

MBT-14

**PUNJABI UNIVERSITY, PATIALA**

**OUTLINES OF TESTS,  
SYLLABI AND COURSES OF READING  
FOR  
M.Sc. (Fashion Design and Technology)  
PART-I  
(Semester I & II)  
FOR  
2021-22, 2022-23**



*Meenu*

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Page No.



## SYLLABUS

**M.Sc. (Fashion Design and Technology)**  
**Programme Code: (FDTM2PUP)**

**PART-I**  
**(Semester I & II)**  
**2021-22, 2022-23**  
**ACADEMIC SESSIONS**

### OUTLINES OF TESTS

The examinations of I and II semesters will be held in November/December and May/June, respectively. The students of this course shall also undertake in plant training/industrial training for 4-6 weeks at various industries/institutions/Research & development centers etc. after the completion of theory & practical examination of the III semester. Weightage to different components for internal assessment will be given as following-

1.	Attendance	20%	%of the Total Marks of the Internal Assessment
2.	Written Assignment/project work	40%	
3.	Two Mid-Semester Tests/Internal Examination	40%	

The awards of internal assessment shall be dispatched by the Head of the Department before the commencement of semester examinations. The Assignment/ Project will be allotted to all the students from the respective syllabi of theory papers. The assessment of Assignment / Project will be given by the concerned teacher to the office of the Head of the department in prescribed Performa.

*Heena*  
*Henry*



**M.Sc. FDT Part-I****Semester-I (Exam: November/December)****Theory Papers**

Subject Code	Paper Name	Internal Assessment	External Assessment	Total marks	Credit hours/week
FDTM1101T	Fabric Science	26	74	100	6
FDTM1102T	Garment Production Management	26	74	100	6
FDTM1103T	Consumer Behavior	26	74	100	6

**Practical Papers**

	Paper Name	Internal Assessment	External Assessment	Total Marks	Credit Hours/week
FDTM1104L	Home Textiles	-	50	50	3
FDTM1105L	Textile Design Development	-	50	50	6
FDTM1106L	Pattern Making & Construction Techniques	-	50	50	6
FDTM1107L	Seminar	50		50	2

**Semester-II (Exam: May/June)****Theory Papers**

	Paper Name	Internal Assessment	External Assessment	Total Marks	Credit Hours/week
FDTM1201T	Textile Wet Processing	26	74	100	6
FDTM1202T	Research Methodology	26	74	100	6
FDTM1203T	Communication Skills	26	74	100	6

**Practical Papers**

	Paper Name	Internal Assessment	External Assessment	Total Marks	Credit Hours/week
FDTM1204L	Textile Wet Processing		50	50	2
FDTM1205L	Fashion Illustration	-	50	50	6
FDTM1206L	Advanced Apparel Construction	-	50	50	8
FDTM1207L	Project Work -I	50		50	2
	<b>Grand Total for Semesters I &amp; II</b>	<b>225</b>	<b>744</b>	<b>100</b>	<b>73</b>

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# M.Sc. (Fashion Design and Technology (Semester-I)

## Semester-I

### Theory paper I- Fabric Science

Credit: 6 Hrs. /Week

Maximum Marks: 74

Time : 3 Hrs.

#### Objectives:

- To enable the students to identify various fibers and yarns and their uses.
- To help students understand various types of fabric formation techniques.

#### Instructions for paper setter

The question paper will consist of three sections A, B and C. Section A and B will have 4 questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 3 marks each.

#### Instructions for candidates

Candidates are required to attempt two questions each from Sections A and B of the question paper and the entire Section C.

#### Section-A

Polymer- Definition, types,

Polymerization- addition & condensation

Significance of molecular structure - crystalline & amorphous

Classification of Textile Fibers based on source and origin

Manufacturing and properties (Physical and chemical) of Natural Fibers –  
Cotton, Wool, Silk, Linen

Manufacturing and properties (Physical and chemical Synthetic Fibers-Polyesters, Polyamide (Nylon 6, Nylon 66), Acrylic, Rayon, Spandex

Innovation in fibers - Micro fibers, Hollow fibers, Nano fibers

Introduction, properties and uses to sustainable fibers

Yarns-

Types of Yarns- spun and filament, carded and combed, simple, novelty and textured

a. Yarn properties in relation to fabric-Twist, count, diameter determination in yarn, Yarn numbering system







b. Yarn Construction –

- Staple yarns- Conventional ring spinning, open end spinning, friction spinning, self-twist spinning, twist less spinning, airjet spinning, waterjet spinning
- Filament yarns- Wet, Dry and melt spinning.

Shrinkage in fabrics- Laundering shrinkage, Thermal shrinkage & Heat Setting in dimensional stability of fabrics.

Thermal conductivity, air permeability, porosity of fabrics

**Section-B**

Looms- Parts of a simple loom and their functions.

Different types of looms-

Shuttle looms- pit loom

Shuttle less looms- Rapier, Multiphas, Airjet, Waterjet

Fabric Construction - Weave & its types, ends & picks, count, weight, thickness determination, Fabric defects.

Characteristics and advantages of woven, knits and non-woven fabrics;

Methods of production of non- woven-

Braiding

Netting

Lace etc;

Difference b/w Woven & Knit fabrics

Knitting technology-

Different types of knits- Weft and Warp knitting

Weft Knitting- Plain Knit/single jersey (Tuck, Pile, Float, Drop), purl stitch, Rib stitch

Warp knitting- Tricot, Raschel, Simplex, Milanese, Crotchet, Weft insertion warp knit,

Warp knitted fabrics- Single jersey, Double Jersey, Wale Deflection, Lace, Rib, jacquard types.

Different types of knitted garments and quality control

Garments with circular knits

Fully cut

Stitched shape cut

Fully fashioned garments

Integral garments

**Note:** • Students will learn to identify fibers through Visual, burning, microscopic and solubility test.

They will learn about Identification of yarns, blends, Fabric count, Evaluation of crimp and twist in yarn, make a file.

Market survey will be conducted to understand varieties of fabrics available in the market for handling (physical appearance, weaves, uses and care).



**References:**

- Textiles: Fiber to Fabric 6th Edition, Bernard P. Corbman, „International students“ edition, McGRAW Hill International Edition book co Singapore (1985).
- Textile chemistry, Peters.R.H. Vol i, ii, textile institute Manchester 1970.
- Technology of textile processing, Shenai.V.A. Vol i, ii, v, vii, sevak publications, Bombay, 1981
- Textile Science 2nd Edition, E.P.G. Gohl & L.D.Vilensky, CBS Publishers and Distributors 2006
- Fabric science, 5th edition, Joseph.J.P. Et.al. Fairchild publications, New York, 1990
- Norman Hollen and Jane Saddler, „Textiles“ Second Edition. (1949), The Macmillan Company, New York. Collier-Macmillan Limited, London.

**Semester-I****Theory paper II- : Garment Production Management****Time Allowed: 3 Hrs.****Max. Marks: 74****Teaching Time: 6 Lectures/week****Objectives**

- To familiarize students with principals of management and various departments in garment industry
- To acquaint the students with garment production process, methods and technologies adopted in apparel industry.

**Instructions for the paper setter**

The question paper will consist of three sections A, B & C. Section A & B will have four questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions carrying 3 marks each covering the entire syllabus uniformly.

**Instructions for the candidate**

Candidates are required to attempt two questions each from Sections A & B of the question paper and the entire Section C.

**SECTION-A**

Organizational structure of Apparel Industry

Principles of Management

Working of various departments in apparel industry -

- Design Department
- Marketing Department
- Finance Department
- Purchasing Department
- Production Department





- Operation department
- Manufacturing Technology-
- Cutting & Cutting Room
  - Marker planning,
  - Marker Efficiency Method & use of marker plan.
  - Introduction to concept of CAD/ CAM in apparel Construction

Spreading-Methods of spreading of fabric and requirements of the spreading process Cutting the fabric – objectives and Types of cutting machines and advantage of each-Straight Knife, Round Knife, Band Knife, Die Cutter, End cutters, Notches. Different types of blades of cutting knives. Reasons for Quality problems in cutting

## SECTION-B

Fusing Technology

Sewing Technology

- Sewing – properties, types
- Stitch – types
- Sewing Machines, machines, Needles
  - Sewing threads – types of fiber, construction and furnish, thread size, thread package thread costs, thread properties and seam performance.

Use of components and Trims

Alternative Methods of forming materials –

- Fusing
- Welding and adhesives
- Moulding

Pressing Technology

Ware Housing

### References:

- A.J.Chuter, Introduction to Clothing Production Management, Blackwell science  
 Kilgus, R. Clothing technology; From Fibre to Fashion, Verlag Europa Lehrmittel, 1996.  
 Tarlos, E. Clothing matters; Questions of dress and identity in India, Hurst 1996  
 Gaetan, M. Sewn product engineering and reference manual, Bobbin publications 1977  
 Ruth E Clock, Apparel Manufacturing & sewn product analysis  
 Tyles D J, Material Management in Clothing Production, Blackwell Science Pub.  
 Carr Harold and Latham Barbara “The technology of clothing manufacture” Blackwell Publisher (1994-2004)  
 Kaplan, NS “Changing Trends in Apparel Industry” Abhishek Publisher (2004)  
 Cooklin Gerry “Introduction to Clothing manufacture, Blackwell Science, UK, 1991



Bheda Rajesh, "Managing Productivity in the Apparel Industry" CBS Pub, New Delhi

**Semester-I**

**Theory paper III- : Consumer Behaviour**

**Max. Marks: 74**

**Time Allowed: 3 Hrs.**

**Teaching Time: 6 Lectures/week**

**Objectives:**

- To acquaint students with consumer behaviour and its effects on the fashion market

**Instructions for the paper setter**

The question paper will consist of three sections A, B & C. Section A & B will have four questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions carrying 3 marks each covering the entire syllabus uniformly.

**Instructions for the candidate**

Candidates are required to attempt two questions each from Sections A & B of the question paper and the entire Section C.

#### **SECTION-A**

**Consumer Behavior: Need and Importance of studying Consumer Behavior**  
Scope, Importance and characteristics of consumer behaviour in fashion marketing  
Types of consumers, Factors influencing consumer behaviour  
Consumer Behavior Models- The Black Box model

**Consumer Motivation: Motivation, Needs and goals, Motivational theories, Dynamics of Motivation, Types and systems of needs, measurement of motives, Motivational research**

**Consumer Learning: Definition and Meaning of Consumer Learning, Basic elements, Nature and Characteristics of Consumer Learning, Measures of consumer learning**  
Approaches to learning- behavioral learning theories, cognitive learning theory,

**Personality- Nature and Concept of personality**

Theories of personality-

- a) Freudian theory.
- b) Neo-Freudian personality theory:
- c) Trait theory

#### **SECTION-B**

**Personality and understanding consumer diversity**  
Brand personality, Self-concept and Self-image, Virtual self  
Self-concept and Marketing segmentation, lifestyle trends and consumer behavior







Attitude- Measurement of Attitudes, Attitude Formation and Attitude Change  
Sources and functions of attitude, Models of Attitude, Attitudes in predicting behavior  
Lifestyles and psychographics

Consumer Research- Relevance of market research with consumer behavior, approaches towards  
consumer behavior research, consumer research ethics  
Research paradigm in consumer behavior- Quantitative research and Qualitative research.  
Steps in the consumer research process

Consumer and business ethics, consumer concern for environmental issues and fashion industry  
Dark side of consumer behavior

**References:**

Consumer Behaviour – Ramanuj Majumdar PHI learning PVT Ltd.,  
Consumer Behaviour, CL Tyagi and Arun kumar, Atlantic publishers  
Consumer behaviour, India Edition, Jay D. Lindquist and M. Joseph Sirgy, Cengage learning.  
Consumer behaviour, concepts, Applications and cases – MS Raju, Dominic Xardel, Vikas  
publishing House PVT Ltd.  
Loudon, D.L. and Bitta A.J. Della, Consumer Behavior, Fourth Edition, 2002, Tata McGraw-  
Hill, New Delhi.  
Peter, P.J. and Olson, J.C., Consumer Behavior and Marketing Strategy, Seventh Edition, 2005,  
McGraw-Hill Higher Education.  
Schiffman, L.G. and Kanuk, L.L., Consumer Behavior, Eight Edition, 2004, Prentice Hall, India.

**Semester-I**  
**Practical Paper I- Home Textiles**

**Credit: 3 Hrs. /Week**  
**Time : 4 Hrs.**

**Maximum Marks: 50**

**Objectives:**

- To implement the students creativeness in decorating the home products.
- To innovate a product using different ornamentation skills
- To enable the students to understand the progression of product design

**Content:**

Students will design and Construct Products on any one of the following categories using  
different techniques (Cut Work, Smoking, Shearing, Pleats, Patchwork, Applique, Mirror Work,  
Painting and printing):

**Living Room Linens-** Sofa Covers, Cushion Covers, Wall Hangings, Curtain, Carpet

**Kitchen Linen** –Apron, Gloves, Table Linens, Runner, Napkins, Table Mat

**Bed Linen** - Bed Spread /Bed Sheet, Baby Blanket, Pillow Covers, Pillow



## ORDINANCES

(FOR BACHELOR OF SCIENCE FASHION TECHNOLOGY)

(UNDER SEMESTER SYSTEM)

### Applicability of Ordinances for the time being in force

Notwithstanding the integrated nature of a course spread over more than one academic year, the ordinance in force at the time a student joins a course shall hold good only for the examination held during or at the end of the academic year. Nothing in these Ordinances shall be deemed to debar the university from amending the ordinance subsequently and the amended ordinance, if any, shall apply to all the students.

1. B.Sc. Fashion Technology is an integrated course comprising three parts spread over three year. Each part will consist of two semesters. The course of study B.Sc. Fashion Technology shall be divided in six semesters and the university examination will be held at the end of every semester in the month of November/December (for semester I, III & V) and May/June (for II, IV & VI) or as fixed by the academic Council.
2. A candidate must complete and pass the whole course of three year within a maximum of six years from the date of admission in B.Sc. Fashion Technology first semester.
3. The outline of test and syllabi shall be such as prescribed by council from time to time.
4. A candidate will be eligible to join <sup>5<sup>th</sup></sup> semester of B.Sc. Fashion Technology course, if he/she has passed +2 examination of Punjab School Education Board, or any other examination recognized as equivalent thereto without reappear.
5. Semester examination will be open to regular candidates who have been on the rolls of a college affiliated to this university and meet the attendance and other requirements as prescribed in the Ordinances no. 7.
6. Subject to fulfil of requirements of House examination, the attendance requirements and these ordinances there will be no condition of passing papers for promotion from odd semester to even semester in an Academic Session.
  - a) To qualify for admission to second year of the course, the candidate must have passed 50% of total papers of the two semesters of the first year. Similarly, to qualify for admission to third year of the course, the candidate should have passed 50% of total papers of four semesters of the earlier two years.
  - b) A candidate placed under reappear in any paper, will be allowed two chances to clear the reappear, which should be availed within consecutive two years/chances i.e. to pass in a paper the candidate will have a total of three chances, one as regular student and two as reappear candidate.

The examination of reappear papers of odd semesters will be held with regular examination of the odd semester and reappear examination of the even semester will be held with regular examination of even semester. But if a candidate is placed under reappear in the last semester of the course, he will be provided chance to pass the reappear with the examination of the next semester, provided his reappear of lower semester does not go beyond next semester.
7. Attendance requirement:

Every candidate will be required to attend a minimum of 75% lecturers delivered to that class in each paper as well as 75% of the practical work, seminars etc.

**Bath Linen-Hand Towel, Bath Towel, Bath Robes, Shower Caps**

**Semester-I**

**Practical Paper II-Textile Design Development**

**Credit: 6 Hrs. /Week**

**Maximum Marks: 50**

**Time : 3 Hrs.**

**Objectives:**

- To make students understand and apply the knowledge of principle and elements of art in designing
- To enable the students to understand the concept of creating design

Understanding principle and elements of art in relation to textile designing  
Development of designs-Using Natural, Geometrical, stylized and traditional motifs  
Enlargement and reduction of motif  
Concept of design Repeat

**Techniques of Designing and product development:**

Stencil,  
Screen,  
Block printing and  
Hand painting through colour blending.

**References:**

- Grosicki, Z.J. (1989) Advanced Textile Design (4th Ed) - Watson's, London, Newness Butterworths.  
Meller S and Eiffer. J (1991) Textile Design, London, Thames and Hudson  
Prakash., Traditional Indian Motifs, The Design Point, Bombay.  
Sumathi, G.J. "Elements of Fashion and Apparel Design" New Age International Publishers, New Delhi, 2002  
Wilson Eva (1994) 8000 Years of Ornament, London, the British Museum Press

**Semester-I**

**Practical Paper III- Pattern Making and Construction Techniques**

**Credit: 6 Hrs. /Week**

**Maximum Marks: 50**

**Time : 4 Hrs.**

**Content:**

- Basic Knowledge of Tools and Equipment used for measurements, drafting, cutting and stitching and finishing.
- Inter-relationship between fabric, sewing thread, stitch length and needles



**ORDINANCES  
AND  
OUTLINES OF TESTS,  
SYLLABI AND COURSES OF READING  
FOR  
B. Sc. (Fashion Technology)  
PART-I**

**Session -2021-22, 2022-23, 2023-24**



**PUNJABI UNIVERSITY, PATIALA**

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- Basic Terminology: related to apparel construction
- Methods of taking measurements and units of measurements
- Taking measurements from body, pattern and readymade garments

**Drafting and adaptation of-**

- Basic sleeve variations - gathered, puff, flare, leg O' mutton, petal, cowl, cap, dolman, bishop, dropped shoulder, kimono, magyar, raglan, saddle, circular etc.
- Collars - Cape, Peter pan, Mandarin, coat, shawl, shirt, sailors, cowl
- Skirt:
  - A line, flared, gored, pegged, skirt with yoke
  - Pleated skirt- knife, box, inverted box
  - Circular
  - Godets and variations
  - Tiered skirt
- Interpretation of style lines - by dart manipulation using slash and spread method.

**Understanding the characteristics, uses, collection and market survey on various types of accessories-**

- Support Materials: Interfacing, Lining, Interlining
- Support Devices: Shoulder pad, Sleeve headers and Collar stays
  - a. Closures: Zippers, Buttons, Button holes, Hooks 'n' Eye, Press 'n' Studs, Buckles, Belts
  - b. Trims: Ribbons, Laces and Braids
  - c. Non-woven

**Sample preparation of the following:**

- Different types of Seams and Hems: Plain seam, Bound seam, Bias binding, Hand Overcast, French seam, Lap seam, Flat Fell seam
- Facing: Armhole Facing, Basic Neckline and All in one facing
- Darts and Tucks: Single dart, Double pointed dart, Dart tuck, Pin tuck, Blind tuck
- Plackets Placket: Inseam Placket, Bound Placket, Faced Placket
- Band & Cuffs: Closed-Band, One Part, Two Part, Waist bands
- Sleeves: Separate Sleeve, Cut-in-one
- Collar: Flat Collar, Stand and Roll Collar
- Closure: Buttonholes, Button Loops, Hooks & Eyes, Zippers
- Pockets: Applied Pocket, Set-in and Slash Pockets

**References:**

- Armstrong, J., Draping for Fashion Design, Fair child Publications, New York.2004  
 Bray N., Dress Pattern Designing, 2003 (5th edition) Willey Blackwell.  
 Reader's Digest-Complete guide of sewing, The Reader's Digest Association Ltd., London  
 Relis, Nurie., & Jaffe, Hilde., Draping for fashion Design, Prentice Hall career & Technology, New Jersey.1993



Thomas, Anna, Jacob, The Art of Sewing, UBSPD Publishers Distributors Ltd, New Delhi  
Penelope, Cream., The Complete Book of Sewing- A Practical Step by Step Guide to Sewing  
Techniques ADK Publications Book, New York 1996  
Pattern Making for Fashion Design by Helen Joseph Armstrong, 2005, Prentice Hall

**Semester-I**  
**Practical Paper IV- Seminar**

**Credit: 6 Hrs. /Week**

**Maximum Marks: 50**

**Time : 4 Hrs.**

**Objectives:**

- To enable the students to understand basic fashion concepts.
- To create awareness amongst students regarding current trends related to Fashion Field.

**1. Students will prepare notes on the following topics:**

- Understanding Basic Fashion terminology-Fashion, Fads, Styles, classics, high fashion, mass fashion, design, trend, haute couture, couturiere, knockoffs and prêt-a-porter, Fashion Leaders and Followers.
- Knowledge of Principals of Fashion, Fashion cycle, length of fashion cycle.
- Factors influencing fashion- Geographical, Psychological, Economical and Social
- Theories of fashion adaptation –
- Traditional fashion adoption (Trickledown theory)
- Reverse adoption (Bottom up theory)
- Mass Dissemination (Trickle across theory).
- National & International designers and fashion centers
- Fashion forecasting- concept of season, fairs and international markets
- Fast Fashion, Slow fashion, Recycling and up cycling

2. Students will prepare a report on topic related to fashion or allied field. Topics can be taken related to some industry, survey, product development or some concern related to fashion & present a seminar along with power point on the selected topic
3. Students will present collections and achievements of any one designer.

**References:**

Gini Stephens Frings, Fashion (from concept to consumer), Sixth Edition, 1999, Prentice Hall  
Internal (UK) Limited, London  
Kathryn Mckelvey, Fashion Source Book by (Second Edition), (2006), Blackwell Publishing  
The Fairchild Dictionary of Fashion by Charlotte Mankey Calasibetta, (third edition), 2005,  
Fairchild Publications







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## M.Sc. (Fashion Design and Technology (Semester-II)

### Semester-II Theory Paper I- Textile Wet Processing

Credit: 6 Hrs. /Week  
Time : 3 Hrs.

Maximum Marks: 74

#### Objectives:

- To acquaint the students with pre and post dyeing wet processing with recent developments.
- To impart knowledge about textiles dyeing and printing
- To enable the students to understand textile finishing and its applications in textile Industry

#### Instructions for paper setter

The question paper will consist of three sections A, B and C. Section A and B will have 4 questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 3 marks each.

#### Instructions for candidates

Candidates are required to attempt two questions each from Sections A & B of the question paper and the entire Section C.

#### Section-A

Dyeing: Dyeing theory, Dyeing auxiliaries

Pre dyeing preparation of fabric- Scouring, bleaching, Desizing

Dyes: Definition and Types (Natural and Synthetic Dyes)

Home & Industrial Dyeing - Fibre Dyeing, Yarn Dyeing, Fabric Dyeing & Garments Dyeing.  
Application of Direct, Acid, Basic and Azoic dyes on Natural Fibres - Cotton, Silk and Wool

Dyeing defects and their remedies

Recent advances in dyes and dyeing technology - microwave dyeing, super critical CO<sub>2</sub> dyeing, ultrasonic dyeing, plasma treated dyeing – principle, mechanism and procedure for dyeing.

Printing:

Introduction to printing, Difference between dyeing and printing

Types of printing: Machine Printing, Hand Printing.

Recent advances in printing technology

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## Section-B

Finishes – Definition and advantages, most commonly used substrate for finishing, Classification of Finishes

Finishes for preparatory processes- Desizing, scouring, decating bleaching, mercerization degumming, carbonizing, milling, tentering

Finishes improving handle and appearance-

- Softeners, stiffening agents, Optical whiteners,
- Calendaring, Enzyme wash (bio- polishing, stone wash, sand wash), Glazing, Moireing, Schreinerizing Embossing. Parchmentization, Sizing, Weighting, Shearing, Brushing, Fulling, Beetling, Flocking, Napping, Peach finish

Functional Finishes- Antimicrobial Finishes, Moth proof, Aroma therapy- Fragma series/ moisturizers/ essential oils/ aloe vera, anti-static finish, Dry soiling of clothing, bio softening, cool finish (snocool), hydro-phillic finish, Flame retardant, heat setting, coating and lamination, UV protective finish, water oil repellent finish, wrinkle free finish, Anti-crease/ durable press finishes.

Micro encapsulation techniques in finishing process

Recent trends in wet processing

Study of enzymes, Role of enzymes for various textile processes-desizing, scouring, bleaching, softening, bio-polishing, degumming

### References:

Textiles: Fiber to Fabric 6th Edition, Bernard P. Corbman, International students" edition, McGRAW Hill International Edition book co Singapore (1985).

Textile chemistry, Peters.R.H. Vol i, ii, textile institute Manchester 1970.

Technology of textile processing, Shenai.V.A. Vol i, ii, v, vii, sevak publications, Bombay, 1981

Textile Science 2nd Edition, E.P.G. Gohl & L.D.Vilensky, CBS Publishers and Distributors 2006

Fabric science, 5th edition, Joseph.j.p. Et.al. Fairchild publications, New York, 1990

Norman Hollen and Jane Saddler, "Textiles" Second Edition. (1949), The Macmillan Company, New York. Colliie-Macmillan Limited, London.

Blackenbury. Terry., Knitted Clothing Technology, Blackwell Publishing 2005.

Joshnson. Henry., Introduction to Knitting Technology, Abhishek Publication, 2006.

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**Semester-II**  
**Theory Paper II- Research Methodology**

**Credit: 6 Hrs. /Week**  
**Time : 3 Hrs.**

**Maximum Marks: 74**

**Objectives:**

- To understand the methodology of research, research terms, its principals and techniques,
- To understand the various methods of conducting research.
- To develop skills in conducting research from planning a study to report writing

**Instructions for the paper setter**

The question paper will consist of three sections A, B & C. Section A & B will have four questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions carrying 3 marks each covering the entire syllabus uniformly.

**Instructions for the candidate**

Candidates are required to attempt two questions each from Sections A & B of the question paper and the entire Section C.

**SECTION-A**

Meaning and Objective of Research

Type of Research-

- Descriptive/Analytical Research
- Applied v/s/ Fundamental Research
- Qualitative/Quantitative Research
- Other types of Research

Significance of research and scientific method

Research Process - Criteria of goods research.

Research Problem - Identification, selection and defining research problem

Research Design - Meaning and purpose of research design, Features of a good research design. Different research designs.

Measurement & scaling techniques

**SECTION-B**

Sampling Design- Implication and steps involved in sample design, Criteria of selection of sample, Different types of samples.





Collection of data - primary and secondary  
Interpretation of data - Techniques of analysis and precautions in interpretation

Role of Computer in Research

Report Writing - Significance, Different Steps in report writing, Layout of report. Mechanics of writing a research reports, Precautions of writing research report.

**References:**

- Statistical Methods - S.P. Gupta, Sultan Chand & Sons, 1972  
Kothari, C.R., Research methodology-methods & techniques, New age International Publishers, New Delhi  
Hand Book on Methodology of Research - R.P.A. Devadas.  
Statistical analysis in Psychology and Education- George A Forguson, Mc.Graw Hill Book Co. 1965  
Statistical Methods for Research Workers, Fisher R.A., Hafner Publishing Company, Iric. 1948.  
A.K.P.C. Swan, Business Research Methods and Statistics

**Semester-II**

**Theory Paper III- Communication Skills**

**Credit: 6 Hrs. /Week**

**Maximum Marks: 74**

**Time : 3 Hrs.**

**Instructions for paper setter**

The question paper will consist of three sections A, B and C. Section A and B will have 4 questions each from the respective sections of the syllabus and will carry 11 marks each. Section C will have 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 3 marks each.

**Instructions for candidates**

Candidates are required to attempt two questions each from Sections A & B of the question paper and the entire Section C.

**Section-A**

Communication – Its meaning and importance.

Different types of communication- One way or two way communication

Essentials of good communication

Forms of communication- Verbal and Non-verbal

Oral-Telephonic communication

Written –Drafting reports, notices, agenda notes, business correspondence, circulars, press releases and advertisements.

Nonverbal-Importance of non-verbal communication, Positive gestures, symbols and signs







Modern forms of communication-Fax, Internet/e-mail, video conferencing  
Barrier of communication

Mass Communication:- Concept, Definition, Scope,  
Functions of Mass Communication through different media – Electronic media, Print media,  
Cyber media,  
Role of media in society  
Need of Mass Communication in Fashion world-Importance and classification

### **Section-B**

Group discussions- Advantages and techniques of conducting group discussions

Resume Writing and job applications, applications for business (Application for loan, refund,  
and advance salary)

Business Letter- Business Letters (Types, Essentials and Layout) letter of enquiry, letter of  
quotation, letter of orders, letter of advice, letter of trade reference, circular letters, letter of  
complaint and adjustments, sales letter, credit letters and status inquires, collection letters.

Essentials of technical report writing and proposals

### **References:**

Gupta C.V. Business Communication and Customer Relations, Sultan Chand and Sons  
Pal Rajender & Korlahalli J.J., Essentials of Business Communications, Sultan Chand & sons.  
Chaturvedi, P.D., Business Communication, Pearson Publication  
Jain.V.K. and Biyani Om Prakash, Business Communications, Sultan Chand & company Ltd.  
Mohan, Krishna and Beerjee, Meera, Developing Communication Skills, Macmillan Press

### **Semester-II**

**Practical Paper I-**

**Textile Wet Processing**

**Credit: 2 Hrs. /Week**

**Maximum Marks: 50**

**Time : 4 Hrs.**

### **Objectives:**

- To know the difference between dyeing and printing.
- Understand the different methods of transferring the designs on fabric
- To acquaint students with different methods of dyeing and printing





**Dyeing**

Pre-Dyeing preparatory Processing - Desizing Starch, Scouring, Bleaching Washing, Drying  
Dyeing of Cotton with: Direct dyes, Reactive dyes  
Dyeing of Silk and Wool with – Acid, Basic  
Extraction and application of natural dyes on cotton silk and wool  
Resist Dyeing of Fabric- Tie and dye, Batik  
Evaluation of color fastness to washing, ironing, crocking, perspiration and sunlight

**Printing:**

Preparation of sample for printing – cotton, silk, polyester and jute  
Preparation of printing paste  
Preparation of samples for hand block printing  
Preparation of stencil & use stencil printing and spray painting.

*The Record should be submitted at the time of external evaluation*

**Semester-II**  
**Practical Paper II- Fashion Illustration –I**

**Credit: 6 Hrs. /Week**

**Maximum Marks: 50**

**Time : 4 Hrs.**

**Objectives:**

- To enable the students to Illustrate the apparel design for principles and elements of designs.
- To acquaint the students with sketching the basic shadings and fashion figures.
- To acquaint the students with technique of creating different textures
- To create understanding of the human body in proportions relevant to fashion illustration.

**Content:**

- Study of human figure in relation to fashion proportion of a perfect figure
- Sketching of Stick figures and Block figures
- Detail in study in pencil and colour with light and shade of different types of folds, gathers and shape of fabric in dresses.
- Effect of principal and elements of design in dresses
- Sketching of facial features- Eyes, Ear, Nose, Legs and Feet, Arms, Hair styles
- Fashion figure: 8½, 10 and 12 heads - front, back and ¾th profile,
- Fleshing of Fashion Figure
- Creating various textures using different techniques and medium- Nets, Knits, Velvet, Lace, Denims, Fur, Corduroy
- Illustration of Dresses depicting various textures, prints and drapes





**References:**

- Fashion Drawing—the Basic Principles by Anne Allen & Julian Seaman-B.T. Batsford, London.  
Fashion Design Drawing & Presentation by Patrick John Ireland, 4th Edition, New Delhi, Om, 2005.  
Fashion Design Illustration Children by Patrick John Ireland- London, B.T. Batsford, 1995  
Fashion Source Book by Kathryn Mc Kelvey- 4th Edition, New Delhi, Om, 2005.  
Fashion Sketchbook by Bina Abling, 4th Edition, New Delhi, Om, 2005.  
Illustrating Fashion by Kathryn Mckelvey & Janine Munslow-Blackwell Pub. Co.USA, 2007  
New Fashion Illustration by Martin Dawber- Singapore: Page One-2005.

**Semester-II**  
**Practical Paper III- Advanced Apparel Construction**

**Credit: 8 Hrs. /Week**

**Maximum Marks: 50**

**Time : 4 Hrs.**

**Objectives:**

- To enable the students to understand the concept of drafting and pattern making
- To enable the students to develop skills in garment construction commercial
- To develop skill in pattern grading
- To learn the art of preparing commercial paper patterns for different garments
- To learn the importance of

**Content-****Understanding concept of Drafting and Pattern Making**

- Fitting- Factors affecting good fit in garments
- Reasons for poor fitting and their remedies defects for upper and lower garments

**Designing, Pattern development and construction of-**

- Children's garment of recent fashion- any 3 styles
- Women's garment of recent fashion- any 3 styles
- Men's garment of recent fashion- any 2 styles
- Design and construct garment for a Party wear and Ethnic dress
- Commercial paper - pattern of any one above mentioned garments.
- Grading of any two patterns.





**References:**

- Basic Processes and Clothing Construction - Doongaji, Sherie and Desh Pande R  
Bernard Zamkoff and Jeanne Price, Creative Pattern Skills for Fashion  
Design(f.i.t Collection),1990, Publisher: Fairchild Books & Visual.  
Helen Joseph Armstrong, Pattern making for Fashion Design, 2000,  
Dorlin Kindersley (India)Pvt.Ltd. India.  
Sandra Betzina, Fast Fit – Easy Pattern Alterations for Every Figure, 2003 Taunton Pr.  
Metric Pattern Cutting by Wini Fred Aldrich-New Delhi Om Book

**Semester-II**  
**Practical Paper IV- Project Work -I**

**Credit: 2 Hrs. /Week**  
**Time : 2 Hrs.**

**Internal Marks: 50**

**Objectives:**

- To orient students to the process of research.
- To enable the students to identify a problem for undertaking the research project

**Content-**

- Allocation of Projects to M.Sc. FDT (Semester-II) students specifying focus areas or topic of their choice by the end of semester by the teachers
- Students will submit synopsis / project proposal for approval to respective guide.
- Students will present research proposal in seminar along with power point on the given topic
- Synopsis will be discussed, modified and finalized in staff committee

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