.	Neha Publishers & Distributors	Event Management Principles and Methods	
3.	Glenn A.J Bowdin, Johnny Allen, Willian O'Toole	Event Management	
4.	D.G Conway	Event Managers Bible The complete guide to planning & organizing a Voluntary or Public Event	

(IT501) INDUSTRIAL TRAINING

1. RATIONALE:

Industrial Training is a newly introduced component, in the curriculum under Revised Semester Pattern system for all 03 year Diploma Programmes. It is a Training programme designed to expose & prepare the students for the Industrial work situation. This exposure and hands on experience, will further enhance the prospects of student fraternity to be better placed on completion of their course.

2. TEACHING AND EXAMINATION SCHEME

Course code & course title	Periods/Week (in hours)			Total Credits	Examination Scheme				
					Theory		Practical		Total
IT501 INDUSTRIAL TRAINING	L	T	P	C	TH	TM	PR/OR	TW	Grade
	-	-	16	16	-	-	30	70	

Minimum passing %: 40%

Legends:

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Students are required to study and have hands-on experience wherever possible in the following areas (depending on availability):

1. Company Profile
2. Organizational Structure
3. Company Product Range
4. Manufacturing Facilities Available /Services provided
5. Plant / Facility Layout
6. Operations / Production Processes
7. Production Planning and Control
8. Detail study of Latest Equipment/ Technologies Used
9. Stores Functions
10. Material Handling Systems/ Equipments
11. Quality Management Systems / Functions
12. Maintenance and Repair Practices
13. Safety Practices / Safety Equipments
14. Utilities
15. Logistics
16. Sales and Marketing
17. Ethics, Statutory Rules and Regulations followed
18. Product Design and Development
19. Any other area specific to the Industry providing Training

4. TERM WORK & PRACTICALS

Evaluation Scheme					
TW				PR/OR	TOTAL Marks
Attendance Marks*	Industrial Mentor's assessment Marks	Institute Mentor's assessment Marks	Training Report	Report Assessment & Seminar/Viva	

Directorate of Technical Education, Goa State

10	20	20	20	30	100
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* 01 mark shall be deducted for every Absence (with or without permission).

Daily Dairy

The daily dairy should-be maintained in a book. It should reflect the day to day activities performed by the student (including task, men and materials involved). It should be counter signed by the Industry Mentor. It will become the basis for writing reports on the complete training.

Training Report

The training report should be submitted by the training students should include the following salient points- Certificate from institute, Certificate of training from company, detailed write up as per daily dairy, detailed drawings, working drawings, photographs, safety precautions, techniques for work minimization on site, organizational chart, Importance of project to the society, special methods/techniques/equipment should be separately high lightened, including environmental aspects. The report should be informative and technical, typed with double spacing on good quality bond paper and bound.

Assessment of Training Report be based on Knowledge, Presentation, Quality of contents and Sketches.

Note :

- a. Student/s undergoing Industrial Training shall follow Rules and Regulations of the Industry.
- b. Industrial Training will generally be organised and conducted in accordance with Industrial Training Manual duly prescribed by the Board.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No	Name of the Unit	Teaching Hours	Marks
1	PR/OR	} 08 Weeks	30
2	TW		70
	Total	08 Weeks	100

Note:

1. For Industrial training Grades will be awarded based on marks scored as follows:
 - 80% and above Marks – Grade ‘A’
 - 60% to 79% Marks – Grade ‘B’
 - 40% to 59% Marks – Grade ‘C’
 - Marks below 40% - Grade ‘D’
2. TW and PR/OR shall be separate heads of passing. Student has to secure minimum Grade ‘C’ for passing.

(CS501) ENTREPRENEURSHIP DEVELOPMENT

1. RATIONALE

The course on Entrepreneurship Development focuses on creating awareness regarding entrepreneurial traits, entrepreneurial support system, opportunity identification, project report preparation and understanding of legal and managerial aspects related to setting up of enterprise. This can be helpful in motivating technical students to start their own small-scale business/enterprise.

2. TEACHING AND EXAMINATION SCHEME

Course Code & Course Title	Periods/ Week (In Hours)			Total Credits	Examination Scheme				
					Theory Marks		Practical Marks		Total Marks
CS501 Entrepreneurship Development	L	T	P	C	-	-	PR/OR	TW	50
	-	-	2	2	-	-	-	50	

Minimum passing % Practical 40%

3. COMPETENCY TO BE DEVELOPED THROUGH THIS COURSE

The course content should be taught and implemented with the aim to develop different types of skills leading to the achievement of the competency – *Prepare a detailed project report for an identified product/service.*

4. DETAILED COURSE CONTENT

<p><u>Unit 1:Introduction</u> (7 Hours, 12 Marks)</p> <p>Meaning of entrepreneurship, need in the present scenario, definition of an entrepreneurship, qualities of an entrepreneur, functions of an entrepreneur, risks and rewards of entrepreneurship.</p> <p>Definition of Micro, Small And Medium Enterprises (MSME).Classification of Micro, Small And Medium Enterprises (MSME). Types of Enterprises - manufacturing, service and franchisee.</p>
<p><u>Unit 2:Forms of Business Organisation</u> (2 Hours, 9 Marks)</p> <p>Main features of Sole Proprietorship, Partnership, Private Limited Company, Public Limited Company, Co-operative Society.</p>

<u>Unit 3: Entrepreneurial Support System</u>	(6 Hours, 9 Marks)
<p><u>Central Government Agencies:</u> Functions of Small Industries Development Bank of India(SIDBI), National Bank for Agriculture and Rural Development (NABARD), National Small Industries Corporation (NSIC), Micro, Small And Medium Enterprises -Development Institute (MSME- DI), Technology Business Incubator (TBI), Khadi & Village Industries Commission (KVIC).</p> <p><u>State Government Agencies:</u> Functions of District Industries Centre(DIC), Goa Industries Development Corporation (GIDC), Economic Development Corporation (EDC), Financial Institutions-Banks, Goa Handicrafts and Rural Small Scale Industries Development Corporation (GHRSSIDC), Rural Development Agency (RDA), Khadi and Village Industries Board (KVIB).</p>	
<u>Unit 4: Business Opportunity Identification</u>	(7 Hours, 6 Marks)
Evaluation of business opportunity:- selection of industry, initial prospects study, product marketing concept, decision to proceed, feasibility study, project evaluation.	
<u>Unit 5: Market Research</u>	(6 Hours, 12 Marks)
Definition of demand, factors affecting demand, law of demand,demand curves Definition of supply, factors affecting supply,law of supply, supply curves. Preparation of questionnaire. Data collection for setting up a small enterprise.	
<u>Unit 6: Legal Aspects</u>	(4 Hours, 9 Marks)
Procedure of registration of Micro, Small And Medium Enterprise (MSME), meaning and registration of Value Added Tax(VAT), Service Tax, PAN. Slabs of Income tax.	
<u>Unit 7: Project Report</u>	(16 Hours, 18 Marks)
Need for project report, importance of Project report, scope of project report:Economic aspects, technical aspects,financial aspects, managerial aspects, production aspects. List the contents of a project report. Proforma of a project report which includes:-Introduction,scheme, profitability and projections, infrastructure, break- even point, names and addresses of suppliers, remarks. Project Profile. Project appraisal criteria:- technical feasibility, financial feasibility, economic viability, commercial viability, managerial competency, political and labour considerations.	

5. SUGGESTED SPECIFICATION TABLE WITH HOURS & MARKS (THEORY)

Unit No.	Topic	Teaching Hours/ Semester	MARKS
1	Introduction	7	12
2	Forms of Business Organisation	2	9
3	Entrepreneurial Support System	6	9
4	Business Opportunity Identification	7	6
5	Market Research	6	12
6	Legal Aspects	4	9
7	Project Report	16	18
TOTAL		48	75

6.MANDATORY ASSIGNMENTS

1. Preparation of a Case Study on leading entrepreneurs of Goa. (To be taken while conducting Unit 1)
2. Preparation of a Case Study on leading entrepreneurs of India. (To be taken while conducting Unit 1) Unit 1)
3. Filling of template of “Business Model Canvas”
4. Preparation of Project Profile.
5. Preparation of Project Report.

7.SUGGESTED ACTIVITIES:

1. Visits to related departments (DIC,Banks,Tecnology Business Incubators, MSME-DI, NSIC, KVIC, KVIB).
2. Study visits to industries.
3. Organise entrepreneurship related event / activities.
4. Organise lectures/seminars with successful entrepreneurs.
5. Organise brainstorming sessions on ideation.
6. Establish an Entrepreneurship Development Cell.

8. SUGGESTED LEARNING RESOURCES

S.No.	Author	Title of Books	Year of Publication
1.	<i>Sharad jawadekar, shobha dodlani,</i>	<i>Business entrepreneurship</i>	<i>Suvichar prakashan mandal pune,</i>
2.	<i>S.S. Khanna</i>	<i>Entrepreneurship development</i>	<i>S. Chand & Co. Ltd, New Delhi,</i>
3.	<i>Vasant Desai</i>	<i>Management of small Scale Industry in India</i>	<i>Himalaya Publishing House</i>
4.	<i>Dilip Sarwate</i>	<i>Entrepreneurial development Concepts and practices</i>	<i>Everest Publication House, Pune</i>
5.	<i>CB Gupta and P Srinivasan</i>	<i>Entrepreneurship Development</i>	<i>S. Chand and Sons, New Delhi</i>
6.	<i>PM Bhandari</i>	<i>Handbook of Small Scale Industry</i>	

SEMESTER VI

(GT601) FASHION SHOW

1. **RATIONALE:** Students are taught all aspects of putting up creative wearable garments based on a particular theme for public viewing.

2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
GT601 SHOWCASING FASDHION	-	-	10	10	-	-	150	-	150

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. **DETAILED COURSE CONTENTS**

RAMP FASHION SHOW

<p>Unit 1 Measurements</p> <ul style="list-style-type: none"> - As per garments & as per model selected - Charts for measurements to suit design of garments
<p>Unit 2 Drafting</p> <ul style="list-style-type: none"> - Based on selected garments & measurements- Brown paper
<p>Unit 3 Sourcing /Procurement</p> <ul style="list-style-type: none"> - Fabric suitable for garments - Trims & embellishments
<p>Unit 4 Cutting & Tacking</p> <ul style="list-style-type: none"> - Cutting on Muslin/ Grey fabric - First trial
<p>Unit 5 Surface Ornamentation</p> <ul style="list-style-type: none"> - Embroidery/embellishments on garments to be done
<p>Unit 6 Finishing</p> <ul style="list-style-type: none"> - Finishing garments to fit required size

Unit 7 Accessorising - Creating accessories to complete look of the garments
Unit 8 Trials & Fittings - Final trials of garments along with accessories
Unit 9 Finished Ensemble Display - Ironing, cutting loose threads, display on hangers etc. of garments
Unit 10 Forming of Committee Members - Designing of Invites and brochures - Press conference arrangements, press notes preparation, publicity of events (advertisements, posters etc.) - Ramp- preparation of stage, backdrop, ramp, green room etc. - Rehearsals (previous day) – Ramp- Choreography, cue’s etc. - Event- Fashion Show- Ramp
Unit 11 Costing of Fashion Show Garments
Total

4. **Competencies to be developed:**

- **Students can tailor make garments, accessories as well as embellish garments based on themes.**
- **They develop the talent to design brochures, backdrops, invites etc. to promote their garments.**

(GT602) FASHION BUSINESS MANAGEMENT

1. RATIONALE: The course helps the student to develop managerial skills to run a business for themselves or their employers.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT602 FASHION BUSINESS MANAGEMENT	L	T	P	C	TH	TM	TW	PR/OR	125
	3	-	1	4	75	25	25	-	

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1	Business Firms	(03 hr – 06 mks)
	<ul style="list-style-type: none"> - What is Business? - Types of Business firms - (a) Based on ownership- Brief introduction - (b) Based on Organisational structure- line, Functional & Committee Organisations. - (c) Based on area- Local, Regional, National & International; Business. Globalisation and its importance. Benefits and problems. 	
Unit 2	Management Concepts & Organisational Behaviour	(08 hrs – 12 mks)
	<ul style="list-style-type: none"> -) Introduction to Management -) Functions of Management- basic functions of planning, organizing, direction and control. Additional functions of Co-ordination, Staffing, Marketing, Forecasting, Research & Development, Communication & Motivation. - ttitudes & Behaviour- their importance, developing the right attitudes and behavioral skills. Social responsibility of a Business Organisation- responsibility towards customer, shareholder/partner, employees, government and society. Its importance in creating a Brand Image. 	a b A c

) Principles of Management. Principles of Division of work, Authority & Responsibility, Discipline, Unity of command and interest, Fairness & Equity, Centralisation & De-centralisation, Scalar Chair & Stability of tenure.	
Unit 3 Operations Management	(08 hrs –12 mks)
<ul style="list-style-type: none"> - Introduction to Production. Production Planning, Block Planning. Routing & Scheduling. Quality Control. Stores & Purchase- Procurement. Requisitions- Material & Purchase. Quotations & Tenders. Types of Tenders- Single, Open & Closed. Inventories. Inventory Control. Material handling. Importance & Objectives of layouts. Types of layouts- Process, Product & Fixed. 	
Unit 4 Marketing Management	(10 hrs – 16 mks)
<ul style="list-style-type: none"> - Role & Importance of Marketing. Consumer Marketing. Organisational Marketing. Channels of Distribution. Sales Promotion. Channels of Sales Promotion. Advertising and Publicity- Media of Advertisement, Types of Advertisement, Advertising impact. 	
Unit 5 Financial Management	(10 hrs – 13 mks)
<ul style="list-style-type: none"> - Introduction & Importance. Capitalization- under & over capitalization. ROI. Block & working Capital, Securities- Preferential shares. Equity Shares and Debentures. Depreciation. Profit Disposition. Time, value for money. Profit & loss statement (only understanding). Breakeven point and analysis. Balance sheet (only understanding), Costing, Cost control. Budgeting & Budgetary control. 	
Unit 6 Personal Management & Human Resource Management	(09 hrs – 16 mks)
<p>Difference between Personal management and Human Resource Management. Personnel in an organization.</p> <ul style="list-style-type: none"> - The Hierarchy- 3 levels - Top level- Owner, CEO/ Chairman, General Manager & Directors - Mid Level- Managers, Executives. - 1st Level- Supervisors, Floor In charge. - Job Analysis- Job evaluation enrichment, job rotation and satisfaction - Conflict management and dealing with unions. - Concepts of Bargaining, Managing. - Staffing- Sources for Recruitment, selection and recruitment process, training and placement. Types of training- on the job, Apprentice, vestibule, external, induction, job and promotional training. - Promotion & Transfers. Retirement. Resignation. Dismissal, layoff & suspensions. - Wages & Incentives- Types of wages- Line rate & Piece rate. - Difference between wages, salaries & incentives like Bonus, P.f., E.S.I.C., Insurance. 	

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<ul style="list-style-type: none"> - Welfare Activities involving safety & Hygiene, Health & Sanitation. - Motivation Techniques.
Total (48 hrs – 75 mks)

- 4. Competencies to be developed:** At the end of the course, the student will be able to build teams, make product & process layouts, make tender & quotation forms, production planning charts, block planning charts, route a garment & understand Profit & Loss statements, budget and balance sheets.

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Business Firms	03 hrs	06 mks
2	Management Concepts & Organisational Behaviour	08 hrs	12 mks
3	Operations Management	08 hrs	12 mks
4	Marketing Management	10 hrs	16 mks
5	Financial Management	10 hrs	13 mks
6	Personal Management & Human Resource Management	09hrs	16 mks
	Total	48hrs	75 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS	
1	Production Planning charts- Forward & Backward	(1 hr)
2	Production Planning charts- Simple & complex	(1 hr)
3	Block Planning Charts	(1 hr)
4	Routing	(1 hr)
5	Scheduling	(1 hr)
6	Material requisition	(1 hr)
7	Purchase requisition forms	(1 hr)

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8	Quotation	(1 hr)
9	Tender forms	(1 hr)
10	Process Layout	(1 hr)
11	Product Layout	(1 hr)
12	Planning and creation of an advertisement	(2 hrs)
13	Profit & Loss statement	(1 hr)
14	Balance sheet- (Analysing- an example will be given to understand)	(1 hr)
15	Job analysis- an exercise	(1 hr)
		(16 hrs)

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Dr. Suresh Dalela & Dr. Mansoor Ali	Industrial Engineering & Management Systems	
2.	Satya Saran Chatterjee	Modern Business- Its Organisation & Management	
3.	Satya Saran Chatterjee	An Introduction to Management, Its Principle & Technique	
4.	M.C. Shukla	Business Organisation Management	
5.	Awate Chunnawala, Bhandarkar & Shrinivasan	Business Organisation Management	
6.	T. R. banga & S.C. Sharma	Industrial Organisation & Engg. Economics	
7	Harold Carr & Barbara Latha- Blackwell Science	The Technology Of Clothing Manufacture	

(GT603) PORTFOLIO DEVELOPMENT

1. RATIONALE: This course will help the student to get career and employment counseling and qualification recognition. Basically to promote their skills and talent.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT603 PORTFOLIO DEVELOPMENT	L	T	P	C	TH	TM	TW	PR/OR	100
	-	-	4	4	-	-	50	50	

Minimum passing % : Theory 40% and Practical 40%

Duration of practical Paper: 4 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 Introduction to Portfolio Development	(08 hrs)
<ul style="list-style-type: none"> - Importance of Portfolio Development. - Techniques and Planning of Portfolio 	
Unit 2 Bio-Data- Electronic resume	(08 hrs)
<ul style="list-style-type: none"> - Different styles of resume, details, importance of resume and to create one's resume. - Objectives - Personal details - Qualifications - Achievements - Work experience - References 	
Unit 3 Course Compilation	(14 hrs)
Unit 4 To Create mood board on specific job area of students interest or	(10 hrs)
Unit 5 Fashion Show Compilation	(08 hrs)

Unit 6 Designing a cover for your Portfolio	(08 hrs)
-	The
cover should relate to some aspects of this course, it should include students name, course, title be creative.	
Unit 7 Mock Interviews with internal Examiner- panel of interviewers (3 minimum)(08 hrs)	
Total (64 hrs)	

4. **Competencies to be developed:** students will be able to tap their in the specific area of design, construction, industry etc.
 Students will be able to locate specific areas of the Fashion Industry for their future job prospects
 The students will learn to face a job interview.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS (Practical)
1.	Sourcing of different type of paper and other raw materials needed to develop a portfolio. Rough costing of the portfolio.
2.	Creating a resume for future fashion designers.
3.	Creating collages on the subjects learnt during the 3 years of diploma in Garment Technology.
4.	Creating mood boards on specific job areas of student s interest
5.	Create a cover page for the portfolio.

- **Final Interview conducted by some professional from garment Industry**
- **Share the portfolios with 2-3 panel members of curriculum and receive feedback**
- **Bound portfolio signed by internal mentor/Head of Department and Principal and finally External Jury.**

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Anna Kiper	Fashion Portfolio- Design & Presentation	
2.	Steven Faern	Design your Fashion Portfolio	
3.	Anna Kiper	Fashion Illustration- Inspiration	

		& Techniques	
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(GT604) KNITWEAR

1. **RATIONALE:** To familiarize the students with the handling of knit fabric and make garments from knitted fabrics.

2. **TEACHING AND EXAMINATION SCHEME:**

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT604 KNITWEAR	L	T	P	C	TH	TM	TW	PR/OR	150
	-	-	4	4	-	-	50	100	

Minimum passing % : Theory 40% and Practical 40%

Duration of practical Paper: 4 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. **DETAILED COURSE CONTENTS**

Unit 1	Tank Top	(12 hrs)
	<ul style="list-style-type: none"> - 2 dart bodice block will be drafted and modified into a dart-less block for knit fabric. - A tank top will be stitched using this block and suitably finished. 	
Unit 2	Bra	(18 hrs)
	<ul style="list-style-type: none"> - Modification of a basic bra from the 2 dart bodice block. Cutting, Sewing and finishing the bra with cups, lace trimmings and lining. 	
Unit 3	Swimwear	(16 hrs)
	<ul style="list-style-type: none"> - Drafting, cutting and construction of basic one piece swimsuit. - Construction of the garment may be with/without darts. It may have a princess cut with straps/strapless. Knit fabric with knit lining will be used for the swimsuit and garment will be neatly finished. 	
Unit 4	Evening Gown	(18 hrs)
	<ul style="list-style-type: none"> - Designing a one piece/two piece evening gown. Drafting, cutting and stitching the same, suitably embellished and finished. Garment has to be on knit fabric, partially or fully lined. 	
Total (68 hrs)		

4. Competencies to be developed:

- An understanding of knit fabric and their varieties will be gained
- Students will learn to adapt the bodice blocks for knit fabrics
- Skills of stitching and finishing of garments made of knit fabric will be obtained.

5. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1.	Drafting of two dart bodice block
2.	Modification of two dart bodice block into dart-less knit block
3.	Cutting of tank top on knit fabric and stitching it with suitable finishes
4.	Drafting, cutting and stitching of Bra
5.	Drafting, cutting and stitching of Swimsuit
6.	Designing, drafting, cutting and stitching of one/two piece evening gown

6. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Ann Hagger- Blackwell Science	Pattern Cutting for Lingerie, Beach wear and Leisure wear	
2.	Terry Brackerbgney- Blackwell Science	Knitted Clothing Technology	
3.	Gerry Cooklin	Pattern Cutting for Women's outerwear	

(GT605) PROJECT WORK

1. RATIONALE: The course is intended for students to work on selected topics under the guidance and supervision of the teacher in charge.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/ Week (In Hours)			Total Credit	Examination Scheme				Total Marks
					Theory Marks		Practical Marks		
GT605 PROJECT WORK	L	T	P	C	TH	TM	TW	PR/OR	
	-	-	4	4	-	-	75	50	125

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; T - Tutorial; P - Practical; C- Credit; TH- End Semester Theory; TM – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; TW- Term Work

3. DETAILED COURSE CONTENTS

Unit 1 Introduction	(02 hr)
- Concept of Project work.	
Unit 2	(06 hrs)
Based on knowledge; submission of various concepts/themes of project by the students and selection of topic by teacher in charge. Topics will be based on following fields	
<ul style="list-style-type: none"> - Textiles - Clothing - Fashion and Design - Garment Industries 	
Project will be done in a group. Group/groups will be formed based on the selected topics and interest of the students.	
Unit 3 Pilot Report	(04 hrs)
- Submission of pilot reports which include- aim, methodology, procedure and expected results by the group.	
Unit 4 Execution of Project	(40 hrs)
<ul style="list-style-type: none"> a. Survey related to market, feasibility, financial implications, availability of resources b. Production and finishing c. Costing d. Promotion of products- creating own label/tag, right kind of packaging. e. Display, Exhibition and presentation 	

Unit 5 Preparation of Project Report	(12 hrs)
- Which includes Aim, Acknowledgement, Introduction, History, Methodology, Results & discussion, Reference/bibliography, Annexures.	
Total (64 hrs)	

- Presentation & seminars in groups to be marked by an external examiner.

Competencies to be developed:

1. Students will be able to identify different topics to be worked on.
2. Able to plan, work and execute the project
3. Able to work in group.
4. Able to write project Reports

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (Practicals)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Introduction	02	mks
2	Submission of various concepts/themes of project	06	10mks
3	Pilot Report	04	10mks
4	Execution of Project	40	60mks
5	Preparation of Project Report	12	20mks

6. SUGGESTED LIST OF ASSIGNMENTS

Based on the topics of project.

7. SUGGESTED LEARNING RESOURCES

Learning Resources will be Based on topics selected by students every year.

(IE6) INSTIUTIONAL ELECTIVE**

1. RATIONALE :

It has been observed that the curriculum prescribed, is many times out of context of Industry, on account of the pace with which technology development is taking place at Industry end. Due to this, gap exists between the Industry requirement of manpower and manpower produced by the Polytechnics. Board takes some time to incorporate the development of technology in the curriculum and many a times technology becomes outdated when it is incorporated in the curriculum. Further the expertise to train students as per Industry current requirement is available at the institute, but the same cannot be taught to students, as it is not a part of curriculum.

To address this situation, Board has decided to permit Institutions affiliated to Board, to identify such technologies or other aspects and teach the same to the students as an elective subject called “Institutional Elective”. Through this Institutional Elective subject, Institutions will be able to cater to the requirements of Industry by identifying their immediate requirement and prepare the students for the requirement by developing the curriculum in consultation with the Industry.

As many a time’s same subject may not be offered more than one or two years, a non conventional way of teaching – learning may be required to be adopted. Participation of Industry experts, guest lecturers, visit to Industry, exploring the knowledge available on net, etc may be essential to achieve the objectives.

2. TEACHING AND EXAMINATION SCHEME :

Course code & course title	Periods/Week (in hours)			Total Credits	Examination Scheme				Total Marks
					Theory		Practical		
	L	T	P	C	TH	TM	PR/OR	TW	
IE6** INSTIUTIONAL ELECTIVE	3	-	2	5	75	25	25	25	150

3. DETAILED COURSE CONTENTS :

- a) Curriculum shall be drafted by the concerned department by interacting with Industry counterpart in regards to the Newer Technology required to be transferred for purpose of Teaching /Learning process.
- b) Department shall work out the modalities of execution of the curriculum at Industry/Institute Level.
- c) Curriculum shall be forwarded to Board for approval before its implementation.

(GT611) CLOTHING PSYCHOLOGY

1. RATIONALE: This course enables the student to understand their clients and design better to suit their individual requirements.

2. TEACHING AND EXAMINATION SCHEME:

Course Code & Course Title	Periods/Week (In Hours)			Total Credit	Examination Scheme				Total Marks
	L	T	P		TH	TM	TW	PR/OR	
GT611 CLOTHING PSYCHOLOGY	3	-	2	5	75	25	25	25	150

Minimum passing % : Theory 40% and Practical 40%

Duration of Theory Paper: 3 Hrs.

Legends:

L-Lecture; *T* - Tutorial; *P* - Practical; *C*- Credit; *TH*- End Semester Theory; *TM* – Test Marks;

PR/OR - End Semester Practical / Oral Examinations; *TW*- Term Work

3. DETAILED COURSE CONTENTS

	(Th- Pr)	(Mks)
Unit 1 Psychology & Its Effect On Clothing - What is Psychology? Social Psychology, P.A.C.- its effect on our behavior and clothing. - Conformity v.s Individuality- Conformity to place, region & religion. Individuality in expressing our moods, values & personality through clothing. How this Conformity v/s Individuality creates conflict in our minds. - Peer Pressure- Acceptability in Groups. Clothing to please peer group. - Clothing as status symbols - Affordability v/s Brand fixation - Comfort v/s Fashion	(12 hr – 06 hr)	(12mks)
Unit 2 Environmental Effect On Clothing 1. Climatic conditions of a place that affect clothing. Clothes for spring, summer, autumn, winter & rain 2. Lounge wear- travel clothing 3. Clothing for Adventure Sports 4. Eco-friendly and Green Clothes 5. Unique clothing in different parts of India as per climate.	(06 hrs – 04 hrs)	(08mks)

Unit 3 Personality In Clothing	(08 hrs –10 hrs) (18mks)
<ol style="list-style-type: none"> 1. Persona. Personality traits- Introvert, Extrovert, Shy, Bold, Talkative, enduring characteristics. 2. Clothing as per ones physical attributes such as thin, fat, short, stout, tall, lanky, robust figures. Clothing for different skin colours (fabrics & textures). 3. Clothing to suit a particular job, keeping in mind the hours, the stress & strain, the hazards involved & injuries possible. Uniforms & Insignias. 4. Clothing to project a personality, clothing for dance, drama, theatre. (F & T) 	
Unit 4 Sexual Identity in Clothing	(06 hrs – 02 hrs) (05 mks)
<ol style="list-style-type: none"> 1. Masculine Clothing 2. Feminine clothing 3. Unisex clothing 4. Metro sexual clothing 5. Women’s lib / tom boy clothing 6. LGBT 	
Unit 5 Social Aspects Of Clothing	(08 hrs – 08 hrs) (20 mks)
<ol style="list-style-type: none"> 1. Culture and religion in clothes – how people are expected to dress differently in each religion. Taboos in clothing. 2. Clothing for different rituals like birth, death, marriage, important ceremonies such as Thread ceremony, Mundan/ Haqeeqa, Holy Communion, etc. bridal garments of different parts of India. 3. Personality Development with Clothes- Clothes for Day, Night, Day Occasion, and Night Occasion. 4. Creating an impression with clothes; <ul style="list-style-type: none"> - Dressing up to create an impression for a job interview, personal interview for a marriage proposal, meeting dignitaries - 	
Unit 6 Clothing Across Lifespan	(08hrs – 08 hrs) (12 mks)
<ul style="list-style-type: none"> - Clothing for different age groups such as infants, toddlers, prèt school child, elementary school child, school going child, adolescent/teenager, adult, middle age person and seniors. 	
Total (48 hrs/32 hrs) (75 mks)	

4. Competencies to be developed:

- 1. The student will be able to understand self & Wear clothes to suit him/her.**
- 2. The student can dress properly for different occasion.**
- 3. The student can understand the nature of clients that come and design clothes that will be loved by their clients.**

5. SUGGESTED SPECIFICATION TABLE WITH MARKS & HOURS (THEORY)

Unit No.	Unit	Teaching Hours / Semester	Marks
1	Psychology & Its Effect On Clothing	12 + 06 hrs	mks
2	Environmental Effect On Clothing	06 + 06 hrs	mks
3	Personality In Clothing	08 + 08 hrs	mks
4	Sexual Identity in Clothing	06 + 02 hrs	mks
5	Social Aspects Of Clothing	08 + 08 hrs	mks
6	Clothing Across Lifespan	08 + 08 hrs	mks
	Total	48hrs	38 mks

Legends: R = Remembrance; U = Understanding; A = Application and above levels

6. SUGGESTED LIST OF ASSIGNMENTS

Sr. No.	LIST OF ASSIGNMENTS
1	P.A.C. Chart for self (2 h
2	P.A.C. Chart for other (2 h
3	Presentation of P.A.C. (2 h
4	Pictures of clothes from other states
5	Presentation
6	Pictures of different personality traits
7	Pictures of different uniforms & Insignias
8	Pictures of clothes for Dance
9	Pictures of clothes for Drama
10	Pictures of clothes for theatre
11	Pictures of masculine, feminine, unisex, heterosexual, LGBT and Women's lib / tom boy clothing
12	Collecting pictures of clothes for different religions
13	Collecting pictures of clothes for different rituals

14	Collecting pictures of bridal garments
15	Role play of an interview to be marked by class
16	Collecting pictures of clothes for infants
17	Collecting pictures of clothes for toddler & Pre-school, elementary school child, school going child
18	Collecting pictures of clothes for teenagers
19	Collecting clothes for an Adult, Middle age and senior person

7. SUGGESTED LEARNING RESOURCES

Sr.No.	Author	Title	Publication and Year
1.	Clifford Morgan, Richard King, John Weisz & John Schopler, McGraw Hill education _____,	Introduction to Psychology	
2.	S.K. Mangal, Sterling Publishers	Introduction to Psychology	
3.	Thomas Harris, Harper Collins Publishers	I'm Ok, You're ok	
4.	Susan T. Fiske, Daniel T. Gilbert, Gardner Lindzey Published by John Wiley & sons Inc. New Jersey	Handbook of Social Psychology	