## KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) w.e.f. 2012-13

# SEMESTER-III

Code No.	Subject	Marks	Time
BFAD-201	Apparel Production Technology-I	120+30*	3 hrs.
BFAD-202	Fundamentals of Fabric Production	120+30*	3 hrs.
BFAD-203	Applied Maths	120+30*	3 hrs.

# Practical / Lab based Courses

BFAD-251	Pattern Making-II	50	3 hrs.
BFAD-252	Fabric Production Techniques	50	3 hrs.
BFAD-253	Women's Clothing	50	3 hrs.
BFAD-254	CAD-I	50	3 hrs.
BFAD-255	Fashion Illustration	50	3 hrs.

# TOTAL

700

\* Internal Assesment

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III APPAREL PRODUCTION TECHNOLOGY-I (THEORY)

### Course Code: BFAD-201

Duration of exam: 3 hrs M.M.: 150 Theory Exam: 120 Int. Assesment: 30

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. 1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from unit 1 and 2, four questions from each unit
- The candidates are required to attempt five questions. Q.No. 1 will be compulsory and remaining four questions will be attempted selecting two questions from each unit.

#### <u>Unit-I</u>

- Back ground to the Clothing Industry, Its contribution to economy of country; The Products; Types of cloth factories.
- The organization of a clothing factory:-Planning and control.
- The Stores: The material in stores, Quality checking and Storage of material.
- Cutting:- Maker planning & reproducing; Maximizing maker utilization; Methods of maker planning; Lay Planning; Requirements for Spreading process; Ply direction & lay stability.
- Elimination of Fabric faults; Methods of spreading; Types of fabric packages,
- Cutting the Fabric objectives of cutting; Methods of cutting:- Hand shears, Straight knife, Round knife, Band knife, Computer controller cutting knife, Die cutting, Laser cutting, Plasma cutting, Water jet cutting, Ultrasonic cutting, Notches, Drill & thread maker.

#### <u>Unit-II</u>

- Preparation of cut work for the sewing room:- Bundling, Shade separation control, Indication of right side of Fabrics, Work ticking
- Sewing seams types,Class-1- superimposed,Class-2- lapped seam,Class-3- Bound seam, Class-4- Flat seam, Class-5- Decorative stitching, Class-6- Edge neatening.
- Visit to cutting department in a garment Industry
- Assignment Literature survey about garment Industry in India.

## **REFERENCES**

- Carr & Latham. (IV ED.). Technology of Clothing Manufacture.
- Gerry Conklin. (II ED.). Introduction to Clothing Manufacture.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III FUNDAMENTALS OF FABRIC PRODUCTION (THEORY)

### Course Code: BFAD-202

Duration of exam: 3 hrs M.M.: 150 Theory Exam: 120 Int. Assesment: 30

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. 1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from unit 1 and 2, four questions from each unit
- The candidates are required to attempt five questions. Q.No. 1 will be compulsory and remaining four questions will be attempted selecting two questions from each unit.

## <u>Unit-I</u>

## Fabric formation:-

- Different methods of fabric formation and terminologies.
- Weaving: Parts of loom and their functions, main operations in weaving shuttle less looms.
- Graphical representation of weaves: drafting plan, lifting plan and repeat of the weave.
- Basic weaves: Plain, Twill, Satin and their variations.
- Fancy weaves: Dobby weave, jacquard weave, leno, extra yarn figuring, pile weave and its variations, double cloth.
- Non-woven's:- Classifications, production techniques and end uses.

### <u>Unit –II</u>

## Knitting:-

- Introduction to knitting technology, difference between knits and woven, terms used in knitting.
- Comparison of warp and weft knitting.

- Basic weft knit stitches: single jersey, rib, purl, interlock, float, and tuck stitches.
- Basic warp knit stitches: under-lap, overlap, closed-lap, open-lap.
- Knitting machines: flat, circular, jacquard, warp and weft knitting machines.
- Defects in knitted fabrics.
- Knitwear industry: origin, history, growth and development.

# **REFERENCES**

# <u>Text books:</u>

- Marks A.T.C & Robinson. Principles of weaving.
- Watson. Textile Color & Design.
- Banerjee, N.N. Weaving.
- Corbmen. Fibre to Fabric.
- Hollen, N. and Saddler, J. 1968. Textiles. New York, Macmilan Company.

# KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III APPLIED MATHS (THEORY)

## Course Code: BFAD-203

Duration of exam: 3 hrs M.M.: 150 Theory Exam: 120 Int. Assesment: 30

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. 1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from unit 1 and 2, four questions from each unit
- The candidates are required to attempt five questions. Q.No. 1 will be compulsory and remaining four questions will be attempted selecting two questions from each unit.

# <u>Unit-I</u>

- Length, Breadth measurements, Area measurements.
- Rectangular Co- Ordinate, Distance Formula
- Number System, Linear Programming.
- Statistics- Mean, median, mode, combined mean and computation, linear programming.

- Definition of population, Variable, Attribute, Census survey, Sample survey, simple random sample, raw statistical data, collection, classification, frequency distribution, class limits and boundary, class width, midpoint, histogram, frequency polygon, frequency curve.
- Probability- Random-experiment, sample space, event, types of events, Venn diagram, definition, law of probability and examples.

### <u>Unit--II</u>

- Sampling: types of sampling, selection of sample, benefits of sampling, evaluation of sample.
- Correlation Karl Pearson's co-efficient of correlation, coefficient of correlation and its interpretation, rank correlation, regression equations and predictions.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III PATTERN MAKING-II (PRACTICAL)

### Course Code: BFAD-251

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

## • Rules and Darts :-

Principle 1- Dart manipulation by:- Slash & Spread technique, Pivotal transfer technique

- 1. Single dart series.
- 2. Two dart series.

Designing with Darts, Tucks, Pleats, and Gathers.

Style lines: - Classic princess lines, Armhole princess lines, Panel style lines.

Built-up necklines, Inset Bands.

Principle 2- Added fullness:- 3 types of added fullness.

Principle 3- Contouring patterns:- off-shoulder, halters, cowl.

## • Skirts :-

4 skirts foundation-:

- 1. Basic straight, rectangular.
- 2. A line.
- 3. Pegged / inverted triangular.
- 4. Bell shaped.

High & low waist skirt; Flared, skirt with gathers, tier, pleated, godets, gored- skirt, wrap and uneven skirt.

## • The sheath dress (fitted silhouette one piece dress).

# **REFERENCES**

- Aldrich Winifred, Metric Pattern Cutting, Om book service. 1997.
- Armstrong H.J, Pattern Making for Fashion Design, Longman. 2003.
- Bray Natalia, More Dress Pattern Designing, Blackwell Science. 1999.
- Cooklin Gery. Pattern Cutting for Women's outer Wear, Blackwell Science. 2001.
- Cooklin Gery, Garment Technology for Fashion Designers, Blackwell Science, 1997
- Kapoor Bela, Pattern Drafting and Making , Phoenix Publishing House Pvt.Ltd 199

# Magazines/Journals:

- Apparel online.com
- Apparel views

## <u>KURUKSHETRA UNIVERSITY KURUKSHETRA</u> <u>BACHELOR OF FASHION AND APPAREL DESIGN (BFAD)</u> SEMESTER-III FABRIC PRODUCTION TECHNIQUES (PRACTICAL)

Course Code: BFAD-252

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Preparation of graphic representation of weaves.
- Making basic weave samples.
- Weaving of any two fancy weave samples.
- Preparation of woven article using more than one weaves.
- Development of fabric glossary
- Visit to Textile industry and knit wear industry in India.

### **REFERENCES**

- Marks, A.T.C & Robinson. Principles of Weaving.
- Watson. Textile Color & Design.
- N.N.Banerjee. Weaving.
- Bernard P. Corbman. Fibre to Fabric.
- Hollen, N. and Saddler, J. 1968. Textiles. New York, Macmilan Company.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III WOMEN'S CLOTHING (PRACTICAL)

### Course Code: BFAD-253

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

### • Drafting and construction of:-

(1) Blouse and its variation;

- Katori cut
- Choli cut
- Princes line
- (2) 6 Gore saree peticot.
- (3) Salwar Kameez: Simple & Chudidar.

(4) Night wear.

(5) The sheath (one piece dress).

## **REFERENCES**

### Text books:

- Carr and Lather. The technology of clothing manufacture.
- Bains, S. and Hutton, J. Singer Sewing Book.
- Gioello and Brake. Figure types and size ranges.
- Aldrich Winifred. Metric pattern cutting. Om book services.1997.
- Armstrong II. J. Pattern making for fashion design. Longman. 2003.
- Bray Natalia. More dress pattern designing. Blackwell science. 2001.
- Cooklin Grey. Pattern making for women's outer wear. Blackwell sciences, 1997

## Magazines and journals:

• Apparel online.com

# KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III CAD-I (PRACTICAL)

### Course Code: BFAD-254

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Introduction to Adobe Illustrator.
- Study about tools of Adobe Illustrator.
- Color and motif: traditional, floral and geometric.
- Figure and profile: profile of male and female silhouettes.
- Accessories: party, casual and formal.
- Project board:- logo, label, brochure and window display

# **REFERENCES**

### <u>Text books:</u>

- Bina Abling. Fashion Sketch Book. Fairchild Publications. 1994.
- Druid Elisabeth and Pace Tiziana. Figure Drawing for Fashion Design. Peplin Press.2004
- Ireland Patrick John. Fashion Design Drawing and Presentation. Batsford. 2005.
- Mckelvy Kathrynanad Munslow Janine. Illustrating Fashion. Blackwell Publishing. 2004.
- Books on Adobe Illustrator Software.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-III FASHION ILLUSTRATION (PRACTICAL)

### Course Code: BFAD-255

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Basic tools required for sketching:- Understanding fashion figure, Road map grid, 8 head croquie, 10 head croquie (male/female)
- Figure analysis:- Front profile, <sup>3</sup>/<sub>4</sub> turned view, Understanding style lines in fashion figure
- Analysis of features:- Eyes, Nose, Lips.
- Analysis of different hairstyles.
- Analysis of hands:- Front, Profile, <sup>3</sup>/<sub>4</sub> turned view.
- Analysis of feet: Front, Profile, <sup>3</sup>/<sub>4</sub> turned view.
- Analysis of face: Front, Profile, <sup>3</sup>/<sub>4</sub> turned view.
- Basic free hand drawing.
- Pencil shading technique.

# **REFERENCES**

- Bina Abling. Fashion Sketch Book. Fairchild Publications.1994.
- Druid Elisabeth and Pace Tiziana. Figure Drawing for Fashion Design. Peplin Press.2004
- Ireland Patrick John. Fashion Design Drawing and Presentation. Batsford. 2005.
- Mckelvy Kathrynanad Munslow Janine. Illustrating Fashion, Blackwell Publishing. 2004.
- Ray Smith. Drawing Figures. Dorling Kindersley. 1994.

## KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) w.e.f. 2012-13

# SEMESTER-IV

Code No.	Subject	Marks	Time
BFAD-221	Fashion Marketing & Merchandising	120+30*	3 hrs.
BFAD-222	Textile Dyeing & Printing	120+30*	3 hrs.

# Practical / Lab based Courses

BFAD-271	Fashion Illustration & Stylization	50	3 hrs.
BFAD-272	Pattern Making-III	50	3 hrs.
BFAD-273	Men's Clothing	50	3 hrs.
BFAD-274	Dyeing & Printing	50	3 hrs.
BFAD-275	Draping	50	3 hrs.

# TOTAL

550

\* Internal Assesment

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV FASHION MARKETING AND MERCHANDISING (THEORY)

### Course Code: BFAD-221

Duration of exam: 3 hrs M.M.: 150 Theory Exam: 120 Int. Assesment: 30

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. 1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from unit 1 and 2, four questions from each unit
- The candidates are required to attempt five questions. Q.No. 1 will be compulsory and remaining four questions will be attempted selecting two questions from each unit.

## <u>Unit-I</u>

## PART 1

### Introduction to fashion

- Fashion terminology
- Sources of fashion
- Fashion cycles and seasons
- Factors favouring and retarding fashion
- Fashion theories:- Traditional fashion adoption (Trickle-Down theory), Reverse adoption (Trickle-Up or Bottom-Up theories), Mass dissemination (Trickle-Across theory)
- Fashion forecasting.

## PART 2

- Marketing: Definition, concepts and functions.
- Marketing plan and process, market terminology,
- Fashion market and marketing environment, fashion marketing planning, Market research, User's buying behavior, market communication.
- Channels of distribution
- Advertising, sales promotion techniques, exhibitions and sales.
- Care labels and brands

# <u>Unit-II</u>

- Merchandising-"Introduction, role of merchandiser, types of merchandiser, types of merchandising".
- Importance of textile industry in Indian economy.
- Export documentation:-Export marketing, global scenario and WTO.
- Export and textile policies.

# REFERENCES

# Text books:

- Blythe Jim. Marketing Communication, Pearson Education. 2000.
- Costabtino Maria. Fashion Marketing and PR. Bt Batsford Ltd. 1998.
- Koiter. Marketing Management. Pearson Education. 2003.
- Mike Easey. Fashion Marketing. Blackwell Science. 2002.

## KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV TEXTILE DYEING AND PRINTING (THEORY)

# Course Code: BFAD-222

Duration of exam: 3 hrs M.M.: 150 Theory Exam: 120 Int. Assesment: 30

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. 1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from unit 1 and 2, four questions from each unit
- The candidates are required to attempt five questions. Q.No. 1 will be compulsory and remaining four questions will be attempted selecting two questions from each unit.

## <u>Unit-I</u>

# • Introduction to Fabric finishes:-

- 1. Process of removing impurities from fabrics; Scouring, desizing, degumming, carbonizing.
- 2. Basic finishes that alter hand or texture; Felting, singeing, stiffening, decatizing.

- 3. Surface finishes:- Bleaching, delustering, calandering, beettling, napping, flocking, burn out design, acid design, plisse design, tentering shearing and brushing.
- 4. Functional finishes:- Waterproof and water repellent finishes, shrinkage control, wrinkle resistance, durable press and flame retardant finish.
- **Dyeing:-** Introduction, classification and selection of dyes.
  - 1. Types of dyes; direct, acid, reactive, basic, vat, azoic, sulphur, disperse and mordant dyes.
  - 2. Methods of dyeing.
  - 3. Identifying dyeing defects.
  - 4. Colorfastness: fastness to washing, light, perspiration, crocking and gas-fading.

## <u>Unit –II</u>

- Introduction to printing, difference between dyeing and printing.
- Methods of printing:- Direct, Discharge and Resist printings.

• Applications of Printing:-Block, Roller, Duplex, Stencil, Screen printing (Flat screen, Rotary screen printing), Transfer (Dry heat and Wet heat transfer), Blotch, Jet spray (Polychromatic dyeing, Microjet), Electrostatic, Photo, Warp, Batik and Tie – Dyeing.

# **REFERENCES**

- Clarke. W. 1974. An Introduction to Textile Printing. London, Newness Butter Worth.
- Anderson, F. 1974. Tie-dyeing and Batik. London, Octupus Editorial Production by Berkeley Publishers Ltd.
- Smith, J.L. Textile Proccessing: Printing, Finishing, Dyeing.
- H.Panda. Modern Technology of Textile: Dyes & Pigments.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV FASHION ILLUSTRATION AND STYLIZATION (PRACTICAL)

### Course Code: BFAD-271

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

## <u>Unit-1</u>

- Creation of 12 head croquies (male/female)
- Creation of stick figures and fleshing out figures. (male/female)
- Different body poses (male/female)
- Drawing with color mediums directly (without the use of pencil)
- 1. Water color
- 2. Steadlers
- 3. Crayons

### <u>Unit-II</u>

- Exploring Collage
- Composition of figures. (male/ female)
- Sketching Accessories
- 1. Hats, Caps
- 2. Scarves
- 3. Bags, Belts
- Stylized figures (male/female)
- Age wise figure development of children

## **REFERENCES**

### <u>Text books:</u>

- Borelli Laird. Fashion Illustration Now. Thomas and Hudson Publishers. 2003.
- Druid Elisabeth and Pace Tiziana. Figure Drawing for Fashion Design. Peplin Press. 2004.
- Ireland Patrick John. Fashion Design Drawing and Presentation. Bats ford. 2005.
- Seaman Julian. Foundation in Fashion Designing and Illustration. BT. Bats ford. 2004.

# Magazines/ Journals:

• Global Apparel

- Image Business of Fashion.
- INDIA Vogue/INTERNATIONAL VOGUE
- Fashion ELLE
- In touch with fashion
- Gladrags
- Hi-blitz

## KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV PATTERN MAKING- III (PRACTICAL)

## Course Code: BFAD-272

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

## • Making paper patterns of:-

- 1. Shirts.
- 2. Jackets.
- 3. Coats
- 4. Pants/ Trousers.
- 5. Capes and Hoods
- 6. Preparation of commercial paper pattern of :-
  - Kids wear.
  - Women's wear.
  - Men's wear

# **REFERENCES**

- Aldrich Winifred. Metric Pattern Cutting (Men's), Om Book Services. 1997.
- Armstrong H.J. Pattern Making for Fashion Design. Longman. 2003.
- Bray Natalia. More Dress Pattern Designing. Blackwell Science. 1999.
- Cooklin Gery. Pattern Cutting for Women's Outer wear. Blackwell Science. 2001.
- Cooklin Gery. Garment Technology for Fashion Designers. Blackwell. 1997.
- Kapoor Bela. Pattern Drafting and Making UP, Phoenix Publishing House Pvt Ltd. 1997.

## KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV MEN'S CLOTHING (PRACTICAL)

### Course Code: BFAD-273

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Development of design and style features for men's dress:-
  - 1. Shorts
  - 2. Shirts
  - 3. Trousers (casual/formal)
  - 4. Suits (casual/formal)
- Construction of following garments:-
  - 1. Kurta Pyjama
  - 2. Shirt with and without yoke
  - 3. Jacket

# **REFERENCES**

- Bowers Lewis and Kettunen. Clothing Construction and Wardrobe Planning.
- Carr and Lather. The Technology of Clothing Manufacture.
- S. Baines and J.Hutton. Singer Sewing Book.
- Gioello and Brake. Figure Types and Size Ranges.
- Aldrich Winifred. Metric Pattern Cutting. Om Book Services. 1997.
- Armstrong H.J. Pattern Making for Fashion Design. Longman. 2003.
- Bray Natalia. More Dress Pattern Designing. Blackwell Science. 1999.
- Cooklin Grey. Pattern Cutting for Women's Outer wear. Blackwell Science. 2001.

### KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV DYEING AND PRINTING (PRACTICAL)

### Course Code: BFAD-274

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Dyeing of yarn and fabrics with different dyes.
- Creating designs on fabrics through various dyeing process.:-Tie and dye, Batik
- Preparation of printing samples:-Stencil, block, screen and hand painting on:- cotton, silk ,wool, cotton-wool, cotton-silk, cotton-polyester with different dye classes.
- Making one article each of:- Block, Stencil, Screen, Tie and Dye and Batik.
- Visit to a printing unit.

# **REFERENCES**

- Bernard P. Corbman. Fibre to Fabric.
- Clarke. W. 1974. An Introduction to Textile Printing. London, Newness Butter Worth.
- Anderson, F. 1974. Tie-dyeing and Batik. London, Octupus Editorial Production by Berkeley Publishers Ltd.
- Smith, J.L. Textile Proccessing: Printing, Finishing, Dyeing.
- H.Panda. Modern Technology of Textile: Dyes & Pigments.

# KURUKSHETRA UNIVERSITY KURUKSHETRA BACHELOR OF FASHION AND APPAREL DESIGN (BFAD) SEMESTER-IV DRAPING (PRACTICAL)

### Course Code: BFAD-275

Duration of exam: 3 hrs M.M.: 50 Practical Exam: 50

- Draping:- definition, terminology, principles of draping, preparation and uses, measurement and tools used in draping.
- Basic Draping techniques: front & back bodice, front & back skirt.
- Dart location and manipulation.
- Designing the garment using the following construction features :-
  - 1. Gathers.
  - 2. Pleats.
  - 3. Cowl & fancy neacklines.
  - 4. Collars.
- Designing and construction of following garments using different construction and decorative features :-
  - 1. Shirt/ Top (female / male)
  - 2. Skirt.
  - 3. Gown.
- Preparation of one dress using draping techniques

## **REFERENCES**

## <u>Text books:</u>

- Bowers Lewis and Kettunen. Clothing Construction and Wardrobe Planning.
- Carr and Lather. The Technology of Clothing Manufacture.
- Baines, S. and Hutton, J. Singer Sewing Book.
- Gioello and Brake, Figure Types and Size Ranges.
- Aldrich Winifred. Metric Pattern Cutting. Om Book Services.1997.
- Armstrong H.J. Pattern Making for Fashion Design. Longman. 2003.
- Bray Natalia. More Dress Pattern Designing. Blackwell Science. 1999.