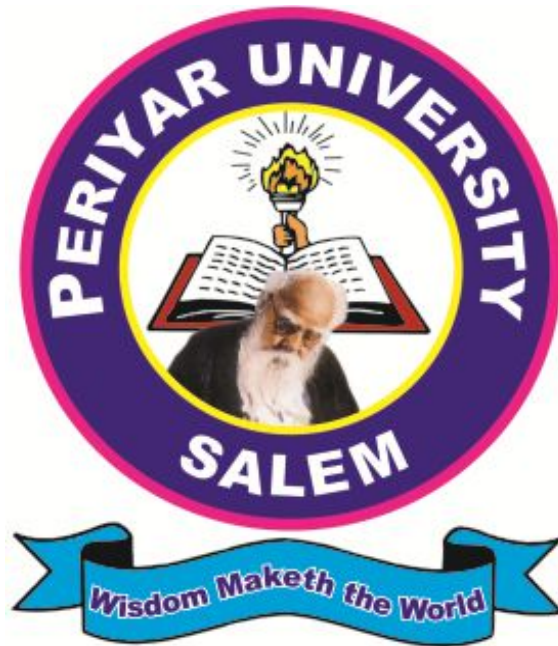


**PERIYAR UNIVERSITY**  
**PERIYAR PALKALAI NAGAR**  
**SALEM – 636 011**



**DEGREE OF BACHELOR OF SCIENCE**  
**CHOICE BASED CREDIT SYSTEM**  
**SYLLABUS FOR**  
**B.Sc. FASHION TECHNOLOGY**  
**FOR THE STUDENTS ADMITTED FROM THE**  
**ACADEMIC YEAR 2017-2018 ONWARDS**

# **RULES AND REGULATIONS FOR THE ADMISSION OF 3 YEAR PROGRAMME IN FASHION TECHNOLOGY**

## **I. CONDITION FOR ADMISSION**

Candidates seeking admission to the first year degree of Bachelor of Science in Fashion Technology shall be required to have passed in any higher secondary course examination of the state board/CBSE/ICSE.

Pass in any Fashion/ Costume/Textile/Apparel related Diploma course is eligible to admit in direct second year of this UG Course.

## **II. DURATION OF THE COURSE**

The course for the degree of Bachelor Of Fashion Technology shall extend over a period of three academic years - 6 Semesters and each semester normally consisting of 90 working days or 450 Hours.

## **III. ELIGIBILITY FOR THE DEGREE**

A candidate shall be eligible for the degree of Bachelor Of Science in Fashion Technology , if he/she has satisfactorily undergone the prescribed courses of the study for a period not less than 6 semesters in an institution approved by the university has passed the prescribed examinations in all the 6 Semesters.

## **IV. SUBJECT OF STUDY**

The subjects of the study for the B.Sc., Fashion Technology and the syllabus for the subjects are given in the annexure.

## **V. REQUIREMENT OF EXAMINATION**

The theory examinations will be conducted for 3 Hours by the university in the subjects prescribed for all the semesters in the month of November & April every year.

The practical examinations will be conducted for 3 Hours by the university in all the subjects prescribed in the month of March & April.

## **VI. SCHEME OF THE EXAMINATION**

The scheme of examinations for the course is given in Annexure. All the practical examinations/ Project work shall be conducted & evaluated internally by the institution themselves with internal and external examiners appointed by the university.

| SEM | PART | COURSE CODE | COURSE   | HRS |           | CRE DIT   | MARKS |    |       |
|-----|------|-------------|--|-----|-----------|-----------|-------|----|-------|
|     |      |             |  | L   | T/P       |           | CIA   | EA | TOTAL |
| I   | I    | 17UTA01     | Tamil- I   | 4   | 2         | 5         | 25    | 75 | 100   |
|     | II   | 17UEN01     | English – I  | 4   | 2         | 5         | 25    | 75 | 100   |
|     | III  | 17UFTP01    | Core Practical I -Pattern Making & Grading                     | -   | 5         | 3         | 40    | 60 | 100   |
|     |      | 17UFTP02    | Core Practical II -Basic Apparel Designing                     | -   | 5         | 3         | 40    | 60 | 100   |
|     |      | 17UFTA01    | Allied – I Sewing Technology                                   | 4   | 2         | 5         | 25    | 75 | 100   |
|     | IV   | 17UFTV01    | Value education- Yoga  | 2   |           | 2         | 25    | 75 | 100   |
|     |      |             |  |     | 30        | <b>23</b> |       |    |       |
| II  | I    | 17UTA02     | Tamil –II  | 4   | 2         | 5         | 25    | 75 | 100   |
|     | II   | 17UEN02     | English –II  | 4   | 2         | 5         | 25    | 75 | 100   |
|     | III  | 17UFT01     | Core I Fibre To Yarn Science                                   | 4   | 1         | 5         | 25    | 75 | 100   |
|     |      | 17UFTAP01   | Allied Practical I Basic Draping Practicals                    |     | 3         | 2         | 40    | 60 | 100   |
|     |      | 17UFTP03    | Core Practical III- Fibre to Yarn Science Practicals           |     | 3         | 2         | 40    | 60 | 100   |
|     |      | 17UFTAP02   | Allied Practical II -Basic Illustration & Sketching Practicals |     | 6         | 3         | 40    | 60 | 100   |
|     | IV   | 17UES01     | Environmental Studies  | 1   |           | 1         | 25    | 75 | 100   |
|     |      |             |  | 30  | <b>23</b> |           |       |    |       |
| III | III  | 17UFT02     | Core II Fabric Science -I                                      | 4   | 1         | 5         | 25    | 75 | 100   |
|     |      | 17UFT03     | Core III -Clothing Care  | 4   | 1         | 5         | 25    | 75 | 100   |
|     |      | 17UFTA02    | Allied II -Fashion Designing                                   | 4   | 1         | 4         | 25    | 75 | 100   |
|     |      | 17UFTP04    | Core practical IV - Fabric Science Practicals                  |     | 3         | 2         | 40    | 60 | 100   |
|     |      | 17UFTAP03   | Allied Practical III - Fashion Designing Practicals            |     | 3         | 2         | 40    | 60 | 100   |
|     |      | 17UFTP05    | Core Practical –V- Childrens Apparel Practicals                |     | 5         | 3         | 40    | 60 | 100   |
|     | IV   | 17UFTNM01   | NMEC I -Fundamentals Of Textiles                               | 3   | 1         | 3         | 25    | 75 | 100   |
|     |      |             |  | 30  | <b>24</b> |           |       |    |       |
| IV  | III  | 17UFT04     | Core IV-Non Woven & Technical Textiles                         | 3   | 1         | 4         | 25    | 75 | 100   |

|    |         |                      |   |           |           |           |    |    |     |
|----|---------|----------------------|---|-----------|-----------|-----------|----|----|-----|
|    |         | 17UFTA03             | Allied III-Fashion Clothing Psychology                                | 3         | 1         | 4         | 25 | 75 | 100 |
|    |         | 17UFT05              | Core V-Wet Processing   | 4         | 1         | 5         | 25 | 75 | 100 |
|    |         | 17UFTP06             | Core Practical VI- Womens Apparel Practicals                          |           | 6         | 3         | 40 | 60 | 100 |
|    |         | 17UFTP07             | Core Practical VII -Wet Processing Practicals                         |           | 3         | 2         | 40 | 60 | 100 |
|    | IV      | 17UFTSP01            | SBEC-I Embroidery Practicals  |           | 4         | 2         | 40 | 60 | 100 |
|    |         | 17UFTMN02            | NMEC II-Fundamentals Of designing                                     | 3         | 1         | 3         | 25 | 75 | 100 |
|    |         |                      |   |           | 30        | <b>23</b> |    |    |     |
| V  | III     | 17UFT06              | Core VI-Computers & Textile In Garment Design                         | 3         | 1         | 4         | 25 | 75 | 100 |
|    |         | 17UFT07              | Core VII-Textile Finishing  | 4         | 1         | 5         | 25 | 75 | 100 |
|    |         | 17UFT08              | Core VIII-Textile Printing  | 3         |           | 3         | 25 | 75 | 100 |
|    |         | 17UFTP08             | Core Practical VIII- Computers & Textile In Garment Design Practicals |           | 5         | 3         | 40 | 60 | 100 |
|    |         | 17UFTP09             | Core Practical IX - Textile Printing Practicals                       |           | 3         | 2         | 40 | 60 | 100 |
|    |         | 17UFTP10             | Core Practical X –Men’s Apparel Practicals                            |           | 5         | 3         | 40 | 60 | 100 |
|    | IV      | 17UFTM01             | MBEC I - Garment Quality & Cost Control                               | 4         | 1         | 4         | 25 | 75 | 100 |
|    |         |                      |   |           | 30        | <b>24</b> |    |    |     |
| VI | III     | 17UFT09              | Core IX -Fabric Science-II  | 4         | 1         | 5         | 25 | 75 | 100 |
|    |         | 17UFT10              | Core X-Organization Of Garment Unit                                   | 4         | 1         | 5         | 25 | 75 | 100 |
|    |         | 17UFTP11             | Core Practical XI- Accessories Making Practicals                      |           | 4         | 2         | 40 | 60 | 100 |
|    | IV      | 17UFTM02             | MBEC- II -Fashion & Visual Merchandising                              | 3         | 1         | 4         | 25 | 75 | 100 |
|    |         | 17UFTSP02            | SBEC II Practical- Portfolio Presentation Practicals                  |           | 3         | 2         | 40 | 60 | 100 |
|    |         | 17UFTSP03            | SBEC III-Beauty Care Practicals                                       |           | 4         | 2         | 40 | 60 | 100 |
|    | V       | 17UFTPR01            | Project Viva Voice  |           | 4         | 2         |    |    |     |
|    | 17UEX01 | Extension Activities |   | 1         | 1         |           |    |    |     |
|    |         |                      |   | <b>30</b> | <b>23</b> |           |    |    |     |

SBEC- Skill Based Elective Courses

NMEC – Non Major Elective Courses

MBEC – Major Based Elective Courses

## VII. PASSING RULES

- **Theory Subjects**

75% of the marks for external evaluation and 25% marks are allotted for internal evaluation.

Candidate is demand to have passed to a subject, if he/she get a minimum of 40% of total marks in theory subjects with internal mark of 10 marks and external marks of 30 marks.

- **Practical/Project**

60% of the marks for external evaluation and 40% marks are allotted for internal evaluation.

For practical subjects, the candidate should get minimum marks of 24 marks in external evaluation out of 60 and 16 marks in internal evaluation out of 40.

For project work and viva voce a candidate should get minimum of 40 marks out of 100.

### QUESTION PAPER PATTERN

**a. THEORY:**

Time: 3Hours

Total Marks: 75 Marks

#### QUESTION PAPER PATTERN

| Unit | Section-A | Section-B    | Section-C |
|------|-----------|--------------|-----------|
| I    | Q. 1, 2   | Q. 11a, 11b, | Q. 16     |
| II   | Q. 3, 4   | Q. 12a, 12b  | Q.17      |
| III  | Q. 5, 6   | Q.13a, 13b   | Q.18      |
| IV   | Q. 7, 8   | Q.14a, 14b   | Q.19      |
| V    | Q. 9, 10  | Q.15a, 15b   | Q.20      |

**SECTION A (10 X2 = 20)**

ANSWER ALL THE QUESTIONS

**SECTION B (5 X5 = 25)**

Either or Choice

ANSWER ALL THE QUESTIONS

**SECTION C (3 X10 = 30)**

ANSWER ANY THREE QUESTIONS OUT OF FIVE

**INTERNAL ASSESSMENT**

**MARKS**

TEST : 15

ASSIGNMENT : 5

ATTENDANCE : 5

25

PASSING MINIMUM (IA) 40% - 10 MARKS

PASSING MINIMUM (UE) 40% - 30 MARKS

PASSING MINIMUM TOTAL - 40 MARKS

**b. PRACTICAL:**

Time: 3Hours

Total Marks: 60 Marks

**SECTION A (1 X20= 20)**

Either or Choice

ANSWER ANY ONE

**SECTION B (1 X40 = 40)**

Either or Choice

ANSWER ANY ONE

**INTERNAL MARKS:**

RECORD: 25

SAMPLES: 10

ATTENDANCE : 05

TOTAL: 40

PASSING MINIMUM (IA) 40% - 16 MARKS

PASSING MINIMUM (UE) 60% - 24 MARKS

PASSING MINIMUM TOTAL - 40 MARKS

# **B.Sc. FASHION TECHNOLOGY**

## **CHOICE BASED CREDIT SYSTEM**

### **SEMESTER I**

#### **CORE PRACTICAL I- PATTERN MAKING AND GRADING**

##### **I. Draft and grade the Patterns for the following**

###### **a) Sleeve**

1. Plain
2. Puff sleeve at top and bottom
3. Bell sleeve

###### **b) Collar**

1. Shirt
2. Peter pan
3. Stand

###### **c) Yoke**

1. Simple
2. Partial

##### **II. Designing and Drafting and grading basic apparel for**

###### **a) Children**

- Bib, Panty, Jabla
- Summer Frock
- Angel Top
- A-line Frock
- Sun Suit

###### **b) Women**

- Saree Petticoat
- Middi and Middi top
- Blouse
- Nighty
- Salwar Kameez

c) Men

- Full Sleeve Shirt
- Pleated Trouser
- S.B.Vest
- Nehru Kurtha
- Night Dress

## **SEMESTER I**

### **CORE PRACTICAL II - BASIC APPAREL DESIGNING PRACTICALS**

1. Preparation of Samples for Seams and Seam Finishes.
2. Preparation of Samples for Hems.
3. Preparation of Samples for Fullness. (Darts, Tucks, Pleats, Gathers, Flares, Ruffles, Godets and Gathers)
4. Preparation of Samples for Facing and binding. (Any 3)
5. Preparation of Samples for Plackets and fasteners. (Any 4)
6. Preparation of Samples for different Sleeves. (Any 3)
7. Preparation of Samples for different Collars. (Any 3)
8. Preparation of Samples for different Yokes. (Any 3)
9. Preparation of Samples for different pockets (Any 3)

### **REFERENCES:**

Thomas Anna Jacob, "The art of sewing", USB publishers New Delhi 1994.

Readers Digest sewing book. Verma G., cutting & tailoring theory", Asian publishers

Delhi, 1999.

Armstrong J.H. "Pattern making for fashion design" Pearson Education. 2001

Practical Clothing Construction – Part I and II, Mary Mathews, Cosmic Press, Chennai

(1986)

Deni Bown "The Complete Book of Sewing" Dorling Kindersley Limited, London (1986)



## **SEMESTER I**

### **ALLIED I - SEWING TECHNOLOGY**

#### Unit – I

Introduction to sewing, History of sewing machines, Sewing Machine – parts and functions of single needle machine, Tools for measuring, marking, cutting & pressing. Selection of thread and needle for various types of fabric.

#### Unit – II

Classification of sewing machines -Single Needle Lock stitch Industrial model, Over Lock Machine, Zig Zag Multi Purpose Machine, Double Needle Machine, Bar Tack Machine, button hole making machine, button fixing machine, blind stitching machine, fabric examining machine. Machine attachments - care and maintenance of sewing machines.

#### Unit – III

Basic sewing machines and associated work aids, simple automobiles. The use of components & trims – Labels and motifs, lining, Interlining, wadding, lace, braids & elastics, Hooks and loop fastening, Seam binding and tape, Shoulder pad, Eyelets & laces, Zip fastener, Buttons, Tack buttons, Snap fasteners and Rivets, Performance properties of components and trims. Sewing machines attachments – (Hemmers, Ruffler, Binder, Tucker, cloth guide, zipper foot, gathering foot, feed cover plate, circular attachment). Common problem & remedies

#### Unit – IV

Fusing – Definition, advantages of using fusible interlinings, requirement of fusing, Fusing process. The means of fusing, Fusing equipments, Methods of fusing quality control in fusing. Alternative of fusible interlining. Pressing: the purpose of pressing, categories of pressing, means of pressing, pressing equipments and methods, pleating, permanent press. State of pressing.

#### Unit – V

Stitching mechanism – needles, bobbin and bobbin case, bobbin winding, upper and cover threading, auxiliary hooks, throat plates, take –ups tension disc.

Feeding mechanism – drop feed, different fed, needle feed, compound feed, puller feed

**References:**

- 1.The Technology of Clothing manufacture, Harold Carr and Barbara Catham, Blackwell Science (1994)
- 2.Goswami, B.C. “ Textile Yarns”, Technology, Structure and applications”, McGraw Hill.
- 2.Chris Jefferys (2004), 101 Essential Tip- Basic Sewing, D.K. Publishing
- 4.Besty Hosegood (2006), The complete book of sewing, Dorling Kindersley Ltd., London.
- 5.Thomas Anna Jacob, “The art of sewing:”, USB publishers New Delhi, 1994.
- 6.Readers Digest Sewing book.

**SEMESTER II****CORE I - FIBRE TO YARN SCIENCE**

## Unit – I

Introduction to textile fibres – definition, classification of fibres, manufacturing process, physical and chemical properties and end uses of natural fibres – cotton, linen, wool & silk and jute. Polyester, nylon.

## Unit - II

Man made fibres – polyester, nylon, acrylic, spandex, viscose, rayon and tencel.

## Unit –III

Introduction to ginning –objectives – types, working principle of knife roller gin, blow room process – objects of mixing, objects of blow room, working principles of axi-flow cleaner, kirschner beater, lap forming unit ( scutcher )- cleaning efficiency.

## Unit –IV

Sequence of spinning process – objective and working principles of blow room, carding, draw frame and comber – objects and working principles of simplex and spinning ( Ring Frame )

## Unit – V

Yarn – definition, classification, simple, fancy threads and sewing threads manufacturing process, yarn twist – classification of twist, yarn count. Identification of yarn count.

**References:**

1. Corbman B.P Fibre to Fabric, International Students Edition Mc Graw Hill Book Co- Singapore, 2000
2. Spun Yarn Technology, Eric Oxtoloy, Butter work Pub UK 1987
3. Technology of spinning WD Klein, Textile Institute

**SEMESTER II****ALLIED PRACTICAL I - BASIC DRAPING PRACTICALS****I. Prepare the following samples using the Draping Method**

Basic bodice - Front and Back

Dart Manipulation

Pleats, Darts, Tucks and Gathers

**II. Neckline variations**

- Boat neck
- Drawstring
- Cowl
- Key hole
- Halter
- 

**III. Armhole variations**

- Square
- Round
- V Shape

**IV . Waistline variations****V. Skirts-**

- Flared skirt
- Gore skirt
- Pleated skirt
- Hip yoke skirt
- Umbrella skirt

## VI. Collars -

- Shirt Collar
- Stand Collar
- Peter Pan collar
- Shawl collar cut in one piece with front waist
- Tie tying techniques – 5 methods
- 

## VII .Sleeves -

- □Basic sleeve
- Puff sleeve
- Bell Sleeve
- Leg – o – Mutton
- Petal sleeve
- Raglan sleeve
- Kimono sleeve

## VIII . Design the following garment by draping Techniques

- Create any one of garment for a girl child – street wear
- Create any one of garment for a boy child – casual wear
- Create any one of garment for a teenage girl – party wear
- Create any one of garment for a teenage boy – formal wear

### **Reference Books:**

1. Draping for fashion design: Nurie Relis/ Hilde Jaffe, Reston publishing co.
2. Designs cutting and draping for special occasion clothes : for evening wear and party Wear, Drawn Cloak, Chryssalis

## **SEMESTER II**

### **CORE PRACTICAL III- FIBRE TO YARN SCIENCE PRACTICAL**

- I. Fibre Testing :  
Identification of textile fibres by
  - a. Microscopical Test
  - b. Solubility Test
  - c. Burning Test
  
- II. Yarn Testing:
  - a. Analysis of blend ratio of yarn
  - b. Determination of
    1. Yarn count
    2. Yarn Twist
    3. Lea Strength
    4. CSP calculation
    5. Fabric Count

## **SEMESTER II**

### **ALLIED PRACTICAL II - BASIC ILLUSTRATION AND SKETCHING PRACTICALS**

Prepare sketches for the following

1. Different types of collar, Sleeve, Neck line, skirts.
2. Different types of ladies tops, Shirt, Pant(Full and half),Chudidhar
3. Different types of Accessories – Bags ,footwear , hats etc
4. Different types of Ornaments
5. Facial features – Eyes ,nose , lips ears
6. Face ,hands legs – Different positions
7. Lay figure -7 1/2 head
8. Fashion figure -8 , 10 ,12 head.

## **References:**

1. Advanced Fashion Sketch Book, Bina Abling, OM Book Service, India (2007)
2. Basic fashion design Styling .
3. Sapna sarkas “Fashion and sketch book” .
4. Harold Carr “Fashion design and product development”
5. Fashion Design illustration Children Ireland
6. verekes “Fashion designers hand book for adobe illustration Centers” .
7. Anmol Roy “Fashion designing and technologies”
8. Fashion Illustration Flat drawing.
9. Pratap Mulick “Sketching“
10. Tatham Seamas, “fashion design drawing course” .

## **SEMESTER III**

### **CORE II- FABRIC SCIENCE-I**

#### Unit – I

Weaving – Definition – process sequence of weaving preparatory process.  
Warp winding – objectives – warping, sizing, weft winding- objectives – pirn winding machine

#### Unit – II

Looms – classification of loom, basic loom, mechanism , basic elements of woven design – design, draft and peg plan. Types of drafting plan.

#### Unit – III

Plain weave – modification of plain weave – characteristic features and end uses. Twill weave – modification of twill weave – characteristic features and end uses . Satin weave , sateen weave characteristic features and end uses .

## Unit – IV

Honey comb, huck – a – back, mock leno- characteristic features and end uses

Complex weave structure – double cloth, extra warp, extra weft, pile fabric – characteristic features and end uses.

## Unit – V

Shuttle less looms – airjet, water jet, Repier, projectile loom. Difference between shuttle & shuttle less loom

### Reference :

1. Gokerneshan. N (2009 weaving Repaartion Technology, Abisheck Publication, Chandigarh
2. Murphy.W.S (2001) Handbook of weaving . Abhishek Publications, Chandigarh
3. Fabric Science 5<sup>th</sup> Edition , Joseph J Pretal, Fairchild Publication. New York 1990.
4. Mechanism of weaving , N.N. Banner. J.I Vol- I & II Textile Institute
5. Principles of weaving, Mark and Robinson, Textile Institute Manchester

## **SEMESTER III**

### **CORE III - CLOTHING CARE**

#### **UNIT-I**

Water- hard and soft water, methods of softening water. Zeolite or Base exchange method. Determination of water hardness. Laundry soaps – Manufacture of soap and methods, composition of soap, types of soap, soap less detergents, chemical action, detergent manufacture, advantages of detergents. Difference between soap and detergents.

#### **UNIT-II**

Laundry equipment and reagents: Study of laundry equipment and laundry reagents - soaps - detergents - cleaning action of soaps, indigenous cleaning agents - rita nut - shikakai - green gram - bran solution – study of modern and industrial cleaning agents

### **UNIT III**

Stiffening Agents: Study of stiffening agents –purpose of stiffening- classification of stiffening Agents preparation and uses of stiffeners- natural and commercial starches - preparation of starch for use - bleaching agents - blueing and tinting agents and their application – optical whiteners .

### **UNIT-IV**

Washing Machine And Care Labels: Study of different types of house hold/industrial washing machine- rotary - swirling - pressure - tumble wash etc; the various systems of care labeling-washing instruction. bleaching instruction-drying instruction-ironing instruction-dry cleaning instruction. placement of labels on garments.

### **UNIT -V**

Stain Removal: Principles of laundering - stain removal - various solvents for stain removing blood, tea, rust; oil/grease etc. – different methods of washing - application of friction by hand rubbing - scribing -tumble wash. General rules and ways of stain removal.

### **References**

1. Dantyagi S., “Fundamentals of Textile and Their Care”, Oriental Longmans Ltd, New Delhi, 1996
2. Denlkar, “Household Textiles and Laundry Work”, Atma Ram and Sons, Delhi, 1993
3. Neomi D’Souza, “Fabric Care”, New Age International Publisher, 1998
4. Davis, “Laundry and Clothing Care”, Drama Book Publishers, 1995

## **SEMESTER III**

### **ALLIED II - FASHION DESIGNING**

#### **UNIT I**

Terms related to the fashion industry – fashion, style, fad, classic, and collection, chic, Custom made , mannequin , fashion show, trend, forecasting, high fashion, fashion cycle, haute couture, fashion director, fashion editor, line, knock-off, avantgarde, bridge, buying house, apparel, fashion merchandising, pret – a – porter.



## UNIT II

Design- definition and types – structural and decorative design, requirements of a good structural and decorative design. Elements of design – line, shape or form, colour , size and texture. Application of structural and decorative design in a dress, selection and application of trimmings and decorations. Principles of design- balance – formal and informal, rhythm- through repetition, radiation and gradation, emphasis, harmony and proportion. Application of principles of design in a dress.

## UNIT III

Colour- definition, colour theories- prang colour chart and munsell colour system, Dimensions of colour- hue, value, and intensity. Standard colour harmonies- application in dress design. Colour in principles of design- application of the same in dress design.

## UNIT IV

Designing dresses for unusual figures becoming and unbecoming for the following figure types- Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

## UNIT V

Wardrobe planning for different age groups, factors influencing wardrobe selection, Fashion and season, Designing dresses for different occasions – business meetings, parties/ dinners, evenings/leisure hours, marriage functions, sports, uniforms for civil service, airhostess, hoteliers, schools – girls and boys.

### Reference:

- 1 . Fashion – From Concept to Consumer – Gini Stephens Frings, 6 th edition, Prentice Hall (1999).
- 2 . Inside the Fashion Business – Bennett, Coleman & Co, Mumbai (1998)
3. Art and Fashion in Clothing Selection – Harriet T, Mc Jimsey, The Iowa state University Press, Ames, Iowa (1973)
4. Inside the Fashion Business- Heannette A Jarnow et-al, macimilan Publishing Company, New **York**.

5. Art and Fashion in Clothing Selection – Mc Jimsey and Harriet, Iowa State University Press, Iowa.

### **SEMESTER III**

#### **CORE IV- FABRIC SCIENCE PRACTICALS**

Analysis of following fabrics for Design, Draft, Peg Plan, and Ends per inch and Picks per inch, Yarn count, Yarn crimp, Cover factor & Weight per square yard of fabrics.

1. Plain weave and its derivatives
2. Twill weaves – 2/1, 3/1.
3. Satin / Sateen
4. Honey comb
5. Huck – a – back
6. Crepe weaves
7. Extra Warp
8. Extra Weft
9. Mock leno
10. Pile weave
11. Fancy weave
12. Single Jersey knit
13. Interlock knit
14. Rib

### **SEMESTER III**

#### **ALLIED PRACTICAL III- FASHION DESIGNING PRACTICALS.**

1. Prepare the following Charts
  - Prang colour chart
  - Value Chart
  - Intensity Chart
2. Illustrate garment designs for the Elements of Design
  - Line
  - Colour
  - Texture
  - Shape or form

- Size
  - 3. Illustrate garment designs for the Principles of Design
  - Balance in dress
  - Harmony in dress
  - Emphasis in dress
  - Proportion in dress
  - Rhythm in dress
4. Illustrate the colour harmony in dress design
- Monochromatic colour harmony
  - Analogous colour harmony
  - Complimentary colour harmony
  - Double complementary colour harmony
  - Split complementary colour harmony
  - Triad colour harmony
5. Application of colour and principles of design in dress
- Harmony through colour
  - Emphasis through colour
  - Proportion through colour
  - Rhythm through colour
  - Balance through colour
6. Designing dresses for figure irregularities- becoming and unbecoming Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

**References:**

1. Fashion Sketch Book – Bina Abling, Fair Child Publications, New York  
Wardrobe
2. Strategies for Women – Judith Rasband, Delmar publishers London  
Fundamentals of

3. Textiles and their Care- Susheela Dantyagi, 5 th edition,. Orient Longman Ltd  
New Delhi

4. Inside the Fashion Business- Heannette A Jarnow et-al, macimilan Publishing  
Company, New York.

5. Art and Fashion in Clothing Selection – Mc Jimsey and Harriet, Iowa State  
University Press, Jowa.

### **SEMESTER III**

#### **CORE PRACTICAL V -CHILDREN'S APPAREL PRACTICALS**

Designing and Drafting the following children's garments.

1. Bib – Give some variation in outline shape or surface design
2. Panty – Plain and variation in shapes.
3. Jabla – With sleeve and opening
4. Knickers - with elastic opening
5. Baba suit /Romper – knickers with chest piece attached
6. A line frock– double pointed dart, facings at neckline and armhole and strap attach in hip.
7. Summer frock – without sleeve and collars, suspenders tied at shoulder
8. Yoke frock – with yoke, with sleeve, Gathered, flared, with collars
9. Boy's shirt – shirt collar, pocket
10. Boy's short – fly open with buttons, side pocket, pleats and dart.

#### **REFERENCES**

- Practical clothing construction – Part I and II, Mary Mathews, cosmic Press, Chennai (1986).
- Zarapkar system of cutting – Zarapkar K.R. Navneet Publications Ltd. (2008)
- Practical cutting and Tailoring part II EshwasriAnwahi, Lakhraj Hans R.B Publications, Delhi.(2014)

## **SEMESTER III**

### **NMEC-I - FUNDAMENTALS OF TEXTILES**

#### **Unit – I**

Introduction to the field of Textiles – classification of fibres – natural and chemical – primary and secondary characteristics of textile fibres.

#### **Unit II**

Manufacturing process, properties and uses of natural fibres – cotton, linen, jute, pineapple, hemp, silk, wool, hair fibres, Man-made fibres – viscose rayon, acetate rayon- nylon, polyester, and acrylic.

#### **Unit III**

Spinning – definition, classification – chemical and mechanical spinning – blending, opening, cleaning, doubling, carding, combing, drawing, roving, spinning-Yarn classification – definition classification – simple fancy yarns, sewing threads and its properties .

#### **Unit IV**

Woven – basic weaves- plain twill, satin, fancy weaves – pile, double cloth, leno, swivel, tappet, dobby and jacquard, weaving technology- process sequence – machinery details.

#### **Unit V**

Non- woven- felting, fusing, bonding, lamination, netting, braiding and calico, tatting and crocheting

#### **REFERENCES:**

Textiles – Fiber to Fabric, Corbman B.P. International student's edition, McGraw Hill book Co, Singapore 1985.

Sewing and knitting – A Reader's Digest Step- by- step guide, Readers Digest, New York 1993.

Fabric Science 5th Edition, Joseph J pretal, Fairchild publication's New York 1990

Technology of dyeing and printing – V.A Shenai, Sevak publication, Mumbai.

## **SEMESTER IV**

### **CORE IV - NON WOVEN & TECHNICAL TEXTILES**

#### Unit – I

Non – woven – Introduction – definition, classification and scope and application of non woven – fibres used- web preparation, opening, cleaning machine, production of parallel laid web, cross laid and random laid web.

#### Unit – II

Bonding methods – mechanical, thermal, chemical/ adhesive, melt blown and spun lace techniques. Finishing of bonded fabrics. Fusing – methods of fusing. Braiding – methods of braiding. Netting – methods, lacing.

#### Unit - III

Technical Textiles – Introduction, definition, scopes & importance and uses. Application of Agro Tech, Build Tech, Cloth Tech, Home Tech, Indu Tech, Medical Tech, Sports Tech, Pack Tech, Mobile Tech, Protect Tech, Geo Tech.

#### Unit – IV

Medical Tech, Sports Tech, Protective – introduction, general properties and end uses.

#### Unit – V

Smart & intelligent textiles, Smart – Active smart, passive smart & ultra smart, Intelligent – PCM, SMP, Chromic & conductive materials

#### **References:**

- Non woven bonded fabrics – Lunenscholss J and W Albrocht, Ellis Horwood, London 1985
- Non – Wovens – Arul Dahiya, MG Kamath, Raghavendra R Hedge and Monika Kannadnguli
- Geo Textiles – NWM John, Blackir London
- Family Clothing – Tate and Glisson, John Wiky and Sons., Illinas, 1963
- Technical Textiles – Anand and A.R. Horracks, Textile Institute

## **SEMESTER IV**

### **ALLIED III - FASHION CLOTHING AND PSYCHOLOGY**

#### **UNIT - I**

Origin of Fashion – Importance of fashion - Development of fashion, Components of fashion -, Design Details, Texture ,Color and Silhouette . Types of silhouette – Natural Body, Slim line, Wedge , Hour Glass , Extreme Volume Silhouette.

#### **UNIT - II**

Fashion Focus – The designers Role , The Manufacturers Role, The Retailers Role . Scope of Fashion Business – Primary Level, The Secondary Level , The retail level and the Auxiliary level. Study about International Designers – Fashion related cycle and theories.

#### **UNIT - III**

The Movement of Fashion - Factors influencing fashion movement -Accelerating factors, Retarding factors, and Recurring fashions. Predicting the movement of fashion.

#### **UNIT - IV**

Types of designers – High fashion Designer, Stylist, and Freelance Designer. Sources of design inspiration.

Indian fashion Designers- Manish Malhotra, Ritu kumar, Ritu berri, Tarun Tahilani, Wendell Rodricks, Abu Jani and Sandeep Khosla, JJ Valaya, Rina Dhaka, Manish Arora,

and Rohit Bal.

#### **UNIT - V**

Study of International Fashion centers – France, Italy, England , Germany, Canada , New York .Study of International Fashion Brands – Women’s Wear, Men’s Wear, Kids Wear,Sports Wear, Cosmetics and Accessories.

#### **TEXT BOOKS:**

1. Elaine stone. 2001. The Dynamics of Fashion. Fair child publications, New York.

2. Gini Stephan Friengs . 1999. Fashion from concept to consumer. [Sixth Edition]. Prentice Hall.

### **REFERENCE BOOKS:**

1. Ellen Diamond. 2007. Fashion Retailing. Pearson Education. INC and Dorling Kinderley Publishing, Delhi.
2. Kitty G, Dickerson. 2005. inside the fashion Business. Pearson Education. INC and Dorling Kinderley Publishing, D

## **SEMESTER IV**

### **CORE V - WET PROCESSING**

#### **UNIT-I**

Wet processing-meaning-process sequence. Object and methods in singeing, Desizing, Scouring, Wool carbonizing, Weighting of silk. Wet processing equipment – kier – J box – pad roll – U box – Roller bed – Conveyor steamer – stenter.

#### **UNIT-II**

Bleaching –objects-types- Hypo chlorites – Hydrogen peroxide – sodium chlorite. Equipments and chemicals for bleaching of cotton, viscose, cotton/ viscose, polyester/ cotton. Mercerization – objects - Methods – types of mercerization-chain and chainless methods.

#### **UNIT III**

Dyeing – properties of dyes, Characteristics of dyes, classification of dyes, Direct, Vat, Sulphur, reactive, naphthol, acid, Basic, disperse dyes and natural dyes.dyeing of fiber blends.Dyeing machines – fiber, yarn –cheese dyeing.

#### **UNIT IV**

Fabric dyeing machines-working principles – hank package – jigger- HT Beam, jet – padding mangles. Colour fastness to washing – light, rubbing & perspiration, computer colour matching-colour matching cabinet.

#### **UNIT – V**

Wet processing of Knitted fabric – scouring – Bleaching- dyeing – printing-calendaring-Shrink controlling - steaming. Wet processing of fiber blends. Briefly study of eco friendly dyeing and Effluents treatments-BOD,COD-primary and secondary treatment process.



**References:**

1. Paters R.H. Textile Chemistry” Vol. I,II Textile institute, Manchester 1970.
2. Shenai V.A.” Technology of textile processing” Vol. III, V, VII Sevale publications, Bombay 1981.
3. Lewis D.M.”Wool Dyeing” SDC publications England 1990.
4. Nalankilli.G., Chemical Preparatory Process, NCUTE Publication, New Delhi.
5. Manivasakam.N. Treatment of Textiles Processing, Effluents, Sakthi Publications, Coimbatore, 1995.

**SEMESTER IV****CORE PRACTICAL VI - WOMEN'S APPAREL PRACTICAL**

Design, Draft and construct the following garments.

1. Middy – Variation in panel, bottom round
2. Middy Top – Front open, single dart, with or without collar and variation in sleeves.
3. Night dress - With or without yoke, variation in Sleeves, attaching trimmings.
4. Maxi – Variation in neck with or without sleeve and attaching trimmings.
5. Salwar - Gathered waist with tape or elastic, bottom design variation.
6. Kameez - Fashioned neck, variation in sleeve.
7. Ladies pant - Variations in bottom zip attached, patch pocket.
8. Ladies shirt - Half open collar attached, half or full sleeve.

**REFERENCES**

- Easy cutting - Juvekar,, Commercial Tailors Corporation Pvt. Ltd, 166 Dr.Ambedkar Road, Delhi.
- Zarapkarsystem of cutting – K.P. Zarapkar, Navneet Publications Ltd.
- Practical clothing construction – Part I and II, Mary Mathews, cosmic Press, Chennai.

## SEMESTER IV

### CORE PRACTICAL VII - WET PROCESSING-PRACTICALS

Preparation of samples for Processing

1. Desizing(acid &enzyme)
2. Scouring
3. Bleaching
4. Mercerizing

Dye the given fabric using suitable dye

1. Direct Dye
- 2.Reactive Dyes(Hot &Cold brand)
3. Sulphur Dyes
4. Vat Dyes
5. Disperse Dyes
- 6.Acid Dyes
7. Basic Dyes
- 8.Vegetable Dyes (any one)

#### **References:**

1. Shenai, V.A., Technology of Textiles Processing, Chemistry of Dyes and Principles of Dyeing, A Sevak Publication, Bombay, 2002
2. Manivasakam.N. Treatment of Textiles Processing, Effluents, Sakthi Publications,Coimbatore, 1995.
3. Gulrajani,M.L., Deepti Gupta, Natural Dyes and their Application to Textiles, Indian Institute of Technology, New Delhi, 1992.

4. Shenai, V.A., History of Textiles Design, sevak Publications, Mumbai, 1995.

#### **SEMESTER IV**

#### **SBEC I - EMBROIDERY PRACTICALS**

A. Prepare samples for the following

1. Hand embroidery – 20 stitches -10 samples
2. Machine embroidery -7stitches -3 samples.

B. Traditional surface ornamentation practices with two to four variations in the following,

- 1.Kantha of Bengal
- 2. Chikankari work
- 3. Kasuti
- 4. Zardosi
- 5. Kutch work
- 6. Mirror work
- 7. Aari work
- 8. Phulkari work .

#### **REFERENCES:**

1. Encyclopedia of Embroidery Stitches Including Crewel – Dover Publications – 1974
2. Computerized Encyclopedia of Needle Work – Therese De Dillmont – 3rd Edition.
3. Decorative Painting Techniques Book – Val Holmes – 2003
4. Traditional Indian Motifs for Weaving and Printing
5. 5000 Designs and Motifs from India – Ajit Mookerjee – 1996
6. Barudan / Tazima / ZSK Embroidery Machines Catalogue

## **SEMESTER IV**

### **NMEC II - FUNDAMENTALS OF DESIGNING**

#### **UNIT - I**

Types of Design - Structural and Decorative design, Requirements Of Structural And Decorative Design, Elements of Design - Line, Size, Shape, Color and Texture.

#### **UNIT - II**

Principles of Design - Balance, Emphasis, Proportion, Rhythm, Harmony and its types. Application of principles of design in dress design.

#### **UNIT - III**

Color- Definition, Color theory - Prang color system, Dimension of color- Hue, Value and Intensity. Color schemes in Prang color System.

#### **UNIT - IV**

Figure Irregularities - Stout figure, Thin figure, Broad shoulders, Narrow Shoulders, Faces – Round, Large, and Small face.

#### **UNIT - V**

Wardrobe Planning – Factors to be considered while selecting clothes for different age group – Men, Women and Children.

#### **TEXT BOOK:**

1. *Sumathi, G.J .2002. Elements of Fashion and Apparel Design.* Newage International (P) Ltd Publishers.

#### **REFERENCE BOOK:**

1. *Harriet Mc jimsey. 1973. Art and Fashion in Clothing Selection.* [Second Edition]. Iowa State University Press, Ames.

## SEMESTER V

### CORE VI - COMPUTER & TEXTILES IN GARMENT DESIGN

#### UNIT-1

Introduction to computers –Organization of Computers –Input Unit, Output Unit, Central Processing Unit ,Memory Devices, Working Principles of Printer-Scanner, Digitizer & Plotter.

#### UNIT -2

Computer Application in Textile Designing- Weaving- Softwares used – Types of woven Design-Dobby and Jacquard- Techniques Used. Knitting - Softwares used – Types of knitting. Printing – Creation of Printed Design – Simulation Technique.

#### UNIT-3

Computer Application in Fashion Designing-Design Creation- Theme Rendering- 3D Modeling- Body Scanning-Texture Mapping-Design Studio- Fashion Studio- Fashion Multimedia Concepts.

#### UNIT-4

Computer Application in Pattern Making- Process involved in Pattern Making Grading-Marker Planning-Laying-Cutting- Labelling-Duplicating. Computerized Sewing Machine.

#### UNIT-5

Computer Aided Manufacturing – Concepts of Computer Integrated Manufacturing – Definition and Functions of CAD, CAM, CIM, CAA, PDC . Computerized Embroidery Machines. Computerized color Matching System. Brief study of Designing Soft wares used in textile industry.

#### References

1. CAD/CAM computer aided design and manufacture, Groover MP and E.W.Zinimmers, prentic hall, India 1984.
2. Computers in fashion industry, Taylor P, Heinemann publications 1990.
3. Computer aided design and manufacture, Bezant C.E, Ellis Horwood, England,1983. 4. CAD in clothing and textiles, Winfred Aldrich, Blackwel science, 1994.
5. Computer aided drafting and design –concept and application, Veinsinet DO, 1987.
6. Computer Fundamentals – P K Sinha , BPB Publications, Delhi (1992)

7. Pattern Grading for Women's Cloths The Technology of sizing – Gerry Cooklin, Blackwell Science Ltd (1990)

## **SEMESTER V**

### **CORE VII - TEXTILE FINISHING**

#### **UNIT - I**

Finishing - Introduction – Objects of finishing, Importance of finishing, Classification of finishes, Advantages of finishing.

#### **UNIT - II**

Mechanical Finishes - Beetling, Shearing, Calendaring, Tenting, Moiré, Embossing, Glazing, Napping, Chemical Weighting Of Silk, Sizing, Sanforizing, Schreiner, Wrinkle free finish.

#### **UNIT - III**

Functional Finish - Resin finish, Water Proof finish, Water Repellent finish, Antimicrobial finish, Flame Retardant finish, Soil Release finish - Process and Recipe, Types and Method of Fusing, Welding and Adhesives, Molding.

#### **UNIT - IV**

Advanced Functional Finish - Stiff finish - Process and Recipe, Softening - Silicone finish, Denim finish, Stone Wash finish, Anti - Pilling finish, Anti Mildew finish.

#### **UNIT - V**

Special Finishes On Garments – Finishing of Woven / Knitted garments – Stone less, Stone Wash effects – Mud wash, Ion wash, Chalk wash, Water resistant Breathable finish, Bio polishing, Leathery Finish, Protective Finishes – Deodorizing, Cool Finish and Thermostat finishes.

#### **TEXT BOOKS:**

1. Shenai and Saraf. 1995. Technology of Textile Finishing. Sevak publications.
2. Nallangilli and Jayaprakasam. 2005. Textile Finishing. S.S.M Institute of Textile

Technology.

## **REFERENCE BOOK:**

1. Prayag. 1996. Technology of finishing. Shree J. Printers, Pune.

## **SEMESTER V**

### **CORE VIII- TEXTILE PRINTING**

#### **UNIT-I**

Printing – Introduction to printing , differences between printing and dyeing, preparation of fabric for printing – cotton , linen, polyester, wool and silk, methods of printing, preparation of printing paste, selection of thickening agents.

#### **UNIT-II**

Direct printing : Block printing – Brief History , Preparation of design , Blocks, table, print paste and printing process Stencil printing – Brief history , preparation of fabric , stencils (For one or more colour) Materials used for preparing stencils, process involved and techniques used .

#### **UNIT-III**

Screen printing – brief history , Flat screen and Rotary screen printing , Preparation of screen , print paste , screen printing process, Discharge printing – chemicals used , process involved

#### **UNIT-IV**

Resist printing : Brief history, Batik printing wax used, Equipments required, process sequence and techniques used. Tie and dye – Brief history , Equipments required, process sequence and techniques used.

#### **UNIT-V**

Other printing methods : Ink jet printing, Heat transfer printing , photo printing

#### **References:**

1. Textiles – Ninth edition , Sara J Radolph and Anna L Langford, Prentice hall, New Jersey (2002).
2. Textile processing – J L Smith, Abhishek publications, Chandigarh (2003).
3. Textile Chemistry – Peters R H , Vol I, & II, Textile Institute Manchester (1970)

4. Beginners Guide to fabric dyeing and printing – Stuart & Robinson, Technical books, London (1982).

5. Thickening agents and Emulsion thickenings in textile printing – Herbert Barthm, New Delhi (1994).

## **SEMESTER V**

### **CORE PRACTICAL VIII- COMPUTER & TEXTILE IN GARMENT DESIGN PRACTICALS**

- I. Application of types of Design in garments-Structural Design, Decorative Design, Geometrical Design, Abstract Design
- II. Application of Colour Harmony in Designing Garments -Monochromatic Colour harmony, Analogous Colour harmony, Single Complementary Colour harmony, Double Complementary Colour harmony, Triad Complementary Colour harmony, Tetrad Colour harmony, Neutral Colour harmony.
- III. Application of Elements of Design in garments-Line, Size, Shape, Colour.
- IV. Application of Principles of Design in garment-Balance, Rhythm, Emphasis, Harmony, Proportion
- V. Design Garments for the following
  1. Party Wear- Men & Women Garments
  2. Casual Wear- Men & Women Garments
  3. Sports Wear- Men & Women Garments
- VI. Create a design using Photoshop Software
  - i) Create visiting Cards invitation and certificate using Image Mixing
- VII. Prepare Pattern, Grading and Marker Efficiency for the following Garments using CAD Software.
  1. Children Garment- Jabla, Boys Shirt.
  2. Women's Garment – Maxi, Salwar & Kameez
  3. Men's Garment- T-Shirt, Pleated Trouser



## **SEMESTER V**

### **CORE PRACTICAL IX - TEXTILE PRINTING PRACTICAL**

1. Printing with fabric paint
2. Texture printing by combining any 3 different types of textures.
3. Printing of cotton using block and screen printing (2 samples each)
4. Printing of tie and dye and batik (2 samples each)
5. Tie and dye of cotton with direct dyes (resist print)
6. Batik print on the cotton fabrics (resist print)
7. Printing on the polyester fabrics by pigment colour
8. Printing on cotton fabric with natural colours

## **SEMESTER V**

### **CORE PRACTICAL X - MEN'S APPAREL PRACTICAL**

Design, Draft and construct the following Men's garments.

1. Slack Shirt – with collar, Half Sleeve, Patch pocket.
2. Full sleeve shirt – shirt collar, patch pocket, full sleeve with sleeve placket and cuff.
3. S.B. Vest - With / without collar, No sleeve, Fancy button attached.
4. Pleated Trouser - Pleat in front, Darts at back, side pocket, fly with button /zip, Belt with adjustable strap.
5. House coat – with collar and full sleeve without cuff.
6. Kalidhakurtha - Kali piece, side pocket, round necks, half open.
7. Pyjama – Waist elastic and tape attached, fly.
8. Men's pant- front opening with zipper placket, side pocket variation in bottom design

### **REFERENCES**

- Commercial system of cutting – Juvekar, commercial Tailors corporation Pvt. ltd, 166, Dr.Ambedkar Road, Dadas.

- Practical clothing construction – part I and II, Mary Mathews, cosmic press, Chennai.
- Zarapkar system of cutting K.,R.Zarapkar, Navneet publications Ltd.
- Dress making - SmtThangamSubramaniam, Bombay tailoring and Embroidery College, 32 North Part Street, Ambattur, Chennai.
- Easy Cutting Juvekar, Commercial Tailors corporationPvt.Ltd, 166, Dr, Ambedkar road, Dadas.

## **SEMESTER V**

### **MBEC I -GARMENT QUALITY AND COST CONTROL**

#### **Unit I**

Basics of Quality Control Definition and Scope of Quality Control – Establishing Merchandising Standards–Establishing Raw Material Quality Control specifications – Quality Control of Raw Material.

#### **Unit II**

Quality Control System Establishing Processing quality specification – Training Quality Control Personnel – The Quality Standard Control – Quality Control Inspection, Procedures for processing – Quality control of finished garments – Quality control and Government contacts – Quality Control for Packaging, Warehousing and shipping – Statistical Quality Control, Sampling plans – industry – wide quality standards.

#### **Unit III**

Basics of Production control Function of Production control – Production, Analysis – Quality Specifications – Quantitative specifications – Scope of Apparel Manufacturing Activity – Coordinating departmental Activities – Distribution of Documents and Records.

#### **Unit IV**

Production Control System Type of Control forms – Basic Production Systems – Principles for Choosing a Production System – Evaluating Production Systems – Flow Process Grids and Charts – Basic Flow Process Grid Construction – Flow Process Grids for Production control

#### **Unit V**

Cost Control, Function of Cost Control: Types of Costs and Expenses – Apparel Manufacturing Cost Categories – Sales Cost Control – Purchasing Cost Control –

Production Cost Control – Administration cost control – Cost Ratio Policies – the manufacturing Budget – Cash flow Control – Standard Cost Sheet, Break–Even Charts

### **REFERENCES:**

1. Patty Brown, Janett Rice,-Ready to wear apparel analysis, Prentice Hall,1998.
2. Salinger, Jacob Apparel, —Manufacturing Analylsisll, New York, Textile Books Futs, 2001
3. Introduction to Clothing Production Management, A.J. Chuter, Second Edition, Black Well Publishing, Second Edition, 2004.
4. Apparel Merchandising, Robin Mathew, First Edition, Book Enclave Publishing, 2008.
5. Textile Industry Development and Growth, Satish Tiwari, First Edition, Anmol Publications Pvt. Ltd., 2000.

## **SEMESTER VI**

### **CORE IX- FABRIC SCIENCE-II**

#### Unit – I

Different fabric forming methods-Comparison of weaving and knitting- Principles of weft and warp knitting – Comparison of weft and warp knitting – Classification of knitting machines - Yarn passage diagram of a circular knitting machine – Knitting machine elements and description - Knitting cycle of latch needle with sinker.

#### Unit-II

Knitting terms and definitions - Principal weft knit stitches - Knit, tuck and miss stitch formation and properties - Representation of weft knit stitches – Study of Basic weft knit structures - Needle gating - Description of circular Rib & Interlock knitting machine – Characteristics of basic weft knit structures – Circular knitting GSM and production calculations.

#### Unit-III

Single jersey knit fabric structures, their cam and needle order: Plain jersey, Pique, Thick pique, Honey comb, Pearl and Twill. Rib fabric structures, their cam and needle order: 1x1 rib, 2x2 rib, Drop needle, Royal rib, Polka rib, Double half cardigan, Double cardigan, Milano rib, Waffle, Flat back, Swiss double pique and French double pique. Interlock fabric structures, their cam and needle order: Interlock, Eight lock, Ottoman rib, Pin tuck, Texi pique and Ponte di Roma.

#### Unit-IV

Jacquard knitting - Needle selection techniques – Pattern jack, Pattern wheel , Pattern drum and Computerized jacquard knitting machines – Brief study on

specialty weft knit structures – Auto stripe yarn programming – Elastomeric yarn insertion and effects – Knitted fabric faults – Causes and Remedies.

#### Unit-V

Flat Knitting – Yarn passage diagram of a flat knitting machine – Mechanical type Flat knitting machine - Needle bed assembly – Racking, Carriage and Cam box arrangement - Transfer Stitch and Drop Stitch – Thread diagram, effects and applications – Introduction to computer controlled Flat knitting machine. Concept of fully-fashioned machines and seamless knitwears. Introduction to warp knitting – Warp knitting terminologies – Open lap and closed lap. Knitting action of Tricot and Raschel machines. Comparison of Tricot and Raschel machine.

#### References:

1. D.B. Ajgaonkar, Knitting Technology
2. David .J.Spencer, Knitting Technology
3. Chandrasekara Iyer et al., Circular knitting technology
4. Dr.Samuel Raz , Flat Knitting
5. Dr.S.Raz, Warp Knitting Technology
6. Peter Lord et al., Fabric forming systems

### SEMESTER VI

#### CORE X - ORGANISATION OF GARMENT UNIT

##### Unit-I

Entrepreneurship- Meaning definition and types, need for Entrepreneurs, qualities and types of Entrepreneurship. Difference between Entrepreneur and manager. Management-Definition Management as a process –Planning, organizing, Directing Controlling, Co-ordination.

##### Unit-II

Institutions supporting entrepreneurs- DIC, NSIC ,SISI,SIPCOT, TII,KVIC, CODISSIA, COMMERCIAL BANKS –SBI. Organizational structure of a garment unit –Hierarchical organization, production planning and control.

##### Unit-III

Different department in a garment unit – Design department, Finance department, purchasing department, Production department, Organizing different sections – hierarchy Personnel involved in all the departments, nature of the job.

## **UNIT-IV**

Factory Design and layout – importance of factory design, factors affecting factory design, Types of buildings, (single and Multi –storey) –advantages and limitation. Factory layout – Process, Product and combined layout Design requirement – requirements relating to health, safety and welfare

## **UNIT-V**

Performance of Indian Garment Export, SWOT Analysis Setting up of garment unit for export market, Export Document, Export finance- Payment method, Export shipping Role of merchandiser in a garment unit

### **REFERENCE;**

1. Principles of management- Dinakarpagare, sultan chand and sons, delhi.
2. Entrepreneurship Development in India – Dr. C.B Gupta, Dr N.P. Srinivasan, sultan Chand and sons delhi 1997.
3. Garment Exports – Darlie O Koshy (1997)
4. Introduction to clothing production management – AJ Chester 2nd Edition, Wrenbury Associates Ltd (1998).
5. The technology of clothing manufacture – Harold Carr and Barbara Latham, Blackwell Science (1994).

## **SEMESTER VI**

### **CORE PRACTICAL XI - ACCESSORIES MAKING PRACTICALS**

1. Hand bag – Any three types
2. Hat – Any two types
3. Bow – Decorative bow and formal bow
4. Belt – For boy and girl
5. Foot wear – Any three types
6. Purse and pouches – Any two types
7. Hair band and head bands – Any four types

8. Watches – Any two types

**References:**

1. “Quick style”, by- Christine Kunzerlman.
2. 1000 Ideas by fashion designers Carolina Cerime
3. 150 Beaded & motifs Kenneth D King
4. 21st Century Jewellery Mrthe Le Van
5. Accessories options : Shrugs scaxues stoles

**SEMESTER VI**

**MBEC II - FASHION & VISUAL MERCHANDISING**

**Unit I**

Introduction to Visual Merchandising Visual merchandising and display; Purpose of visual merchandising; Store image; Target customers; Seasonal visual merchandise; Windows

**Unit II**

Display and Display Settings Types of display; Promotion vs. institutional display; Type of display setting Attention drawing devices: Colour; Lighting; Line and composition; Scale; Contrast; Repetition; Humour; Surprise and shock;

**Unit III**

Inspection and its types – Testing – Check points before cutting - Pilot run or trial run and its importance – Approvals - Types of approvals – Shipping marks – Final inspection procedures – Self, Second and Third party inspection - Effective expedition procedures.

**Unit IV**

Order sheet and its contents – Packing list and its contents – Document formats: order sheet, packing list, invoice, inspection and testing reports etc., - Assortment and its types. Documents recording and maintenance – Claims and reasons for claims - Factory audits – Buyer’s code of conducts.

## **Unit V**

Advertising- scope, importance, types, merits & demerits; sales promotion, personal selling. Retail management. Export associations – Apparel Export Promotion Council – Journals and magazines related to apparel and textiles –Trade shows and Fairs – Participation in trade shows – Advantages of trade shows and fairs - Apparel & Textile Trade shows and fairs in India.

### **REFERENCES:**

1. Jeannette Jarnow, Dickerson, Inside the Fashion Business, Prentice hall, USA.
2. Darlie Koshy, Effective export marketing of Apparel, Global business press, 1996.
3. Fashion Merchandising, Elian Stone,
4. Apparel Merchandising, An integrated Approach, Krishnakumar, M, 2010, Abishek Publications
5. Apparel Merchandising, Robin Mathew, Book Enclave Publishers, Jaipur

## **SEMESTER VI**

### **SBEC II PRACTICAL - PORTFOLIO PRESENTATION**

Portfolio development and Presentation technique

1. To be planned for any 3 Occasion - Forecasting colors, Pattern and Fabric for the ensuing seasons based on International forecast.
2. Preparation of Mood board, Story board.
3. Fabric development chart - Collections of fabric Swatches and Colors.
4. Design development chart - Preparation of various Styles for Selected fabrics
5. Selection of Accessories
6. Final Presentation
7. Number of Garments in a Collection – 1 garment

## **SEMESTER VI**

### **SBEC III - BEAUTY CARE PRACTICALS**

Do the following Experiments

1. Bleaching
2. Facial
3. Hair remover-threading, waxing
4. Hair style – any 3 styles
5. Hair cut – any 3 styles
6. Hair curl, Hair straightening, Hair coloring
7. Make up – Face makeup, bridal make up, party make up
8. Nail treatment – pedicure, manicure, nail art
9. Saree draping – any 3 styles
10. Visit to beauty parlour.