### GOYT. M. H. COLLEGE OF HOME SCIENCE & SCIENCE FOR WOMEN, (AUTONOMOUS) JABALPUR (M. P.) NAAC Re-accredited 2019: B + Grade CGPA 2.64

### Department of Clothing & Textile

# SYLLABUS M.SC.(CLOTHING & TEXTILE)-I SEM. SESSION- 2023-2024

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

### Scheme of Marks

### M.Sc.(C & T)- I Semester

Paper	Title	Max. Marks		
		Theory	CCE	Total
Theory-I	Textile Chemistry	35	15	50
Theory-II	Fabric Construction and Woven Fabric Analysis	35	15	50
Theory-III	Advance Apparel Design & Advance Apparel Construction	35	15	50
Theory-IV	Research Method and Statistics	35	15	50
Practical-I	A -Textile Chemistry	25		50
	<b>B</b> - Fabric Construction and Woven Fabric Analysis	25	_	
Practical-II	Advance Apparel Design & Advance Apparel Construction	50	_	50
Project / Survey		50		50
Total		240	60	350

Dr. Bhavana Sharma

Dr. Ratna Sharma

A, war

SAMPU Mr. Sandeep Dubey

Dr. Abha Tiwari

leen Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manja Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agyawal

Dr. Jyou Jain

Academic Council Approved

### SEMESTER-I PAPER-I

### TEXTILE CHEMISTRY

Max. Marks: 50

Theory:35 CCE:15

### Objectives:

- To acquaint the students about the polymers of which the textile fibers are made.
- To understand the chemistry, production and fundamental properties of natural and synthetic fibers.
- To familiarize with the chemical processing from desizing to finishing of textiles and principles.
- · To acquaint the students with some advanced textile technology.

#### UNIT- I

### Introduction

- 1. Need of studying textile chemistry
- 2. Polymer Chemistry
  - a) Polymers, methods of polymerization, polymerization process.
  - b) Definition of co-polymer, oligomer, graft-co-polymer
- c) Degree of polymerization, molecular weights of polymers and its determination.

(In brief)

- d) Physical & Chemical properties as related to molecular structure
- e) Characterization of polymers using chemical and instrumental method.(In brief)
- 3. Orientation and crystalline of polymers; their influence on fiber Properties.
- 4. Water for textile purposes: Hard & Soft water methods of softening

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyon Jain

Academic Council
Approved

### UNIT-II

### 1. Chemistry of cellulosic fibers

- a) Introduction to cotton, varieties, properties, longitudinal and cross-sectional view.
- b) Molecular structure of cellulose, action of acids and alkalis, hydro cellulose and Oxy-cellulose, mercerization, liquid ammonia treatment
- c) Regenerated cellulosic fibers-viscose rayon, cuprammonium rayon, Cellulose acetate.
  - d) Rayon, polynosic-their manufacture, properties and uses.

### 2. Protein fibers-Wool and silk

- 1. Chemical composition, molecular structure, physical and chemical properties, action of acids, alkalis and other chemical on protein fibers.
- 2. Brief description on, felting of wool, degumming and weighting of silk, Shrink proofing of wool.

### UNIT-III

### Synthetic Fibers-

- Polyester, polyamide and acrylonytrile fibers-
- a) Chemistry of the fibers- raw material, manufacturing process from polymer to fiber stage.
- b) Physical and chemical properties of all the fibers and their uses. Examples of Commercial production in India.
- 2. Blends of different fibers-composition and properties and uses in textile and clothing.
- 3. Other natural and synthetic fibers- Their chemical composition, properties and uses viz. Jute, flax , hemp, tencel, polyethylene , carbon , polycarbonate , metallic , glass fiber and polyurethane fibers. (in brief)

Dr. Bhavana Shar

Dr. Ratna Sharma

Synp Mr. Sandeep Dubey

Anua Dr. Abha Tiwari

Dr. Reena Bhairam

Keen

Dr. Shipra Banerjee

Dr. Rachna Agrawal

RAGRANE

Dr. Smita Pathak

Ms Manfu

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

### UNIT-IV

### Scientific basis of dyeing of textiles -

- 1. Classification of textile dyes, commercial dyes, C.I. Constitution No. & C.I. Generic No.
- 2. Theory of dyeing
  - · Chemical structure of various classes of dyes.
  - · Application of dyes on various substrates including blends.
- 3. Optical brightness agent

### UNIT-V

### Textile finishing -

- 1. Introduction, importance & Classification of finishes
- Mechanical finishes- Calendaring, singeing, shrinking, softening, shearing, napping, stiffening etc.
- 3. Chemical finishes- mercerization, parchmentisation, durable press, wash 'n' wear, wrinkle recovery, chlorination, crape & crinkled effects, Resins, their application and chemistry.
- 3. Special purpose finishes-

Flame retardant, water repellent, antistatic, stain and soil release, moth Proofing.

- 4. A brief introduction to new development in fibers manufacture
  - a. Bi component and bi constituent fibers. (in brief)
  - b. Special purpose fibers.

### Course Outcomes-

Students will be able to-

CO1: Understand the polymers and polymerization process of textile Fibers.

CO2: Understand the system of molecular arrangement to determine the fiber properties.

CO3: Understand the processes, chemical properties of cellulosic, Protein, manmade, synthetic fibers.

CO4: Understand different dye class and applied on various types of historic and

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Sonby

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti dain

Academic Council
Approved

modified fibres.

CO4: Understand the basic, chemical and special finishing.

CO5: Gain knowledge of modified and special Purpose fibers.

### References:

- Shenai, V. A. (1984): Technology of textile processing, Vol. IX, Sevak Publication.
- Cook, J. Gorden, Hand book of textile fibers, Manmade fibers, merrow Publishing Co Ltd. England.
- 3. Moncrief: R.W. Manmade fibers, John Willey & Sons New York.
- 4 Trotman, E.R. (1975): Dyeing and chemical technology of textile fibers Charles Griffino Compony Ltd., London.
- 5. Marsh, J. T.(1979): An Introduction to Textile Finishing, B.I. Publication
- Mark H. Woodling N.S. & Atlas, Smeeds, (1970): Chemical after Treatment of Textiles, John Willey & Sons inc., NY.
- 7. Lewin. M. And Sello, Stephen B. (1983): Hand book of fiber Science And Technology. Vol. II, Chemical Process of Fibers & Fabrics,
- 8. Fundamental Finishes- Part A. Marcel Deker, Inc. NY.Base.
- Shenai V. A. (1991): Introduction to the chemistry of Dyestuffs, Sevak Prakashan.
- 10.Gulrajan M. L. And Gupta D.(1992):Natural Dyes and their Application To Textiles, IIT Delhi.
- Mohanty, Chandramouli, Naik, (1987): Natural dycing process of India Ahmedabad, Calico Museum of Textiles.
- 12. India Hori Business on line, http://www.agroindia.org./1HOL.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee,

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyon Jain

### SEMESTER - I PRACTICAL: TEXTILE CHEMISTRY

Max.Marks-25

### Any eight exercises of the following:

- 1. Identification of fiber-cotton, polyester, viscose, polyamide, wool, Silk, jute, etc. Use of burning test, microscopic examination, chemical test, Solubility test and staining tests.
- 2. Quantitative analysis of binary blends- polyester/cotton, polyester/viscose, Polyester/wool, cotton/wool.
- 3. Enzymatic desizing, scouring and bleaching of cotton fabric.
- 4. Dyeing of cotton (yarn) with direct, reactive and vat dyes (one each) by Exhaust method. Dyeing of polyester with a disperse dye in high temperature and high pressure (HTHP) dyeing technique.
- 5. Dyeing of wool and silk with an acid dye by exhaust method. Dyeing of acrylic fiber with a basic cationic dye by Exhaust method.
- 6. Use of natural dyes and mordent.
- 7. Study chemical properties of fiber as related to textile finishing
- 8. Mercerization in cotton
- 9. Felting of wool
- 10. Weighting of silk
- 11. Degumming of silk
- 12. Permanent pleating PET
- Determination of strength of bleach liquor
- 14. Determination of hardness of water
- 15. Determination of alkalinity in soap solutions
- Mill visit to acquaint student with modern chemical processing.

### Course Outcomes

Students will able to

CO1: Analyze to fiber properties, dyeing Procedures of natural dyes, quantitative analysis of blends.

Dr. Bhayana Sharr

Leen Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Mr. Sandeep Dubey Milout

RHOTHWE Dr. Rachna Agrawal

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Dr. Abha Tiwari

Dr. Smita Pathak

### SEMESTER-I PAPER-II

### FABRIC CONSTRUCTION AND WOVEN FABRIC ANALYSIS

Max. Marks: 50

Theory : 35 CCE : 15

### Objectives:

- To enable students to understand and learn methods of developing fabrics using different fibers, yarn and fabric making techniques.
- To gain knowledge and understanding of fundamentals of weaving Machinery and processes.
- To analyze different weave patterns and learn principles of creating design through weaving.

#### UNIT-I

### Principles of yarn manufacture -

- 1. Yarn processing for natural fibers- cotton, wool, & worsted, jute, linen by Conventional systems and recent developments like:
- a) OE Spinning- Rotor, Vortex, Friction, Air jet Electrostatic, Twist less

b) Self twisting

- c) Fasciated
- Yarn nomenclature and measurement Yarn numbering systems
- 3. Geometry of different classes of varns and its relationship to fabric properties.

#### UNIT- II

### Modern developments in yarns and at their manufacture

- 1. Modern yarn production principles of spinning in production of manmade fibers dry and wet drawing; spun yarn; blend yarn and Bi-component yarn.
- Textured yarn technology- principles methods and process variables in texturing & their effect on properties of textured yarns; morphological changes induced by texturing.
- 3. Core yarns, network and film yarns and laminated yarns.
- 4. Designing through variables in yarns.

Dr. Bhayana Sharma

Dr. Reena Bhairam

Leev

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Arrivar

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyou Jain

### UNIT- III

**Principles of fabric manufacture-** basic principles, characteristics and significance of different processes-woven, knitted, Braids.

- 1. Weaving
  - · Parts and function of the handloom
  - · Types of weave basic and decorative
- 2. Knitting- Knitting machines, types of knitting, Properties

#### UNIT-IV

### Principles of fabric manufacture-

- 1. Basic principles characteristics and Significance of different processes
  - a. Felts and non-woven
  - b. Knotting, braiding and lace making
- 2. Introduction to technical Textiles- Introduction, classification & application.
- 3. Fabric faults on different stages- fiber, yarn and fabric defects and their remedies.
- 4. Fabric Merchandizing: Fabric Costing, Fabric Sourcing for different purposes

### UNIT- V

- Woven: Sequence of operations in warp & weft preparations (in brief) various types of looms and their drive.
- 2. Fabric classification and analysis of fabrics for its construction Weaves..
- 3. Dobby, jacquard shedding and weaving terry pile.
- 4. Principles of color and design in weaving: Preparation of pattern
- 5. For dobby and jacquard looms; brocade, damask, tapestry warp & weft Pile weaving.
- 6. Textile design through weaving.
- New developments in woven fabrics New looms
   Developments: Tri-axial weaving knit and weaves construction.

### Course Outcomes

Dr. Bhavana Sharma

Dr. Reena Bhairam

leen

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee,

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agraval

Dr. Abha Tiwari

Dr. Smita Pathak

Students will able to-

- CO1: Understand the contemporary and new spinning system.
- CO2: Understand the modern yarn production technology.
- CO3: Understand different weave designs details and know the various fabric structures according to their construction techniques.
- CO4: Understand the Various looms and weaving operations.
- CO5: Understand principles of colour and design in weaving.

#### REFERENCES

- 1. Spun yarn Technology- Eric Oxtoby Butterworth Publication.
- 2. American cotton Handbook-Merrill
- 3. Suboth Kumar Agrawal(1980):Textile Processing and Auxillaries.
- 4. Textiles- Burker-(1988) Abhishek Publication.
- 5. Essentials of Textiles- M. Joseph, HolfRinechants, Winston Publication.
- 6. Irene Waller: Designing with Threads.
- 7. Edward Miller (1992) Textiles.
- 8. Corbman, B. Fiber to Fabric.
- Book- Textiles- Prop.&Behaviour in Clothing Use-Year (1992).
- What is textiles; pagr 10-13
- 11. Woven Fabrics , Knitted Fabrics
- Fabric structure (86-94)
- 13. Woven fabric, fabric width, fabric weight, woven fabric structure,
- 14. Weaves, weave variety, plains, twill, stains weave.
- Book- Textiles- Year 1998 By A. F. Barker, chapter 7 Principles of Weaving; page 154-171.
- Book- From fibers to Fabrics, Gale, E.1968, pg. 54.
- 17. Colour& weave- Margaret & Thomas, Winderkuechd.
- 18. Grociki, Z. J.; Watsons Textiles Design &Colour, londonnewness Butter Worth.
- William Watson-Advanced Textile Design, London. Longmans Green And Co. Ltd.
- 20. Nisbet, H. Grammar of Textile Design, Taraporewale Sons &Co.Bombay.
- 21. Aswani, K.T.: Wcaving Machanism Mahajan Book Distributers, Ahmadabad.
- 22. Sengupta, R. Weaving Calculations Taraporewale Sons & Co. Bombay 18.

Dr. Bhavana Sharma Dr. Reena Bhairam Ms Manja Darkhane
Dr. Ratna Sharma Dr. Shipra Banerjee Dr. Ranjana Trivedi
Mr. Sandeep Dubey Dr. Rachna Agrawal Dr. Neelam Agrawal
Dr. Abha Tiwari Dr. Smita Pathak Dr. Jedin Jain

Robinson and Mark: Woven Cloth Construction- Butter Worth and Co. Ltd., London.

- 23. Thorpc, Azaba; Elements of Weaving- Doubleday &Co. Inc, NY.
- 24. Singh R.B., Modern Weaving, Mahajan Book Distributers, Ahmadabad.
- 25. Kulkarni, M.M. Weaving Technology; Virinda Publication, Jalgaon.
- 26. Amalser, D.M.; Yarn & Cloth Calculation. Amalser, D.M.; Handloom Weaving.
- 27. Amalser, D.M.; Fabric Structure and Cloth Analysis

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Mahju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyoti Jain

Academic Council
Approved

### SEMESTER -I

### PRACTICAL: FABRIC CONSTRUCTION AND WOVEN FABRIC ANALYSIS

Max. Marks: 25

- Setting up of simple loom- calculation of raw materials.
- · Weaving on simple loom, plain, rib, matt and twill structures.
- · Fabric analysis for design, repeat, draft, peg plan & other details.
- Creating design for stripes, checks, dobby &jacquards.(Sketching)
- · Visit to weaving mills.
- Survey various fabrics available.
- Collection of samples according to texture and weaving.
- Different types of knitting stitches and prepare samples.
- Lace making-Crochia, Tatting, U-pin. Prepare sample of any one.
- · Different types of knotting used by Macrame thread-prepare any one small article.

### Outcomes-

Students will able to-

CO1: Construct fabrics through different fabric construction techniques.

CO2: Identify different fabrics according to weave and texture.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey AT Way

Dr. Abha Tiwari

Seems Dr. Reena Bhairam

Dr. Shipra Banerjeg

RAGRAWA Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

### SEMESTER-I PAPER-III

### APPAREL DESIGN & ADVANCED APPAREL CONSTRUCTION

Max. Marks: 50

Theory: 35

CCE : 15

### Objectives:

- To impart an in-depth knowledge of style reading, pattern making, And garment construction technique.
- To develop and understand the principles of pattern making through Flat pattern and draping.

### UNIT- I

- 1. Detailed study of industrial machines and equipment used for
  - a. Cutting
  - b. Sewing
- c. Finishing
- d. Embellishment
- 2. Sewing needles: parts, types, uses & sewing threads: types & uses
- 3. Study the interrelationship of needles, thread, stitch length and Fabric.
- Methods of pattern making. Drafting Importance, Drafting of children's bodice block, Placement of drafting, pinning, marking and cutting, Sleeve block and collars (Peter Pan collar, stand collar and shirt Collar)
- Essentials of making paper patterns- Symbols, Introduction to paper patterns, types of paper pattern, pattern making terms, paper production terms, purpose, method & their use in layout cutting.

#### HNIT-II

- Introduction to draping, draping tools and equipment, Terminology, Introduction on dress form, muslin preparation
- 2. Principles of draping
- 3. Flat Pattern Making

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyou Jain

### SEMESTER-I PAPER-III

### APPAREL DESIGN & ADVANCED APPAREL CONSTRUCTION

Max. Marks: 50

Theory : 35

CCE : 15

### Objectives:

- To impart an in-depth knowledge of style reading, pattern making, And garment construction technique.
- To develop and understand the principles of pattern making through Flat pattern and draping.

### UNIT- I

- 1. Detailed study of industrial machines and equipment used for
  - a. Cutting
  - b. Sewing
- c. Finishing
- d. Embellishment
- 2. Sewing needles: parts, types, uses & sewing threads: types & uses
- 3. Study the interrelationship of needles, thread, stitch length and Fabric.
- 4. Methods of pattern making. Drafting Importance, Drafting of children's bodice block, Placement of drafting, pinning, marking and cutting, Sleeve block and collars (Peter Pan collar, stand collar and shirt Collar)
- 5. Essentials of making paper patterns- Symbols, Introduction to paper patterns, types of paper pattern, pattern making terms, paper production terms, purpose, method & their use in layout cutting.

### UNIT-II

- 1. Introduction to draping, draping tools and equipment, Terminology, Introduction on dress form, muslin preparation
- 2. Principles of draping
- 3. Flat Pattern Making

to our. Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee Marawe

Dr: Ranjana Trivedi

Mr. Sandcep Dubey Aribor

Dr. Rachha Agrawal

Ores Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

- 4. Dart manipulation (Slash and Pivot method)
- 5. Understanding the commercial paper pattern
- 6. Selection of commercial paper pattern
- 7. Layout on different fabrics, widths and types.

### UNIT- III

- 1. Fitting- Factors affecting good fit, principles of fitting, common problems encountered and remedies for fitting defects
  - Upper garment
  - Lower garment
- 2. Fitting Standards for fitting ease, lines, grain, set, balance.

### UNIT- IV

- 1. Buying criteria for
  - a. Knits, silks, denim and other special fabrics
  - b. Readymade garments & their importance & selection
- 2. Clothing for people with special needs
  - a. Maternity and lactation period
  - b. Old age
  - c. Physically challenged

### UNIT- V

- 1. Evaluating the quality of apparel
- Identification of the components of apparel
- Fiber content, shaping devices, underlying fabrics, pockets, necklines, Hem treatments, decorative details and alteration potential.
- 4. Standards for evaluating the various components.

### Course Outcomes

Students will be able to

CO1: Use industry terminology and equipments used for apparel construction techniques in appropriate ways.

CO2: Understand different apparel making techniques and their implementation as designer.

CO3: Understand the fitting sessions for best fitted garments.Improve fitting techniques.

Dr. Bhavana Sharma

Riers Dr. Reena Bhairam

Ms Manju Barkhanc

Dr. Ratna Sharma

1 Jap Mr. Sandeep Dubey Dr. Shipra Banerjge RAgrawe

Dr. Ranjana Trivedi

Alway Dr. Abha Tiwari

Dr. Rachna Agrawal

Lame Dr. Neelam Agrawal

Dr. Smita Pathak

Dr. Jyou Jain

CO4: Understand the buying criteria of different types of fabrics.

CO5: Identify the components and evaluate quality of apparel.

### References:-

- 1. Armstrong, Pattern making for fashion design.
- 2. Gioelio andBerke: Figure Type And Size Ramnge, Fairchild Publication, New York.
- 3. Grate and Storm: Concepts in Clothing, Mc Graw Hill Book Co. New York.
- 4. Bina Abling, Fashion Sketch Book, Fairchild Publications, New York.
- Claire Shaeffers: Fabric Sewing Guide, Chilton Book Compony, Radnot, Pennsylvania.
- 6. Harold Carr and Barbara Lathan: The Technology Of Clothing Manufacture, Oxford BSP Professional Book London.
- Stampier, Sharp & Donell: Evaluating Apparel, Quality-Publications, New York.
- 8. Natalle Bray: Dress Fitting Published By Blackwell Science Ltd.
- 9. Margohs Design Your Own Dress Pattern Published By Double Day And Co. Inc. N Y 10. Slampler, Sharp & Donnell: Evaluating Apparel Quality- Fairchild Publication, NY.
- 11. Natalle Bray Dress Fitting Published by Blackwell Science Ltd.

12. Margolis Design Your Own Dress Pattern Published by Double

Dr. Bhayana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubcy 1/100/

Dr. Abha Tiwari

Leen Dr. Reena Bhairam

Dr. Shipra Banerjee

RAGRENOS Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Lare

Dr. Neelam Agrawal

Dr. Jyou Jain

### SEMESTER-I

### PARCTICAL: APPAREL DESIGN AND ADVANCE APPAREL CONSTRUCTION

Max.Marks:50

### Any eight of the following exercises:

- 1. Designing through flat pattern-Dart manipulation
- 2. Development of variation in sleeves, set in sleeves and bodice combinations.
- 3. Development of variations of collars- Roll over collar, Collar with bodice
- 4. Necklines and facings- Scooped necklines, Built-up necklines, Cowl necklines
- 5. Plackets- Center button closing, Asymmetrical closing, double breasted Fly front opening, Zipper in seam, without seam
- 6. Development of paper pattern and construction of garments (Using checks, stripes, unidirectional and novelty fabrics)
- 7. Designing through draping
  - · Basic draping principles and techniques and Developing pattern
- 8. Fashion sketching
- 9. Term garments 2
- 10. Development of slopers for skirt variations- Low and high waist. A line, flared, circular, pleated, yoked with godet / peplum
- 11. Skirt band- separate band, faced waist line
- 12. Pockets Slashed pockets-welt, bound flaps, Inseam pockets: closed and open
- 13. Designing, drafting and construction of skirts

### Outcomes-

Students will be able to

CO1: Construct garment details in modified way.

CO2: Construct tailored garments, in correct sequence of operations.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Janay/

Mr. Sandeep Dubey

Dr. Rachna Agrawal

RAGRANA

Dr. Neclam Ag

Dr. Abha Tiwari

Dr. Smita Pathak

### SEMESTER-I PAPER-IVRESEARCH METHODS AND STATISTICS

Max. Marks: 50

Theory

:35

CCE : 15

### Objectives:

- · To understand the significance of statistics and research methodology in Home Science research.
- · To understand stand the types tools, methods of research and develop the ability to construct data gathering instruments appropriate to the research design.
- · To understand and apply the appropriate statistical technique for the measurement and design.

### UNIT-I

- · Research: meaning, objectives and significance of research.
- · Science, scientific methods, scientific approach.
- Role of statistics and research in Home Science discipline.
- · Types of Research; Historical, Descriptive, experimental, social research,. (in brief)

### UNIT-II

### Sampling Methods:

- Meaning of population and sample. Meaning and characteristics of sample. Aims of sampling. Essentials of a good sample
- Types of sampling
- A Probability & Semi probability sampling: simple random, systematic random sampling, two stages multi stages and cluster sampling.
- B Non- Probability sampling: Purposive quota and volunteer sampling.
- Merits & Demerits of sampling.

Dr. Bhavana Sharma

leen Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

SADA Mr. Sandeep Dubey Missey

RAgrawa Dr. Rachna Agrawal

Dr. Neelam grawal

Dr. Abha Tiwari

Dr. Smita Pathak

### UNIT-III

- · Definition and Identification of a research problem. Origin & sources of research problems.
- Selection, Justification & limitation of research problem.
- · Classification meaning, definition and objectives of classification methods of Classification, advantages & limitations.

### UNIT-IV

- · Tabulation of data, objectives advantages & limitations of tabulation, qualities of a good table, and rule for tabulation types of table.
- Graphic presentation, Frequency distribution, histogram, frequency, polygons, Ogive pictogram.
- Average of position in individual, discrete and continuous series. Characteristics of a good average meaning definition, uses and limitation of mean, median & mode

### UNIT-V

- · Hypothesis-meaning nature, characteristics, types & functions of hypothesis. Criteria of a good research hypothesis.
- Testing of hypotheses. Type I and Type II errors.
- · Non parametric Methods Chi-square test. Condition for Chi-square test and Yates Correction.

Note: With the view to benefit of the students of MSc semester I, II (CT, FN, HD, RM) paper IV Research methods and statistics paper IV statistics and computer applications.

1. The inter change of the statistical and theoretical part of the paper has been intermingle to stabilize the difficulty level of the paper without deleting any part/portion of the already exiting syllabus accept repeations

Dr. Bhavana Sharma

Leer Dr. Reena Bhairam

Ms Manit Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

SACTU Mr. Sandeep Dubey

RAGOOWE Dr. Rachna Agrawal

Dr. Neelam Agrawal

Mi way Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Sor Jain

### Course Outcomes

Students will be able to-

- CO1. Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.
- CO2. Have basic knowledge on qualitative research techniques.
- CO3. Have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis.
- CO4. Have basic awareness of data analysis-and hypothesis testing procedures.

### References:

- Garrett, HeneryE.(1971) Statistics in Psychology and education, David Heley and Co.
- Bandarkar, P.I. and Wilkinson T.S. (2000); Methodology and Techniques of social Research, Himalaya Publishing House, Mumbai.
- Bhatnagar, G.I. (1990): research methods and measurements in Behavioral and social Sciences, Agri. Cole publishing Academy, New Delhi.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandcep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Bankhanc

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyou Jain

M. Sc. Syllabus 2023-24

### GOVT. M. H. COLLEGE OF HOME SCIENCE & SCIENCE FOR WOMEN, (AUTONOMOUS) JABALPUR (M. P.)

NAAC Re-accredited 2019: B + Grade CGPA 2.64



### Department of Clothing & Textile

## SYLLABUS M.Sc.(CLOTHING & TEXTILE)-II SEM. SESSION- 2023-2024

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

### Scheme of Marks M.Sc.(C & T)- II Semester

Paper	Title	Max. Marks		m_4-1
		Theory	CCE	Total
Theory-I	Textile testing & Quality Control	35	15	50
Theory-II	Historic Textile	35	15	50
Theory-III	Fashion Design	35	15	50
Theory-IV	Statistics & Computer Application	35	15	50
Practical-I	Textile testing & Statistics	50		50
Practical-II	Historic textiles, fashion design &fashion illustration)	50		50
Project / Survey		50		50
Total		290	60	350

Dr. Bhavana Sharma

leer-Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

SAMPI Mr. Sandeep Dubey

Dr. Rachna Agrawal

Aque Dr. Neelan Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti Jai

Academic Council Approved

# SEMESTER-I I PAPER-I TEXTILE TESTING AND QUALITY CONTROL

Max. Marks: 50

Theory: 35

CCE :15

### Objectives

- To develop an understanding of methods and technique used to analysis
   Textile fiber, yarns and fabrics for end use performance.
- To acquire knowledge and understanding of various structural properties of textiles and relate them to end use fabric performance and product.
- To familiarize students with the different testing equipments, their Underlying principles and the international accepted standards, Test methods and the language of measurement.
- To be able to analyze and interpret the results and predict the general textile testing.

### UNIT-I

### 1. Introduction to Textile Testing

- a. Concept, scope, importance & objectives of Textile Testing
- b. Terminology used in Textile Testing
- Application areas
- d. Use of statistics in data management, statistical terms, mean deviation, standard deviation, co-efficient of variance
- e. Sampling procedures fiber, yarn & fabric sampling.
- f. Selection of sample for testing.

### UNIT-II

- 1. Total quality management (TQM) approach in the field of textile & Clothing
- 2. Standardization
  - a. Standards for fabric performance.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

- b. Organizations for standardization (National & International)
- c. Quality control of textile products.
- d. Quality standards as applicable to various types of textiles (Garments, Yardage, knits, woven, carpets, processing, dyeing).

### UNIT-III

- 1. Properties of textiles at different stages of processing, definition, terminology and their principles of measurement.
  - a. Fibers- length, fineness, evenness
  - b. Yarn- strength, evenness, openness, load, clongation, crimp, twist
  - c. Identification of textile fiber, burning, solvent

### UNIT-IV

- Fabrics- strength, clongation, shrinkage, thickness, cover, air Permeability, crease recovery, weight, comfort, stiffness, flammability, drape - definition, methods of measuring fabric drape
- 2. Repellency, color fastness.
- Garment finishing- color fastness, shrinkage Concept of fabric faults as related to stages of manufacture and the Remedies.
- Colour Fastness test in textile: crocking, perspiration, sunlight, laundering, pressing.

### UNIT- V

### 1. Concept of statistical QC

- a. Quality control aspects: introduction, definition, importance of quality assurance & final inspection.
- b. Test methods used for quantitative & qualitative analysis of blend mixture
- c. Sampling: terms used in sampling
- d. Determination of tolerance limits & CV%

### Course Outcomes

Students will be able to-

- CO1: Apply statistical tools in textile that is able to testing.
- CO2: Test significance of textile testing
- CO3: Sample selection technique for textile testing.
- CO4: Able to perform measurements and evaluation of fibres, yarn and fabric properties.

Dr. Bhavana Sharma

Dr. Recna Bhairam

Dr. Ratna Sharma

Dr. Shipra Banerjee

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Neelam Agrawal

Dr. Jyoti Jain

CO5: Perform the measurement and evaluation of fabric colour fastness properties.

#### REFERENCES

- 1.Booth, J.E.: Principles of Textile Testing- Newness Butter Worth, London.
- 2.Billie, J. Collier and Helen H. Epps- Textile Testing and Analysis- Prentice Hall, New Jersey.
- 3. John H. Skinkle- Textile Testing- Brooklyn, New York.
- 4. Grover and Hamby- Hand book of textile testing and quality control Wiles.
- 5.SI Specifications, BSI Specification.
- 6.ASTM Standards.
- 7. Mishra and Puri, Indian Economy, Himalay Publishing House.
- 8. National Textile Policy 1986, 2000.
- 9. Journals- Economic Times, Financial Express & Apparel on line.
- 10.Industry Published Journals/ newsletters e.g. From SASMIRA,

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhanc

Dr. Ranjana Trivedi

Dr. Neelam Agraval

Dr. Neciam Agrayar

Dr. Jyoti Jain

Academic Council
Approved

### SEMESTER-II

### PRACTICAL: TEXTILE TESTING AND QUALITY CONTROL

Max. Marks: 25

### Contents-

- 1. Physical testing of textiles using appropriate standardized procedures
- . Fibers-length, diameter, fineness
- . Yarn-count, heaviness, twist, crimp, strength
- Fabric- Thread count, thickness, air porosity, abrasion, strength
   (Tensile, Tear, Bursting) water vapor permeability, cover, stiffness, drapability,
   Crease recovery, pilling, and abrasion.
- 2. Chemical Testing
- . Identification of fibers
- . Binary fabrics- Blend composition.
- . Shrinkage, water, oil repellency
- . Sensitivity to various reagents.
- Dyes- Identification of dye class
- . Color fastness through sunlight, crock meter, washing (laundering), pressing
- 4. Mechanical Testing
- . Seam strength
- . Identification of fabric weaves, Thread count.
- 5. Inspection of Final Garment

#### Outcomes-

Students will be able to -

CO1: Employ various sampling techniques in textile testing.

CO2: Test different types of textile fibers using the relevant instrument.

CO3: Measure yarn count, twist and irregularity using the relevant instrument.

CO4: Test fabric based on different quality parameters using the relevant instruments.

CO5: Test tensile strength of fibers and fabrics using the relevant instrument

Reen Ms Manju Barkhane Dr. Bhavana Sharma Dr. Reena Bhairam Dr. Ranjana Trivedi Dr. Shipra Banerjge Dr. Ratna Sharma RAgrawa STO WO Dr. Neelam Agrawal Dr. Rachna Agrawal Mr. Sandeep Dubey ATUS OF Dr. Jyoti Jain Academic Coun Dr. Abha Tiwari Dr. Smita Pathak Approved

### SEMESTER-II PAPER-II

### HISTORIC TEXTILES

Max. Marks: 50 Theory :35

CCE : 15

### Objectives:-

- · To gain knowledge of the significant developments in production of Textiles in the world.
- · To assess similarities and dissimilarities in different civilizations in Term of fiber production, Ornamentation and usage.
- · To study textiles of historical significance which influenced other cultures & civilization?

### UNIT- I

Importance of textiles in historical perspective- early fibers and products, their use in early civilization- India, China Egypt, Mesopotamia, Persia, Crete, Greek, Rome & Peru.

### UNIT- II

Development of different fibers- Cotton, Silk, Wool, Linen in different countries of significance - in term of processing, tools and equipment used, design and ornamentation applied and specialties achieved.

#### UNIT- III

Development of embroideries from ancient times- India, China, Europe, Persia, Latin & South America-techniques, designs and usage.

#### UNIT- IV

Development of dyeing and printing since ancient times- natural dyes, methods of Dyeing & decorative dyeing, methods & style of printing - tools developed and effects achieved.

### UNIT- V

### Historical textiles of special significance

- 1. Carpet, Rugs. Brocades. Laces. Shawls
- 2. Resist dyed and ikat fabrics.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Shipra Banerjçe

Dr. Ranjana Trivedi

Dr. Ratna Sharma SIQUE

RAgrawal

Ague

Mr. Sandeep Dubcy himor

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

- 3. Printed- Bagru, Bagh, Dabu ,Sanganeri and Kharhi Print of Gujarat
- 4. Painted- Kalamkari, Madhubani, Warli

Historical Development-Centers of development, historical impact on other areas, specialties achieved and Techniques developed for ornamentation-color, designs applied & articles produced.

### Course Outcomes

Students will be able to-

CO1: Understand the historical development and products achieved in historical perspective.

CO2: Analyze different traditional Indian and world embroideries.

CO3: Understand the development process of dyeing and printing.

CO4: Analyze and identify fabric structure, material content, and method of manufacture of historic textiles for purposes of either conservation work or for descriptive analytical reports;

CO5: Interpret the historic context of textiles to a specific intended audience through published papers, exhibitions, and public presentations.

### References-

- 1. Bosomworth Dorothy (1995):The encyclopedia of Patterns and motifs, Studio Editions, London.
- 2. Dhamija Jasleen (1979): Living Traditions of Iran's Crafts, Vikas publishing House, New Dehli.
- 3. Dupont Auberville, M. (1989): Classics Textiles, Bracken Books London.
- Gillow John (1992):Traditional Indonesian Textiles, Thames and Hudson, London.
- 5. Gillow John Sentence Bryan (1999): World Textiles, Thames and Hudson, London.
- 6. Ginsburgh, M. (1977): Embroidery, Marshall Cavendish Editions, London.
- 7. Guy John (1998) : Woven Cargos, Thames and Hudson.
- 8. Harris Jennifer (1993): Textiles 5000 years, Henry and Brans Inc. New York.
- 9. Harvey Janet (1996):Traditional Textiles of Central Asia, Thames and Hudson. London.
- 10. Jones Owen (1997): The Grammer of Ornament, Bernard Outrich, London. Lewis Ethel: Romance of Textiles.

11.Painc Sheila(1990): Embroidered Textiles Tradions, Thames and Hudson,

Dr. Bhavana Sharma Dr. Reena Bhairam Ms Manju Barkhane

Dr. Ratna Sharma Dr. Shipra Banerjee Dr. Ranjana Trivedi

Mr. Sandeep Dubey Dr. Rachna Agrawal Dr. Neelam Agrawal

Dr. Abha Tiwari Dr. Smita Pathak Dr. Jyoti Jain

London.

- 12. Stone Miller Rebecca (1994): To weave for the Sun, Thames and Hudson,
- 13. Reader's Digest (1973): History of Man-The Last Two Million Years.

Dr. Bhavana Sharma

Dr. Ratna Sharma

= Myb Mr. Sandeep Dubey

Dr. Abha Tiwari

Leen Dr. Reena Bhairam

Dr. Shipra Banerjeg

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhanc

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

# SEMESTER-II PAPER-III FASHION DESIGN

Max. Marks: 50 Theory:35

CCE : 15

### Objectives:

 The course aim at providing in depth working knowledge of the development andEnables to the student to use and practice skills and use it to market situation.

### UNIT-I

- 1. Elements and Principles of Art and Design
- a. Plastic elements- line, form, space, color and texture.
- b. Elements used in creating a design.
- c. Principles of Design- Rhythm, Balance, Proportion, Emphasis, Unity.

### UNIT-II

- 1. Composition- with one element and more than one element.
- 2. Color- Its sensitivity and composition in dress: theory, system, wheel, schemes.
- 3. Harmony- in form of space coverage to design of the dress.

#### UNIT-III

- 1. Components of fashion: Types, importance and application of
  - a) Silhouette
- d) Seams

g) Details

b) Style

e) Trims

h) Color

c) texture

f) Fabric

### UNIT-IV

 Fashion Forecasting: Meaning, Role of Forecaster, The precision of the Forecaster, Factors affecting fashion forecasting, sources of fashion forecasting. Time based Forecasting, short term forecasting, long term forecasting.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

feer

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

- Study of fashion markets and its segments: Basic concept, Types of Marketing, basis for segmenting consumer markets, single variable segmentation.
- 3. Designers- International and Domestic: Role of fashion designer in fashion industry.

#### UNIT-V

- 1. Sketching of fashion block figure- (front, back, and side view) with fleshing
- 2. Garments and Garments Details:
  - a. Necklines and collars
  - b. Frills, fringes and gathers, cowls &
  - c. Sleeves details
  - d. Cascades.
  - e. Skirts and pants
  - Hemlines and in sections.
  - g. Blouses, coats and jackets
  - h. Lacing, macramé, patch work
  - i. Drawstring and fastenings
  - j. Tassels and tucks

### Course Outcomes

Students will be able to-

CO1: Apply knowledge of design elements and principles.

CO2: Understand the application of fashion components in the field of fashion.

CO3: Understand the fashion forecasting process for become a fashion designer.

CO4: Sketch fashion figure and applying various components of garment details for the purpose of making fashionable or designer garments.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjçe

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

### REFERENCES

- 1. Sharon Lee Tate, Inside Fashion Design Harper and Row, Publishers NY.
- 2. Kathryn Samual, Life Styles, Fashion Styles, Orbis London.
- 3. Milbank, C.R.(1985):COUTURE, The Great Fashion Designers, Thames and Hudson Publication.
- 4. Cater E.(1977): The Changing World of Fashion, G.P. Putnam's Sons, NY.
- 5. Rubin L.G.(1976):The World of Fashion, Canfield Press, San fransisco.
- 6. Walz, B. and Morris, B. (1978): The Fashion Makers, Random House.
- Carr, H. and Pomery, J. (1992): Fashion Design and Product Development, Blackwell Scientific Publications, London, Edinburgh, Boston.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

PRACTICAL:

HISTORIC TEXTILES, FASHION DESIGN & FASHION ILLUSTRATION

Max. Marks: 50

### **Historic Textiles**

### PROJECT (20 Marks)

- Preparation of portfolio of designs of different textiles.
- Prepare and present term paper on any one or two areas.
- 3. Preparation of samples for Indian traditional embroidery & 10 decorative stitches.

### Fashion Design& Fashion Illustration (30 marks)

### 1. SKETCHING

- Sketching of different action croquie (front ,back and side view) (computer application)
- · Garment and garment details.
- · Neckline and collars, Skirts and pants
- · Blouses ,Coats and jackets , Drawstring and fastenings, tassels and tucks frills, fringes and gathers, cowls, sleeve details-Hemlines and insertions ,lacing , macramé and patch work, shirring ,smoking and zips , yokes and underskirts, cascades,
- Sketching of Accessories. Hats and head gears, footwear, bags and purses, jewellery, any other accessories.

### 2. Developing a line of garments on a theme (any one of the following)

- Casual wear
- Sports wear
- Cocktail wear
- Executive wear.

- · Ramp wear
- Evening wear
- Traditional Indian costume

#### 3. SKETCHING

Dr. Bhavana Sharma

Dr. Ratna Sharma

Sichybu Mr. Sandeep Dubey

Mireda Dr. Abha Tiwari

leen Dr. Reena Bhairam

Dr. Shipra Banerjee

RAGRANNE Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

- Basic rendering techniques. Color matching using different mediums, stripes checks, gingham & plaids, patterns & textures ,reducing a print, shading
- · Developing a line of garments based on a theme.
- 4. Understanding and sketching theme based on fashion forecast.
- Board and its types-Theme board, Mood Board, colour Board, Client Board, Silhouette Board, Sketch Board, Story Board
- Sourcing of raw materials. Developing line, based on fabric and theme selected. Spec sheet study. Sampling. Garment analysis
- Costing- construction of garments. Line presentation. Use of sale promotion material

Designing of 5 garments for selected theme drafting and making patterns for the same construction of any 1/2 garment.

#### Outcomes

Students will be able to-

CO1: Understand the traditional textile designs through process of designing on sheet.

CO2: Students will be able to illustrate garment details and developing a line of garment on theme.

CO3: Students will be able to develop a library of fashion croquis/templates.

#### References:

- 1. Abling Bina, Fashion Sketch, book, Fairchild Publishers, New York.
- Mckelvey Kathryn, Illustrating Fashion Blackwell Science Munslow Janine.
- 3. Seaman Julian, Professional Fashion Illustration, B.T. Batsford Ltd. London.
- 4. Ireland, Patrick John, Fashion Illustration
- 5. Allen Anne Seaman Julian Fashion Drawing The Basic Principles, B.T. Batsford Ltd. London.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

### SEMESTER-II

### PAPER-IV STATISTICS & COMPUTER APPLICATIONS

Max. Marks: 50

Theory :35

CCE : 15

### Objectives:

- To understand the role of Statistics & computer applications in research.
- To apply Statistical techniques to research data for analyzing and interpreting data.
- To understand the significance of statistics and research methodology in Home Science research.
- To understand the types tool, methods of research and develop the ability to construct data gathering instruments appropriate to the research design.
- To understand and apply the appropriate statistical technique for measurement and testing.

Note - special instructions should be sent to paper setter to set one theoretical question and its option should numerical question.

### UNIT-I

- Normal distribution Meaning Definition, Characteristics, and uses deviation from normality.
- Measures of variability Range Quartile deviation, Mean Deviation, Standard Deviation or SD, Merit and limitation.

### UNIT-II

### Quantitative Research Method

- Definition theory, characteristics, design (steps involved in the process), types, merits and limitations, reliability & validity of:-
  - 1. Socio metric scale
  - 2. Questionnaire
  - 3. Schedule
- · Correlation- meaning, types.
- · Coefficient of correlation by Scatter diagram, rank correlation, product

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjeg

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

movement method.

### UNIT-III

### Qualitative Research Method

- Definition theory, characteristics, design (steps involved in the process), types, merits and limitations, reliability & validity of:-
  - 1. Case study
  - 2. Interview
  - 3. Observation
- Application of student't' test for small samples. Difference in proportion for means and difference in means- Critical ratio,

### UNIT-IV

### RESEARCH DESIGN

- Meaning, features concept & purpose of research design.
- Latin square design. Main characteristics, merits of the Latin square design.
- Factorial Design. Definition, merits, demerits of factorial design with two independents variable 2x2x; 2x3.
- Writing a research report-purpose, content of a report, characteristics of a good report.

### UNIT-V

- · Variables: meaning, nature, types & selection of variables.
- Experimental Designs Nature, types-single group, two group. Control & experimental group.
- Randomized block design.
- Analysis of variance nature, use & basic concept. One and two ways (F-Ratio).

### Note:

- With the view to benefit of the students of MSc semester I paper IV Research methods and statistics MSc semester paper IV statistics and computer applications.
- The inter change of the statistical and theoretical part of the paper has been intermingle to stabilize the difficulty level of the paper

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

### Department of Clothing & Textile

M. Sc. Syllabus 2023-24

without deleting any part/portion of the already exiting syllabus accept repetitions

#### Practical: -

M.M.-25

- 1. Tabulation, Classification.
- 2. Graphic presentation, frequency curve, histogram, frequency polygons, ogive. Pictograms.
- 3. Calculation of Mean, Median, Mode.
- 4. Calculation of standard Deviation.
- 5. Correlation.

Note: Students should be given hands-on experience to use appropriate software packages for selected statistical analyses.

#### Course Outcomes

Students will be able to

CO1: Summarize data visually and numerically.

CO2: Understand the statistical techniques and application of computer in the field of subjective research.

CO3: Students will execute statistical analyses with professional software.

#### References:

- Garrett, Henery E.(1971) Statistics in Psychology and education, David Heley and Co.
- Bandarkar, P.I. and Wilkinson T.S. (2000); Methodology and Techniques of social Research, Himalaya Publishing House, Mumbai.
- Bhatnagar, G.I. (1990): research methods and measurements in Behavioral and social Sciences, Agri. Cole publishing Academy, New Delhi.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti Jain

(3)

# GOVT. M. H. COLLEGE OF HOME SCIENCE & SCIENCE FOR WOMEN, (AUTONOMOUS) JABALPUR (M. P.)

NAAC Re-accredited 2019: B + Grade CGPA 2.64



# Department of Clothing & Textile SYLLABUS

M.Sc. (CLOTHING & TEXTILE)-III SEM. SESSION- 2023-2024

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti Jain

# Scheme of Marks M.Sc.(C & T)- III Semester

Paper	Title	Max. Marks		m-4-1
		Theory	CCE	Total
Theory-I	Knitting Technology	35	15	50
Theory-II	Historic Costume	35	15	50
Theory-III	Social and Psychological aspects of Clothing	35	15	50
Theory-IV	Fashion Communication	35	15	50
Practical-I	Draping	50		50
Practical-II	Textile Design (Structure)	50		50
Project / Survey		50		50
Total		290	60	350

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manur Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# SEMESTER-III PAPER-I

#### KNITTING TECHNOLOGY

Max. Marks: 50 Theory : 35

CCE: 15

#### Objectives:

- · To gain experience in hand knitting and machine knitting.
- To know about Indian knitting Industry.
- To develop an understanding of the various knitting structure.
- · To understand stitching of knitted garments.

#### UNIT-I

- 1. Introduction to knitting- definition of knitting, basic structural terms (Plain, Rib, Interlock, Puri ). Difference between knits and woven.
- 2. Indian knitting Industry- past, presented, future.

#### UNIT-II

- Weft knitting and warp knitting- terms and definition used related and warp Knitting.
- 2) Comparison Of weft and warp knitting.
- 3) Classification of weft knitting machines.
  - i) Flat knitting machine.
  - ii) Cotton's Patent Straight Bar Frame machine
  - iii) Circular knitting machine.
- 4) Classification of warp knitting machines.
  - (i) Tricot knitting

(ii) Raschel knitting

#### UNIT-III

- 1. Weft knitting- Basic structure, stitches, designing of weft- knit structure, needle and yarn selection for weft knitting.
- 2. Warp knitting- development of warp knitting machines, basic warp knit structures, yarns for warp knits

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachha Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyou Jain

#### UNIT-IV

- 1. The structure and operation of various Knitting Machine.
- a) Flat Knitting Machine
- b) Circular Knitting Machine
- b) Tricot Knitting Machine d) Rachel Knitting Machine

#### UNIT-V

- 1. Types of Knitted garments
  - ii) Fully Cut
  - iii) Fully Fashioned
  - iv) Stitched Shaped
  - v) Integral
- 2. Quality Control of knitted garments
  - i. Machine Pre-requisites
- iv. Inspection of fabric faults

ii. Yarn Pre-requisites

- v. Testing of fabric quality
- iii. Quality of thread or yarn quality
- Vi Precaution during

garment

#### Course outcomes-

Students will be able to:

CO1: Demonstrate basic skills in knitting techniques and knitting theory,

CO2: Describe types, characteristics and structure of knitted products,

CO3: Understand the Principle of knitting by different types of knitting machines

CO4: Demonstrate basic skills in knitting techniques by knitting on a hand knitting machine and a circular knitting machine.

#### REFERENCES:-

1. David J. Spencer- Knitting technology, Pergeman Press, U. K.

2. Prof. D.B. Ajgaonkar- Knitting Technology, University Publishing Cooperation, Bombay.

3. Dr. Samual Raz- Flat knitting Technology. Germany.

4. Terry Brackenbury - Knitted clothing Technology- Blackwell Science.

Dr. Bhavana

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Mr. Sandeep Dubcy

Dr. Shipra Banerjee RAGRANDE

Dr. Ranjana Trivedi

A.was Dr. Abha Tiwari Dr. Rachna Agrawal

Dr. Neelam grawal

Dr. Smita Pathak

# SEMESTER-III PAPER-II HISTORIC COSTUME

Max. Marks: 50

Theory: 35

CCE : 15

### Objectives:

- To acquaint students the privileging designs of costumes worms by people of different countries different periods.
- To develop sensitivity and understanding towards historic silhouettes and designs.
- To enable students to discuss about major Political, Economic and Social happenings in post and present.

#### UNIT-I

- 1. Origin and functions of clothing.
- i). Clothing as a means of communication.
- ii). Clothing as an art form: painting, cutting & other methods
- iii). Limitations to the design of garments.
- 2. Costume in ancient civilization Mesopotamia, Egypt, Greek, Roman.

#### UNIT-II

#### Medieval costume

- Costume for Men & Women in 10th 11th century.
- Costume for Men & Women in 12th & 13th century
- 3. 1. Costume for Men & Women in 14th& 15th century.

#### UNIT-III

- 1. Costume for Men & Women in 16th & 17th century.
- Costumes of 18th century (1800-1900) England, The American Colonies.
- 3. Costume of  $19^{th}$  century France, England, Italy and Austria, The United States.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelom Arrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyon Jain

#### UNIT-IV

- 1. History of Indian State costume for Male and Female.
- Kashmir i)
- iv) Rajasthan
- vii) Assam

- ii) Maharashtra
- V) West Bengal
- iii) Gujarat
- Tamil Nadu vi)

#### UNIT-V

- 1. Study of Indian Saree: Classification, Draping Style and Features of following states:
- Bengal i)
- ii) Assam
- iii) Uttar Pradesh
- iv) Guirat
- v) Maharashtra
- vi) Karnataka
- Jwellery of India 2.

#### Course Outcomes:

#### Students will be able to-

CO1: Identify costumes and style features of selected historical periods of the Western world from the time of the Egyptians to the 1990s.

CO2: Understand costume as an expression of the cultures of various historical periods. • Relate historical costume design to contemporary dress.

CO3: Describe, define, and/or identify clothing forms associated with various ancient civilizations and time periods of selected Western civilizations.

CO4: Recognize similarities and differences in clothing forms used by selected civilizations and the effect of technological and natural resources on the development of clothing patterns and jewellery.

CO5: Address historical periods and clothing as they are utilized in creating costume design, and understand the social and artistic movements which shaped the era.

CO6: Compile research in costume history, placing it in an historical, social and geographical context.

CO7: analyze and identify fabric structure, material content, and method of

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Shipra Banerjee RAGRAWE

Dr. Ranjana Trivedi

Milar Dr. Abha Tiwari

Dr. Rachna Agrawal

Dr. Neelam Arawal

Dr. Smita Pathak

Dr. Jvoti Jain Academic Council

Approved

#### Department of Clothing & Textile

M. Sc. Syllabus 2023-24

manufacture of historic costume and textiles for purposes of either conservation work or for descriptive analytical reports;

CO8: employ practiced methodologies for the protection and longevity of historic costume and textiles in collections; and

CO9: interpret the historic context of costume and textiles to a specific intended audience through published papers, exhibitions, and public presentations.

#### REFERENCES:-

- "Survey of Historic Costume" Second Edition Phyllis c. Totora, Keith Eubank.
- 2. "Costume of Indian & Pakistan" S. N. Dar.

Dr. Bhavana Sharma 23

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neclam Agrawal

Dr. Jyou Jain

# SEMESTER-III PAPER-III

# Social and Psychological aspects of Clothing

Max. Marks: 50

Theory : 35

CCE : 15

### Objective:

 The aim of this course is to study the psychological effects of clothing on the individual in social situations.

#### UNIT-I

- 1. Origin of Clothing
- 2. Why costumes differ all over the world, material aspects and climate.
- 3. Religious influence
- 4. Events of the world

#### UNIT-II

- Socialization and development of the self
- Social norms, class distinction & socio-economic status, family & social influencing
- 3. Sociological aspects of clothing: Changes in society & culture
- 4. Individuality and conformity

#### UNIT-III

- 1. Personality and personality defined.
- 2. The study of dress and adornment
- Personality Theory-Sigmund Freud Theory defense mechanisms

Dr. Bhavana Sharma

Dr. Reena Bhairam

leen

Ms Maniu Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agnawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyon Jain

#### UNIT-IV

- 1. Personality and Types of personality
- 2. Determinants of Personality
- 3. The analysis of clothing behavior.

#### UNIT-V

- 1. Psychological aspects of clothing for adolescent, adult & old age: self respect, human dignity, emotional response, sex desirability, self expression, individuality.
- 2. Psychological aspects of color in clothing:
  - Sex differences in use of colours
  - Colours for different occasions & ceremonies ii)

#### Course Outcomes-

#### Students will be able to-

CO1: understand the development of clothing from original stage to present

CO2: know different personality theories

CO3: understand the psychological aspects of clothing with reference to different criteria.

#### REFERENCES:-

- 1.Avis, M. Dry(1961): The Psychology of Jung, Methuen & Co., London.
- 2. Horn, Marilyn J. (1968): The second skin, Houghton Miffin Co., USA.
- 3. Flugel, J.C. (1950): The Psycho- analytical study of the family, The Hograth Press & Institute of Psycho Analysis, London.
- 4. Richard Wollheim (1985): Frend, Fontona Press, London.
- 5. Vincent Brome (1978): Jung, Granada Publishing, London, Toronto Sydney, New York.

Dr. Reena Bhairam

Rees

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

RAGRAWA Dr. Rachna Agrawal Dr. Neelam Agrawal

Louis Dr. Abha Tiwari

Dr. Smita Pathak

# SEMESTER-III PAPER-IV FASHION COMMUNICATION

Max. Marks: 50 Theory : 35

CCE : 15

### Objectives:

 To enable the students to critically appreciate and understand the intricacies of the fashion industry and to impart skills of communication comprising of visualization and illustration.

#### UNIT-I

# Fashion and the communication process

- 1. What is Fashion?
- 2. The theories of fashion adoption.
- 3. Communication through different media.

#### UNIT-II

### Written Communication

Fashion writing, Creative writing, reporting features, editing and printing techniques, image management and advertising, public relations.

#### UNIT-III

#### Visual Communication

Visual merchandising and display, fashion photographs, fashion shows and multimedia.

#### UNIT-IV

#### Communication in Practice

Scripting shows, conducting interviews, reporting events, fashion critics, formulating case studies, designing catalogues and brochures

Dr. Bhayana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubcy

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### UNIT-V

#### Communication in Practice

Layouts for stands in Exhibition. Visualization of decor and ambience, preparing short films and audio visuals, choreography of fashion event.

#### Course Outcomes-

Students will be able to-

CO1: Understand the communication processes

CO2:give examples of various types of fashion shows and outline the fashion show plan.

CO3: construct a visual merchandising display with specified criteria.

CO4: write and present a report about the various types of retail organizations.

CO5: knowledge of opportunities and problems as regards the communication of clothing and fashion.

CO6: critically evaluate the fashion design work of others and provide constructive criticism for ongoing work.

CO7: deconstruct and reconstruct alternative collection developments from existing work.

#### REFERENCES:-

- 1) Farbey, A.D. How to Produce Successful Advertising. Kogan Page India Pvt. Ltd.
- 2) Jethwaney, J.N. (1999) Advertising, Phoenix Publishing House Pvt. Ltd.
- Roundy, N. And mair, D. (1985): Strategies for Technical Communication. Little Brown and Company, Boston, Toranto.

Dr. Bhavana Sharm

Dr. Ratna Sharma

Mr. Sandeep Dubey

Statist Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

RAgaque Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

# SEMESTER- III PRACTICAL- I: DRAPING

Max.Marks: 50

#### Objectives

- To enable the student to make pattern from sketch/photograph.
- 2. To enable the student to obtain perfect fit and harmony between the fabric and design of the garment.

#### Contents

- · Introduction to draping and silhouette of the individual- Dress form, Elements of fabric woven, knitted.
- · Development of the ladies block crotch line garments by drafting and draping (shorts, Bermudas, trouser etc.)
- Draping of bodice block and skirt block and their variation.
- Draping of asymmetrical designs and preparing patterns.

#### Course Outcomes-

Students will be able to -

CO1: Drape new apparel designs on the dress form within a given time frame.

CO2: construct tailored garments, in correct sequence of operations.

#### References:

- 1. Crawfosrn C. A., The art of Fashion draping, Fair child Publications, NY.
- 2. Pamela C. Stinger, Pattern drafting for dressmaking.
- 3. Hillhouse, M.S. and Mansfield, E.A.: Dress Design- Draping and Flat Pattern, London.
- 4. Sheldon Maratha Gene- Design through draping, USA Burgers Publishing Company.
- 5. Brackman, Helen, L.-Theory of Fashion Design, New York, John Wiley and Sons.
- 6. Srtickland, Genuole- A Tailoring Manual- New York, Macmillon Company.
- 7. Pepin Herriet- Modern Pattern Design, New York.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Ritarawa Dr. Rachna Agrawal

Dr. Neelam Agrawal

Airea Dr. Abha Tiwari

Dr. Smita Pathak

### SEMESTER- III

## PRACTICAL- II: TEXTILE DESIGN (STRUCTURE)

Max. Marks: 50

#### Objectives:

- To develop awareness and appreciation of art & aesthetics in textiles.
- To impart creative and technical skills for designing textiles with Special emphasis on structural design.

#### Contents

- 1. Design analysis according to fabric.
- 2. Sources of inspiration for basic sketching and painting: nature, religion and mythology, arts and crafts architecture.
- Process of designing-
  - Motif development geometrical, simplified, naturalized, stylized. abstract, figure/nursery, and ornamental.
  - Big and small motifs- enlargement and reduction, growth of a motif
- Creation of patterns and designs with Combining motifs –
- a) big and small and b) Different sources Placement and repeats for all over patterns
- 6. Introduction to related computer software-
  - · Designing of bed sheet using Ms Paint tools
  - · Designing of sari and other dress material using CorelDraw 11 tools.
  - · Portfolio development-Portfolio to range assigned
  - Development of design & design specification

#### Course Outcomes-

Students will be able to:

CO1: Apply comprehensive textile design skills to design textiles through painting, weaving, screen printing, and demonstrate basic skills in drawing, repeat creation, and color application;

CO2: Learn about various techniques and process of designing textiles

Dr. Bhayana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Mr. Sandeep Dubey

RAGOGIN Dr. Rachna Agrawal

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Alwas Dr. Abha Tiwari

Dr. Neelam Agrawal

Dr. Smita Pathak

CO3: Identify various creative textile techniques.

CO4: Apply fundamental computer skills to complement traditional design skills and develop original designs using CAD as a tool including basic technical preparation of designs for production;

#### References

- Leonard G. Rubin (1976): The world of fashion, Publication canfield press, sanfransisco.
- Thames and Hudson (1994): Fashion Illustration today, Thames and Hudson Ltd., London.
- Patrick John Ireland: Fashion Design Illastration , B.T. Batsford Ltd., London.
- KathryynMckelvey and Janine Munslow (1997): Illastration Fashion, Blackwell Science Ltd.
- 5. Max Tilke (1990): Costume Patterns & Designs, Rizzoli, New York.
- Anne Morrell (1995): the techniques of Indian Embroidery, B.T. Batsford Ltd., London.
- Prakash, K. (1996): Heritage- Traditional Border Collection, the Design Point Publication.
- Prakash, K. (1992): Expressions Ethnic Indian Textille Designs, Deluxe Packaging.

9. Prakash, K. (1989): Impressions, Deluxe Packaging.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyou Jain

# GOVT. M. H. COLLEGE OF HOME SCIENCE & SCIENCE FOR WOMEN, (AUTONOMOUS) JABALPUR (M. P.)

NAAC Re-accredited 2019: B + Grade CGPA 2.64



# Department of Clothing & Textile

# SYLLABUS M.SC. (CLOTHING & TEXTILE)-IV SEM, SESSION- 2023-2024

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

## Scheme of Marks

# M.Sc.(C & T)- IV Semester

Paper	Title	Max. Marks		Total
		Theory	CCE	Total
Theory-I	Dyeing & Printing	35	15	50
Theory-II	Garment Production Technology	35	15	50
Theory-III	Fashion Retailing and Merchandising	35	15	50
Theory-IV	Fourth- (Any one) Optional (A)-Textile Industry in India Optional (B) -Mass Communication Optional (C) - Dissertation	35	15	50
Practical-I	Dycing & Printing	50		50
Practical-II	Pattern Making and grading	50		50
Internship	Subject related	100	-	100
Total		340	60	400

Dr. Bhavana Sharma

Leen Dr. Recna Bhairam Ms Manju Barkhane

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Ajway

RAgrand Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# SEMESTER-IV PAPER-I DYEING AND PRINTING

Max. Marks: 50

Theory :35

CCE : 15

## Objectives:

- To impart the knowledge about preparation of fabric for dyeing & Printing.
- To understand the theory of dyeing in relation to various classes of Dyes.
- To introduce the concept, application of various dyes & properties related to it of dyeing at commercial level.
- To inculcate awareness of the different methods of printing and appreciate the technical advantage of each.
- To develop technical competency in printing with different dyes on different fabrics.

#### UNIT-I

- 1. Preparation of fabric for dyeing & printing- Scouring, bleaching, desizing
- 2. Equipments used at cottage & industrial level for fiber yarn and fabric.

#### UNIT-II

#### Dve:-

- 1. Classification, definition.
- 2. Dyeing with natural dyes
- 3. Dyeing with chemical dyes.
  - a) Direct, reactive, vat, sulphur, azo (for cellulose)
  - b) Acid, metal complex, chrome mordent (for protein)
  - c) Basic, disperse (for manmade)
- 4. Use of pigments

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerige

Dr. Raclina Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyoti Jain

. .

53

#### UNIT-III

- 1. Dyeing machine for fibers, yarns & fabrics
- 2. Dyeing auxiliaries & their uses
- 3. Dyeing of blends
- 4. Textile design through dyeing-a) Tie & dye b) Batik c) Union and cross dyeing

#### UNIT-IV

- 1. Introduction to printing.
- 2. Methods and Development of printing-block, stencil, roller and rotary screens.
- Printing paste Thickening agents & auxiliaries for printing and their suitability to various classes of dyes and fibers.
- 4, Preparation of printing paste.

#### UNIT-V

- Style of printing Direct style, dyed, resist or reserve style and raised style. Styles and methods of printing traditionally used in India.
- 2. Printing procedures-transfer printing and flock Printing
- 3. Finishing and after treatment of printed goods.

#### Course Outcomes:

Students should be able to:

CO1: Explain the effect of dyes and chemicals on the properties of textile materials, in both aesthetic and functional terms.

CO2: Independently carry out different types of dyeing, printing and processing of textile materials.

CO3: Describe the methods and styles of printing.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Many Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### REFERENCES:-

- V. A. Shenai(1987), Chemistry of Dyes and Principles of Dyeing; Sevak Prakashan, Mumbai.
- 2. H. A. Lubs, Robert E. The Chemistry of Synthetic Dyes and Pigments, Krieger Publishing Company, New York.
- V. A. Shenai(1999), Azo Dyes- Facts & Figures- Sevak Prakashan, Mumbai.
- 4. R. S. Prayag, Technology Textile Printing- Noyes Data Corporation.
- V. A. Shenai, (1977): Technology of Printing- Technology of Textile Processing, Vol.IV, Sevak Publication.
- M. L. Gulrajani and Deepti Gupta (1990), Natural Dyes and their Application to Textiles, ed. I.I.T. Delhi Publication.
- 7. John and Margarot Cannon (1994); Dye Plants and dyeing, TheHerbert Press (UK). ASTM and ISI standards.K. Venkatrama (1970): Chemistry of synthetic Dyes, Part I&II.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Leem

Ms Manta Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### SEMESTER-IV

#### PAPER-II

# GARMENT PRODUCTION TECHNOLOGY

Max. Marks: 50 Theory : 35 CCE : 15

## Objectives:

 To enable the students to get acquainted with the latest garment/clothing manufacturing technology related to the current practice in the clothing industry.

. To make the students aware of the influence of garment retailing on

the clothing production process.

 To impart knowledge about the latest electronic equipments and machines used in the garment industry.

 To make students aware of the importance of maintaining quality standards during production.

#### UNIT-I

- 1. Introduction to the background and structure of the garment/clothing industry.
- 2. The organization of a garment factory
  - Various Departments like:
- a. Design Departments. b. Marketing Departments c. Production Departments.

#### UNIT-II

Manufacturing Technology of- Cutting & Cutting Room

- a. Marker Planning.
- b. Methods of spreading of fabric
- c. Cutting the fabric objectives, methods of cutting fabric and cutting systems.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Mariju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubcy

Dr. Racima Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### UNIT-III

#### Sewing Technology

- a. Sewing properties, types.
- b. Stitch Types.
- c. Sewing Machines
- d. Sewing threads type of fiber, thread size, thread package, thread costs, thread properties.

Sewing problems - stitch formations, damage along with seam line, puckering.

#### UNIT-IV

- 1. Alternative methods of joining materials:
  - a. Fusing.
  - b. Welding and adhesive.
  - c. Moulding.

#### UNIT-V

- 1. Engineering & Quality Control
- 2. Pressing Technology.
- 3. Warehousing.

#### Course Outcomes:

Students will be able to-

CO1: Knowledge of garment industry, structure and functioning.

CO2: Knowledge related to processes before, during and after production.

CO3: Familiarity with various machines, tools and equipment used in garment industry.

CO4: Understand various materials and components of garment production.

Dr. Bhavana Sharma 723

Dr. Reena Bhairam

Ms Manjur Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubcy

M. War

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# REFERENCES:

- 1. Gerry Cooklin Introduction to Clothing Manufacture, black Well
- 2. Harold Carr& Barbara Latham The Technology of Clothing
- 3. A.J. Chuter Introduction to Clothing Production Management -
- 4. D.J. Tyles Materials Management in Clothing Production Blackwell Science.
- 5. Harold Carr& Barbara Latham (1992). Fashion Design and Product Development Blackwell Science.
- 6. Mike Easey Fashion Marketing. Blackwell Science.
- 7. Stylios, G. (1991): Textiles objective Measurement and Automation in Manufacture, Ellis Harword Lid., New York, London, Singapore.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachha Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

# SEMESTER-IV PAPER-III

# Fashion Retailing and Merchandising

Max. Marks: 50

Theory : 35

CCE : 15

## Objectives:

 To impart knowledge regarding the marketing environment and the prevalent merchandising practices.

 To guide the process of product development toward the market needs.

#### UNIT-I

- 1. Consumer Behavior
- 2. Economic Factors
- 3. Sociological factors
- 4. Theories of Models of buying behaviors like
  - a. Inherent & learned buying theory
  - b. Emotional & Rational buying motives
  - c. Psychological & Social buying motive
  - d. Self image as consumer determinant behavior
  - e. Consumer Patronage motive.

The Dynamics of Fashion: Fashion Terminology, Fashion Cycle and Factors affecting fashion.

#### UNIT-II

 Marketing Concept: Meaning & definition of the word, Historical development of marketing, nature & scope of marketing, differences between marketing & selling, Importance of marketing to the consumer.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Maryu Barkhane

Dr. Ratna Sharma

Di

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Liva/

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

- Marketing Function: Pyle's classification, clark&clark's classification, risks of marketing function, standardization, grading & branding, marketing mix.
- Marketing promotion: Meaning, Sales promotion techniques, Advantages, kinds, limitations, elements of promotion
- The Concept of Retailing: Definition, Role of retailing in merchandising, retail environment, types of retail stores.

#### UNIT-III

1. Interpretation for designing a retail store- Store layout & Design

2. Elements of the store environment-Allocating space, Circulation Store front design, interior Design, and lighting design

#### UNIT-IV

Visual Merchandising

Types of Displays - Window displays, interior displays

 Elements of Display - The merchandise, the backdrop walls and shelves mannequins and forms, signage lightings - luminance levels,

#### UNIT-V

Planning and Budgeting for a Retail Store.

Recruitment and Management of Sales Force, Types of compensation packages for sales force, Personal Selling as a means of Promotion.

#### Course Outcomes:

Students will be able to-

CO1: Knowledge of merchandising activities in a retail setup

CO2: Manage stakeholders involved in retailing

CO3: Understanding the use and characteristics of various tools of promotion

CO4: Understanding the concept of store design, store layout and visual merchandising

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandcep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### References

- Dhake, Socons (1992) Greenworld Retail Fashion Promotion and Advertising Mac Millan Publication.
- Jarmow. J.A. Judelie, B. and Guerreiro. M. (1981): Inside the Fashion Business, John Wiley & Sons, NY, Toranto Brisbane.
- 3. Frings G.S. (1992) Fashion Marketing, Blackwell Science Ltd.
- 4. Easey, M. (1995): The Essence of Marketing, Prentice Hall of India, New Delhi.
- Chuter, A. J. (1995): Introduction to Clothing Production Management, Backwell Science Ltd.
- Stone. E and Samples, J.A. (1995): Fashion Merchandising An Introduction, McGraw Hill Book Company.
- 7. Marketing Management, Reeta Mathur.
- 8. Philip Kotler, Marketing Management
- Mamoria CB & Joshi RL, "Principles & Practice of marketing in India
- 10. Sandage CH & Vernon Fryburger, Advertising Theory & Practice
- 110 विपणनप्रबंध, डॉ. वी. एम. भदादा एवं वी.एल.पोरवाल
- 120 विपणन, विकय कला एवं विज्ञापन, एस.सी. जैन
- 13 विपणनप्रबंध, डॉ. एस.सी. जैन

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandcep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Manju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyoti Jain

# SEMESTER-IV PAPER-IV Textile Industry In India

Max. Marks: 50

Theory : 35

CCE : 15

## **Objectives**

- The aim of this paper is to acquaint the student with the multifaceted
- Profile of the textile industry of India, the economic regime and policy regulations within which the industry is operating.

#### UNIT-I

- 1. Business environment of India
  - a. Concept & scope of textile industry in business environment of India.
  - b. Merit & demerit of textile industry in India.
  - c. Textile industry: Concept, History, Manufacturing unit & importance of following industry- Knitting, garment & testing industry.

#### UNIT-II

Importance of textile and clothing Industry in the Indian economy in terms of domestic consumption, employment and per capita income, gross national product & international trade

#### UNIT-III

National Textile Policy1986, 2001- change in focus over the year in terms of objectives, function ability, regulatory mechanisms and futuristic trends.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachita Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

#### UNIT-IV

Foreign Trade Policy- the mechanism of MFA- history and current status, WTO, implications of a free trade regime vs. protectionist regime.

#### UNIT-V

The textile and clothing industry- in relation to production & consumption pattern, locate, employment potential, R&D, problems and prospects: cotton, wool, silk, rayon & synthetic industry, handloom industry, readymade garment industry and technical textiles.

#### Course outcomes-

Students will be able to-

CO1: An understanding of the textile supply chain, associated sustainability issues and the effect of industrial revolution on current fashion scenario

CO2: Understand the National textile policy and foreign trade policy.

CO3: Understand the textile and clothing industry in relation to various aspects.

#### References:

- 1. Mishra and Puri, Indian Economy, Himalay Publishing House.
- 2. National Textile Policy 1986, 2000.
- 3. Journals- Economic Times, Financial Express & Apparel on line.
- 4. Industry Published Journals/ newsletters e.g. From SASMIRA, WWEPC, HHEC. Etc.
- 5. Economic Surveys, Govt. Of India.

Dr. Bhavana Sharma 1723

Dr. Reena Bhairam

Ms Marin Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandcep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# Semester - IV **Optional IV Paper** Mass Communication

Max. Marks: 50

Theory: 35

CCE : 15

# Objectives

- To understand the importance of communication.
- To develop skill for communication ability.
- Importance of audio visual aids in communication.

#### UNIT -I

- 1. Concept of communication
- 2. Elements and process of communication.
- 3. Functions of communication.
- 4. Non verbal communication-Sign, Gestures, body movement.
- 5. Verbal communication-Language and written communication.

#### UNIT-II

- 1. Types of communication Intra personal, Inter personal, Group communication and Mass communication.
- 2. Feed back in communication.
- 3. Characteristics and method of feedback.
- 4. Elements of effective communication.
- 5. Barriers to communication.

#### UNIT-III

- 1. Print Media-Origin, development characteristics of News paper.
- 2. News agencies-United news of India (UNI). Press Trust of India (PTI) Reuter, tass and etc.
- 3. Magazine -Format. Type and organization.
- 4. Concept of News, values, sources of News. Structure of News Report.
- 5. Features article, Editorial.

Dr. Reena Bhairam

Ms Manu Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

RAGRAND Dr. Rachna Agrawal

Dr. Neelam Ag

A Wall

Dr. Smita Pathak

Dr. Jyoti Jain

Dr. Abha Tiwari

#### UNIT-IV

- Radio-Origin, development and characteristics of Radio.
- 2. Radio as a mass medium.
- 3. Radio news, radio features.
- 4. Various types of Interview.
- 5. Folk Media.

#### UNIT - V

- 1. Television-origin, developer and characteristics of television.
- 2. T.V. News.
- 3. Contribution of T.V. in Social development.
- 4. Film-Origin, Development of India film.
- 5. Socio cultural effects of film as mass medium. Censorship, using film for extension.

#### Course Outcomes:

Students will be able to-

CO1: Evaluate mass communication theories and assess their use.

CO2: Introduce different types of media their characteristics, merits and demerits

CO3: Understand news values and qualities of reporters.

CO4: Introduce students to basics of advertising and its role in society.

CO5: Understand the scope, functioning of Public relations

CO6: rasp the complex relationship between communication/media theories and a diverse set of individual, social, and professional practices.

#### References -

1. Denis Macwell

- Mass communication theory & Introduction.

2. C.S. Rayudu

- Communication

3. K.M. Shrivastava

- Radio and T.V. Journalism

4.M.V. Kamath

- Professional Journalism

5. डॉ. ओमप्रकाष सिंह

-संचारमध्यमीं का प्रगाव

6º डॉ. श्रीकांत सिंह

-जनसंचार

7ण डॉ. वेदप्रतापवैदिक

-पत्रकारिता के विविध आयाम

Dr. Bhavana Sharma

ma Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee,

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

8ण डॉ. हरिमोहन

—रेडियो एवंदूरदर्षनपत्रकारिता

9ण डॉ. अर्जुनतिवारी

–आधुनिकपत्रकारिता

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manja Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# Semester - IV Optional IV Paper Dissertation

Max. Marks : 50 CCE/VIVA : 15 Valuation : 35

#### Objectives:

 To develop skills in conducting a research study/ working in a project and learn the process of writing a dissertation/ project report

#### Course Outcomes:

Student will be able to -

CO1: Know the practical aspects of, collecting data/ project work

CO2: Evaluate, select and use appropriate strategies for reduction, analysis and presentation of data collected during research process/ project work

CO3: Suitably illustrate data/ insights using various graphical and other methods.

CO4: Prepare a dissertation document/ project report based on research process/ project work done.

#### CHAPTER - I

Introduction.

#### CHAPTER - II

Review of Literature.

#### CHAPTER - III

Methodology.

#### CHAPTER - IV

Analysis and discussion.

#### CHAPTER - V

Conclusion and recommendation.

Bibliography.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Akrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti Jairy

# SEMESTER- IV PRACTICAL I: Dyeing and Printing

Max Marks: 50

## Preparation for Dyeing & Printing:

- 1. Preparation of fabric for dyeing & printing.
- 2. Preparation of fabric for printing- different fiber groups with different dyes different styles of printing.
- Preparation of screen for printing. Printing with blocks and screens on cotton, silk, wool and cotton-wool, cotton- silk and cotton- polyester blends in different style with different dye classes.
- 4. Direct style

7. Resist style

5. Mordant or dyed style,

8. Raised style

6. Discharge style

- 9. Transfer printing
- 10. Finishing the printed goods
- 11. Report of visit to processing and printing units-cottage & industrial level.

#### Course Outcomes:

Students will be able to-

CO1: Understand the different styles and methods involved in Dyeing & printing Textiles.

CO2: Identify the correct method and style for printing Textiles.
CO3: Recognize the difference between different kinds of prints.

CO4: To get an overview of printing methods.

Dr. Bhavana Sharma

Dr. Reena Bhairam

Leen

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjeg

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

# SEMESTER- IV PRACTICAL II: PATTERN MAKING & GRADING

Max.Marks :50

## Objectives:

- To develop an understanding of a sample pattern using industrial sample room procedure (emphasize in men garments).
- To develop an understanding of the use of design elements in the process of range development.

#### Practical:

- 1. Developing drafts for Men's garments:
- · Gents shirt Formal, casual
- · Gents trouser / shorts
- 2. Introduction to grading
- · Methodology track or stack method.
- · Procedure for grading blocks to various sizes.
- Children bodice block, sleeve block, skirt & short block.
- · Women bodice block, sleeve block, skirt & short block.
- 3. Preparation of Portfolio
- Grading standard size blocks to various sizes.
- Preparing 2 patterns (trouser / short and shirt) with complete sets of markings
- · Designing and preparing pattern envelope (front and back)
- Preparing markers for 3 different fabric width and designs (stripes, plaids)
- Preparing guide sheet.
- Preparing 3 accompanying pattern promotional items.
- 4. Development of pattern with variation in
  - . One piece dresses
  - . Two piece dresses

(Incorporating various, collars, sleeves, yokes, necklines, pockets and plackets etc.)

Dr. Bhavana Sharma

Dr. Reena Bhairam

Ms Manyu Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

Dr. Jyoti Jain

#### Course Outcomes:

Students will be able to-

CO1: Proficiency in pattern making for girls garments

CO2: Gain ability to use pattern making for creating new girls garments designs

CO3: Understand different types of paper pattern CO4: Competent to lay the pattern on the fabric

CO5: outline the different pattern adaptation techniques used to fit the different figure shapes and garment sizes.

#### REFERENCES:

- 1. Crawfosrn C. A., The art of Fashion draping, Fair child Publications, NY.
- Pamela C. Stinger, Pattern drafting for dressmaking.
- 3. Hillhouse, M.S. and Mansfield, E.A.: Dress Design- Draping and Flat Pattern, London.
- 4. Sheldon Maratha Gene- Design through draping, USA Burgers Publishing Company.
- 5. Brackman, Helen, L.-Theory of Fashion Design, New York, John Wiley and Sons.
- 6. Srtickland, Genuole- A Tailoring Manual- New York, Macmillon Company. Pepin Herriet- Modern Pattern Design, New York.

Ms Manju Barkhane

Dr. Ratna Sharma

Dr. Shipra Banerjee

Locus

Dr. Reena Bhairam

Dr. Ranjana Trivedi

Mr. Sandeep Dubey

Dr. Rachna Agrawal

Dr. Neelam Agrawal

May was Dr. Abha Tiwari

Dr. Smita Pathak

# **Program Specific Outcomes:**

After the completion of the post graduate degree course students will be able to-

Understand the current processes and trends, new developments PSO1: and technological changes in the field of textiles and apparel.

PSO2: Identify and appreciate the historic textiles and costumes of the world and draw inspiration for the present

PSO3: Apply creative, managerial and technical skills for careers and entrepreneurship in the field of apparel and textiles.

PSO4: Understand and apply tools and methods of research and statistics for conducting research in the subject area.

PSO5: Apply their knowledge and skills and reach out to the community for their capacity building.

PSO6: Implement the creative design process and evaluate them.

PSO7: Interpret aesthetic, historic and trend information from the variety of sources to create innovative and artistic textile and apparel products.

PSO8: Communicate creative and design work to professionals and consumers.

PSO9: Understand various accessories used in apparel.

PSO10: Understand analysis and developing of fashion resources and buying behaviors.

PSO11: Understand different aspects of fashion marketing.

PSO12: Understand the basic concept of technical textile.

PSO13: Understand the design details and able to know the various fabric structures as well as colour and weave effect.

Dr. Reena Bhairam

reem

Ms Manju Barkhane

Dr. Ratna Sharma

RAGRAWE

Dr. Shipra Banerjee

Dr. Ranjana Trivedi

Dr. Rachna Agrawal

Dr. Neclam Agrawal

Dr. Abha Tiwari

Dr. Smita Pathak

PSO14: Students will be able to make effective oral presentations on a variety of topics in public settings.

PSO15: Students will be able to make effective business and professional presentations to internal and external audiences.

PSO16: Run their own business as well as they have developed links with the fashion, garment and textile industry.

PSO17: Open their own cloth sewing centres and other sewing related work.

PSO17: Identifying employment opportunities

PSO18: Understand the textile printing processes.

PSO19: Students will comprehend the foundations, process, and practices of writing for and about the media, and demonstrate proficiency in writing in one or more professional media writing applications.

PSO20: Understand demonstration of software applications in textile as well as fashion designing

PSO21: Understand the research areas to related field.

PSO22: Apply fundamental computer skills to complement traditional design skills and develop original designs using CAD as a tool including basic technical preparation of designs for production;

PSO23: Apply historic costume knowledge to modern fashion design construction.

PSO24: Analyze and use color units effectively in their design process.

PSO25: Adapt their artistic abilities to support their future design careers.

PSO26: Demonstrate professionalism by managing time to meet deadlines with quality work and effectively collaborating in teams.

Dr. Bhavana Sharma

Dr. Ratna Sharma

Mr. Sandeep Dubey

Dr. Abha Tiwari

Dr. Reena Bhairam

Dr. Shipra Banerjee

Dr. Rachna Agrawal

Dr. Smita Pathak

Ms Mariju Barkhane

Dr. Ranjana Trivedi

Dr. Neelam Agrawal

Dr. Jyoti Jain