



# UNIVERSITY OF CALCUTTA

## Notification No. CSR/ 12 /18

It is notified for information of all concerned that the Syndicate in its meeting held on 28.05.2018 (vide Item No.14) approved the Syllabi of different subjects in Undergraduate Honours / General / Major courses of studies (CBCS) under this University, as laid down in the accompanying pamphlet:

### List of the subjects

Sl. No.	Subject	Sl. No.	Subject
1	Anthropology (Honours / General)	29	Mathematics (Honours / General)
2	Arabic (Honours / General)	30	Microbiology (Honours / General)
3	Persian (Honours / General)	31	Mol. Biology (General)
4	Bengali (Honours / General /LCC2 /AECC1)	32	Philosophy (Honours / General)
5	Bio-Chemistry (Honours / General)	33	Physical Education (General)
6	Botany (Honours / General)	34	Physics (Honours / General)
7	Chemistry (Honours / General)	35	Physiology (Honours / General)
8	Computer Science (Honours / General)	36	Political Science (Honours / General)
9	Defence Studies (General)	37	Psychology (Honours / General)
10	Economics (Honours / General)	38	Sanskrit (Honours / General)
11	Education (Honours / General)	39	Social Science (General)
12	Electronics (Honours / General)	40	Sociology (Honours / General)
13	English ((Honours / General/ LCC1/ LCC2/AECCI)	41	Statistics (Honours / General)
14	Environmental Science (Honours / General)	42	Urdu (Honours / General /LCC2 /AECC1)
15	Environmental Studies (AECC2)	43	Women Studies (General)
16	Film Studies ( General)	44	Zoology (Honours / General)
17	Food Nutrition (Honours / General)	45	Industrial Fish and Fisheries – IFFV (Major)
18	French (General)	46	Sericulture – SRTV (Major)
19	Geography (Honours / General)	47	Computer Applications – CMAV (Major)
20	Geology (Honours / General)	48	Tourism and Travel Management – TTMV (Major)
21	Hindi (Honours / General /LCC2 /AECC1)	49	Advertising Sales Promotion and Sales Management –ASPV (Major)
22	History (Honours / General)	50	Communicative English –CMEV (Major)
23	Islamic History Culture (Honours / General)	51	Clinical Nutrition and Dietetics CNDV (Major)
24	Home Science Extension Education (General)	52	Bachelor of Business Administration (BBA) (Honours)
25	House Hold Art (General)	53	Bachelor of Fashion and Apparel Design – (B.F.A.D.) (Honours)
26	Human Development (Honours / General)	54	Bachelor of Fine Art (B.F.A.) (Honours)
27	Human Rights (General)	55	B. Music (Honours / General) and Music (General)
28	Journalism and Mass Communication (Honours / General)		

The above shall be effective from the academic session 2018-2019.

SENATE HOUSE  
KOLKATA-700073  
The 4<sup>th</sup> June, 2018

*spaul*  
4/6/18  
(Dr. Santanu Paul)  
Deputy Registrar



**University Of Calcutta**

**PROPOSED REVISED CBCS BASED DRAFT SYLLABUS**

**For**

**6 SEMESTERS**

**BACHELOR OF FASHION AND APPAREL DESIGN**  
**(BFAD)- HONOURS COURSE**

**Under**

**UNIVERSITY OF CALCUTTA**

**w.e.f. July- 2018**

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN**

**University of Calcutta**

**Syllabus of 1st Semester of B.F.A.D.(Hons) in Fashion And Apparel Design**

<b>Category of Paper</b>	<b>Name of Papers</b>	<b>Theory Credits</b>	<b>Practical/ Tutorial Credits</b>	<b>TOTAL</b>
<b>Discipline Specific Course (DSC)</b>	<b>1. Textile Fibres and Yarn Formation</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2. Apparel Construction -I (Fundamentals of Pattern Making)</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
<b>Discipline Specific Elective(DSE)</b>				
<b>Ability/Skill Enhancement Courses (SEC)</b>	<b>1. Communicative English</b>	<b>2 (50 marks)</b>	<b>0</b>	<b>2</b>
<b>Generic/ General Electives (GE)</b>	<b>ANY ONE PAPER</b>			
	<b>1. Elements of Textile Design</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2. Textile Crafts and Costumes</b>			
<b>3. Visual Art and Principles of Design</b>				
	<b>TOTAL</b>	<b>14</b>	<b>6</b>	<b>20</b>
		<b>200</b>	<b>150</b>	<b>350</b>

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN**

**University of Calcutta**

**Syllabus of 2nd Semester of B.F.A.D.(Hons) in Fashion And Apparel Design**

<b>Category of Paper</b>	<b>Name of Papers</b>	<b>Theory Credits</b>	<b>Practical/ Tutorial Credits</b>	<b>TOTAL</b>
<b>Discipline Specific Course (DSC)</b>	<b>1. Fabric Formation and Textile Design</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2. Apparel Construction -II (Fundamentals of Cutting and Stitching)</b>	<b>2 (50 marks)</b>	<b>4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
<b>Discipline Specific Elective(DSE)</b>				
<b>Ability/Skill Enhancement Courses (SEC)</b>	<b>1. Computer Theory and Applications</b>	<b>2 (50 marks)</b>	<b>0</b>	<b>2</b>
<b>Generic/ General Electives (GE)</b>	<b>ANY ONE PAPER</b>			
	<b>1. Elements of Fashion Illustration</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2. Design of Fashion Accessories</b>			
<b>3. Entrepreneurship Development</b>				
	<b>TOTAL</b>	<b>12</b>	<b>8</b>	<b>20</b>
		<b>200</b>	<b>150</b>	<b>350</b>

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN****University of Calcutta****Syllabus of 3rd Semester of B.F.A.D.(Hons) in Fashion And Apparel Design**

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits	TOTAL
<b>Discipline Specific Course (DSC)</b>	<b>1. Textile Chemical Processing -I (Preparatory and Dyeing)</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+</b> (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	<b>6</b>
	<b>2. Textile Surface Ornamentation and Decorative Stitches</b>	<b>2 (50 marks)</b>	<b>4 (30 marks)+</b> (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	<b>6</b>
	<b>3. Advance Pattern Making and Garment Construction</b>	<b>2 (50 marks)</b>	<b>4 (30 marks)+</b> (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	<b>6</b>
<b>Discipline Specific Elective(DSE)</b>				
<b>Ability/Skill Enhancement Courses (SEC)</b>	<b>1. Environmental Science</b>	<b>2 (50 marks)</b>	<b>0</b>	<b>2</b>
<b>Generic/ General Electives (GE)</b>	<b>ANY ONE PAPER</b>			
	<b>1. Fashion Marketing (Visual Merchandising, Retail/E tail Management and Export Procedure Documentation)</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+</b> (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	<b>6</b>
<b>2. Financial Management and Costing</b>				
	<b>TOTAL</b>	<b>14</b>	<b>12</b>	<b>26</b>
		<b>250</b>	<b>200</b>	<b>450</b>

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN****University of Calcutta****Syllabus of 4th Semester of B.F.A.D.(Hons) in Fashion And Apparel Design**

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits	TOTAL
Discipline Specific Course (DSC)	1. Textile Chemical Processing -II (Printing and Finishing)	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	2. Fashion Design Development and Fashion Illustration	2 (50 marks)	4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	3. Sizing, Draping and Texture Mapping of Garments	2 (50 marks)	4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
Discipline Specific Elective(DSE)				
Ability/Skill Enhancement Courses (SEC)	1. Fashion Event Management and Seminar Presentation	2 (50 marks)	0	2
Generic/ General Electives (GE)	ANY ONE PAPER			
	1. Fashion Journalism and Communication 2. Behavioural Science and Human Resource Management	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	<b>TOTAL</b>	<b>14</b>	<b>12</b>	<b>26</b>
		<b>250</b>	<b>200</b>	<b>450</b>

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN**

**University of Calcutta**

**Syllabus of 5th Semester of B.F.A.D.(Hons) in Fashion And Apparel Design**

<b>Category of Paper</b>	<b>Name of Papers</b>	<b>Theory Credits</b>	<b>Practical/ Tutorial Credits</b>	<b>TOTAL</b>
<b>Discipline Specific Course (DSC)</b>	<b>1. Computer Aided Fashion Designing</b>	<b>2 (50 marks)</b>	<b>4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2. Creative Pattern Making and Garment Design</b>	<b>2 (50 marks)</b>	<b>4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
<b>Discipline Specific Elective(DSE)</b>	<b>ANY TWO PAPERS</b>			
	<b>1. Apparel Industry and Production Planning Control</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>2.Colour Science, Dyeing and Finishing for Garments</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>3. Eco-Textiles, Eco-Fashion and Sustainability</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>4. Fashion Forecasting and Designing</b>	<b>4 (50 marks)</b>	<b>2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)</b>	<b>6</b>
	<b>Ability/Skill Enhancement Courses (SEC)</b>			
<b>Generic/ General Electives (GE)</b>				
	<b>TOTAL</b>	<b>12</b>	<b>12</b>	<b>24</b>
		<b>200</b>	<b>200</b>	<b>400</b>

**B.F.A.D (Hons ) in FASHION AND APPAREL DESIGN**

University of Calcutta

Syllabus of 6th Semester of B.F.A.D.(Hons) in Fashion And Apparel Design

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits	TOTAL
Discipline Specific Course (DSC)	1. Term Paper on Assignment Basis Internship (Field Visit and Training in Apparel Industry)	2 (50 marks)	4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	2. Project Work ( Garment Designing/ Dyeing/ Printing/Finishing/ Portfolio Presentation)	2 (50 marks)	4 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
Discipline Specific Elective (DSE)	ANY TWO PAPERS			
	1. Textiles- Care and Conservation	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	2. Textile Testing and Quality Control	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	3. CAD in Garment Design and Construction	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
	4. Garment Testing and Quality Control	4 (50 marks)	2 (30 marks)+ (Sessional -20marks Which includes Attendance -10marks Class Test or Assignment -10 marks)	6
Ability/Skill Enhancement Courses (SEC)				
Generic/ General Electives (GE)				
	<b>TOTAL</b>	<b>12</b>	<b>12</b>	<b>24</b>
		<b>200</b>	<b>200</b>	<b>400</b>

Schedule of Papers



for  
**Semester-I of Six Semesters B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

## 1. Schedule of Papers for Semester-I

<b>Schedule of Papers for Semester -I</b>		
<b>FAD/A/I/CC-I (TH) - Textile Fibres and Yarn Formation</b>		
<b>Textile Fibres and Yarn Formation(Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Fundamental concepts of fibre, Basic requirements of a polymer to be suitable for forming textile fibres, essential characteristics of a textile fibre, classification of textile fibres, essential properties (physical and chemical)- of a textile fibre-their terms and definition.	
2	Introduction to natural fibres- Composition, Physical and Chemical structure, Chemistry, Properties and Uses of following Natural Fibres <ul style="list-style-type: none"> <li>• Cotton: a natural cellulose fibre.</li> <li>• Jute, Flax, Ramie: natural lignocellulosic fibres</li> <li>• Wool and Hairs: natural protein fibres</li> <li>• Silk: natural protein fibre</li> </ul> Minor Natural Fibres: Banana, Sisal, Coir, Pineapple, Bamboo	
3	INTRODUCTION TO MAN-MADE FIBRES <p>a. Manufacturing Technology for production of synthetic fibres: Monomer to polymer conversion; polymerization techniques; melt, wet and dry spinning operations (drawing heat setting etc). Texturising- different techniques of textured yarn production.</p> <p>b. <b>Manufacture, Chemistry, Properties and Uses of common manmade fibres -Rayons: Viscose rayon, polynosic, lyocell (tencel) and Cellulose acetate fibres, Nylon: polyamide fibre (nylon 6 and nylon 6,6), Polyester: polyethylene-terephthalate fibre.</b>            Acrylic: polyacrylonitrile and modacrylic fibres, Polyolefins: polypropylene and polyethylene, Specialty Fibres like polyurethane (spandex/lycra) and others like polylactic acid fibres, tencel fibres etc..</p> <p>c. Study of different types of natural and synthetic fibres with special reference to their end-uses. Identification of fibres.</p>	
4	Dimension of fibres (length, diameter, l/d ratio, fineness, strength, extensibility, shrinkage etc. Testing of common properties of fibres.	
5	Introduction to yarn and fabric dimension, property parameters, construction, types and specification of textile yarn and fabrics. General flow chart for yarn manufacture and fabric manufacture for understanding and acquaintance with mechanical processing of textiles.	
6	Introduction to Yarns: Definition structure and property criteria. A general outline of sequences of process involved in the conversion of textile fibres to yarns.	
7	Objectives of blow room, carding, drawing and spinning, yarn twisting. Flow chart for production of various yarns in different spinning systems, yarn twist, twist factor and yarn properties. Influences of process parameters on yarn properties.	
8	Different types of fancy yarns production, textured yarns and flat filament yarns and their properties. Sewing threads: types, requirements and properties.	
9	Yarn Preparatory: Yarn preparation for weaving, quality of warp and weft yarns. Basic principles of warp winding, weft winding, warping, sizing and beaming machines. Types and sizes of different yarn packages, sectional warping and drawing in process.	

FAD/A/I/CC-I (PR) - Textile Fibres and Yarn Formation( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Testing of fibres, fibre fineness, length, aspect ratio, fibre tenacity, elongation, moisture regain or content etc
2	Yarn Testing: definition, objectives, methods of testing yarn count; denier; twist, diameter, crimp, breaking load, stress-strain, tenacity; elasticity; elastic recovery; load elongation curve, yield point; initial Young's modulus, principle, construction and working of tensile strength testing machines, yarn appearance, evenness and interpretation of results. Test of yarn hairiness.

## References

1. Gohl, E.PG. & L.D.Vilensky, *Textile Science: An Explanation of Fibre Properties*, CBS Publishers & Distributors, Delhi, 2<sup>nd</sup>ed., 1983.
2. Jayaprakashan, S, R.Gopalakrishan & V.Kasinathan, *Fibre Science and Technology*, Komarapalayam, 1<sup>st</sup>ed., 1997.
3. Needles Howard L, *Textile Fibres, Dyes, Finishes & Processes*, Standard Publishers & Distributors, Delhi, 1<sup>st</sup>ed., 2001.
4. Cook, Textile Fibres (Vol.5: natural fibres): Vol-2: Synthetic fibres).
5. Moncrieff R W, *Man -made Fibres*, Newness Butterworths, London, 4<sup>th</sup>ed., 1975.
6. A. A. Vaidya, Production of synthetic fibres
7. P Ghosh, Fibre Science, Tata McGraw Hill, New Delhi, 2003.
8. Booth J E, '*Principles of Textile Testing – An Introduction to Physical methods of Testing Textile Fibres, Yarns and Fabrics*', Heywood Books, Temple Press Books Ltd., London, 2 Edition (1964).
9. Bureau of Indian Standards, '*BIS Handbook of Textile Testing and Grading of Textile Fibres*', Part – 1, 1<sup>st</sup> Revised Edition (1990).
10. Bureau of Indian Standards, '*BIS Handbook of Textile Testing: Testing of Textiles Products Other Than Yarn and Fabrcis*', Part – 3, 1<sup>st</sup> Revised Edition (1991).
11. Bureau of Indian Standards, '*BIS Handbook of Textile Testing: Identification and Testing of Dyestuffs and their Colour Fastness on Textile Materials*', Part – 4, 1<sup>st</sup> Revised Edition (1999).
12. Grover Elliot and Hamby D S, *Handbook of Textile Testing and Quality Control*', Wiley Eastern Ltd., Mew Delhi, 1<sup>st</sup> edition (1960).
15. Skinkle John H, *Textile Testing-Physical, Chemical and Macroscopical*, Brooklyn, New York.

## Schedule of Papers for Semester -I

**FAD/A/I/CC-II (TH) - Apparel Construction-I (Fundamentals of Pattern Making)**

**Apparel Construction-I (Fundamentals of Pattern Making)(Theory)**

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	<b>Introduction of patterns: Need of pattern making.</b> Tools and materials used for pattern making and terminologies used in pattern making, symbols used in pattern making	
2	Introduction to technical skills in pattern making and garment production	
3	Figure Measurement: general principles, taking direct measurements.	
4	Fundamental pattern construction processes and applying these to produce garments	
5	Study on different types of stylelines used in garments	
6	Basic Bodice Block: Child's bodice block and adult's bodice block and standard measurement of body parts. Basic ideas on proportions, balance and fit for drawing and preparing patterns for different men, women and children wear.	
7	Necklines and Plackets: terminology, classification and different types of necklines and plackets. Variations in necklines and plackets.	
8	Collars and Facings: terminology, classification, various types of collars such as convertible, mandarin, wing, role, peter pan, sailor, shawl, notch, bishop, Chinese, ruffle mandarin, shirt. Variations in collars and facings.	
9	Sleeves: sleeve terminology, sleeves length variation, classification of sleeves, drafting of basic sleeve, elongated armhole sleeve: flared, puff, short sleeves, cap, ruffle, kimono, dolman, magyar, leg-o-mutton etc. sleeve variations.	
10	Pockets: Inset pocket, patch pocket, seam line pocket etc.	
11	Introduction to sewing; Principles of working of sewing machine, different parts of sewing machine and their functions. Different types of sewing machine for different purposes.	
12	Pattern making for kids garments to adult dresses (men and women)	

**FAD/A/I/CC-II (PR) - Apparel Construction-I ( Practical)****Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Principles of pattern drafting through block construction and dart manipulation: dart manipulation by Pivotal and Slash-and-Spread method, transferring back shoulder dart to neck; transferring front shoulder dart to neckline, transferring front shoulder dart to armhole, to underarm, to centre front; French dart and Double dart. Variations in fullness of garments.
<b>2</b>	Temporary and permanent hand stitches, plain seam, flat seam and ridge seams. Finishing of raw edges. Disposal of fullness: Variation in pleats, darts, tucks, gathers and facings. Placket opening and joining different fasteners. Basic embroideries and their variations.
<b>3</b>	Drafting of pattern for children garments;: Principles of drafting children basic block and pattern making and stitching of any two children garments (Bloomer, Jhabla, Bush- Shirt , A- Line forck, tops and Skirts, etc.)
<b>4</b>	Drafting of pattern for Skirts: terminology, classification: 2, 4, 6, panel skirt, umbrella, tier, drindle, straight, paneled, flared, pleats, wrap over, yoked. Variations of skirts' designs.
<b>5</b>	Drafting of pattern for shirts, trousers, kameez, salwar, churidar and jacket.

**References**

1. Natalie Bray, *Dress Fitting*, Crosby Lockwood Sons Ltd., London.
2. Lovi A. Knowles, *The Practical Guide to Pattern Making for Fashion Designers, Juniors, Misses and Women*, Fairchild Publication, 2005
3. Cavolyn J. Kundel, Norma R. Hollen, *Pattern Making by the Flat-pattern Method*, Prentice-Hall

## Schedule of Papers for Semester -I

**FAD/A/I/AECC-I (TH) - Communicative English**

### **Communicative English (Theory)**

**Full Marks: 50, Total Credit: 2**

Units	Particulars	No. of Contact Hours
1	Grammar: noun, pronoun, adjective, verb, adverb, conjunctions, preposition, tense, voice, articles, phrases and clauses , parts of speech, phrasal verbs, direct and indirect speech, punctuation and capitalization, Transformation of Sentences.	
2	Communication skills: What is communication? Function and purpose of communication, process of communication, models of communication, noise and barriers to communication. Types of communication: oral, written, non- verbal. Brief narrating/reporting incidents/happenings/accident, etc.	
3	Reading skills: What is reading? Purpose of reading, types of reading: skimming, scanning, extensive reading, intensive reading, and loud and silent reading	
4	Listening skills: What is listening? Types of listening: casual listening, focused listening, hearing and listening. Purpose of listening: material to be recorded, acquiring information. Semantic markers, using abbreviations, taking dictations.	
5	Writing skills: What is a sentence? Subject and predicate, types of sentence: simple, compound, complex, conversion from compound to complex and vice-versa, writing paragraphs, summary writing, linkage and cohesion, linkers in paragraphs, structure of writing, spell check and conversion of long sentences to small sentences.	
6	Correspondence: What is correspondence? Letter writing, general and official correspondence, comprehension, précis writing, essay writing	
7	Dialogue writing, drafting job application, notices, advertisements for classified columns and wrting minutes of any meeting.	
8	Preparation of bibliography: What is bibliography? Types of bibliography, rules for bibliographic page, footnotes and endnotes; reporting	
9	Project Report: Preparation of Project Reports /thesis/research paper and its format.	
10	Motivation,Effective communication and co-ordination and development of personality. Exploration of meaning, message and information, communicated through art, craft and design work, communication through different media, tools, audiovisual and art & design	
11	Preparation of curriculam vitae (Bio-data/ Resume). Writing application for jobs, reporting to news paper for any incident etc.	

### **References**

1. D. Maculaitis & J. Sturtevant, Odyssey: A Communicative Course in English, Addison Wesley Longman ELT Division (a Pearson Education Company), 1987
2. Leo Jones, Communicative Grammar Practice Students Book: Activities for Intermediate Students of English, Cambridge University Press, Cambridge, 1991
3. N. Krishnaswamy, Creative English for Communication, Macmillan India Ltd., New Delhi.
- 4.

### Schedule of Papers for Semester-I

#### FAD/A/I/GE-1 (TH)- Elements of Textile Design

#### Elements of Textile Design (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Basics of Design Structures and Sources of Design for Drawing of Designs. Structural design: Definition, characteristics of structural design with examples. Classification of designs: Naturals, geometric, floral, abstract, animated etc. and sources of design. Different sources of inspirations for textile design: designs from Indian Mythology, motifs, sculpture, civil art, nature, aquatic life, ornaments etc. Introduction of Decorative surface design: definition, characteristics with examples and techniques.	
2	Concept of designs of Textiles in designing Textile Fabrics and apparels for different end-use purposes for different class of people and age. Definition of fashion and fashion cycle and fashion seasons. Designing and stylizing of garments and design of accessories: Theme and inspiration for fashion design for different seasons, analyzing and evaluating the work of fashion designers (Indian and Foreign) in terms of fit, balance, positioning, serviceability, producibility and salability. Impact assessment of design. Activities for revitalizing and marketing of design.	
3	Positioning of motifs and idea of repeats in design. Design development in different forms: rotation, brick effect, mirror effect, step drop effect, half drop effect, pillar effect, batik technique, tie and dye technique, spray technique.	
4	Basics of woven design of Textiles, weaving in handlooms, Basic Principles and design of fabric construction one-up-one down plain weave, one up-two down twill weave, coloured checks and stripe design, motif placement, Drawing woven design on graph paper.	
5	Textile designing by Tie-dye and Printing of Textiles.	
6	Introduction to Fabric: Definition, structure and property criteria. Woven, Non-woven, Knits, Laces and braids. A general sequences of processes for conversion of yarns to fabrics. Concept of woven fabric structure and design with simple and basic weave structures (plain and twill weave.). Representations of any weave structure on graph papers. Basic principles of designing and weaving of fabrics in looms and its control.	
<b>TOTAL</b>		

<b>FAD/A/I/GE-1 (PR)- Elements of Textile Design ( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Placement and Repeats of design blocks in different ways and means on paper sheet. Development of design through rotation, pillar effect, half drop effect, step drop effect, mirror effect, batik and bandhni effect, stencil print, block print, screen print, brushing etc with special reference to its application in garments
<b>2</b>	Use of Colour Schemes: Use of Monochromatic, Analogous and Complimentary, double complementary, split complementary, primary, secondary and tertiary colors for design.,
<b>3</b>	Woven design development in sample forms- plain, twill, checks, stripes etc.

## **References**

1. Sivarama P. Dandamudi, Fundamentals of Computer Organization and Design, Springer-Verlag Inc., New York, New Title edition
  2. T.N. Srivastava, An Introduction to Computers, Macmillan India Ltd., New Delhi
  3. Gini Couter & Annette Marquis with Karla Browing, Mastering Microsoft Office XP, BPB Publication.
  4. Bricket C J, '*Textile Designing*', International Text Book co., U.S.A. (1930).
  5. Nisbeth H, '*Grammer of Textile Design*', D.B.Taraporewala Sons & Co., Bombay, 3<sup>rd</sup> Edition.
- Wright R H, '*Modern Textile Design and Production*', National Trade Press Ltd., Great Britain (1949).

## Schedule of Papers for Semester-I

**FAD/A/I/GE-2 (TH) - Textile Crafts and Costumes**

### Textile Crafts and Costumes (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Origin of clothing, costume of ancient civilization – Indian, Egyptian, Greek and Roman. Introduction to cultural history, which informs about current thought and practice on historical textile art, craft and design.	
2	Demonstration and understanding of the historical evolution of textiles, handicrafts and costumes through different era influenced by theatres, films, entertainment business, magazines, TV and cultural heritage.	
3	History of Indian and Western costumes: Study of different costumes (case studies): Ancient Indian Costume, Medieval (12 <sup>th</sup> to 17 <sup>th</sup> century) costumes, tribal costumes and special costumes (fanciful, historical, theatrical and filmy costumes etc); costumes for different peoples of different age groups for different country during 18 <sup>th</sup> – 20 <sup>th</sup> century: Indian, Pakistan, French, Italian, European (English). Costumes of western and other countries of world: Gothic, Roman, Neoclassicism, Romanticism, Renaissance, Egyptian, Byzantine, Netherland etc.	
4	Historical costumes of India (state-wise): Male and Female traditional costumes of Punjab, Asam, Tripura, Manipur, Rajasthan, Gujarat, Maharastra, West Bengal, Kerala, Tamil Nadu, Kashmir etc and other states of India.	
5	Investigation of historical, contextual and contemporary practices in the fashion industry; conceptualization to implementation. Costumers for different purposes: casual, formal, sports wear, beach wear, evening wear, party wear, ramp wear, executive's office wear etc. Different types of garments according to specific end – uses.	
6	History of Fashion: elements of fashion; Western and Indian traditional textiles and fashion relationship.	
7	Study on development of surface ornamentation and Miscellaneous Methods of Surface Ornamentation: Quilting, patchwork, jariwork, sarawski and beadwork, appliqué and hand knitting, crocheting, macramé, tatting, use of trimmings, etc	
8	Study on development of various craft work of different States of India with special reference to accessories	
9	Woven Textiles <ul style="list-style-type: none"> <li>• Shawls and Carpets of Kashmir, Brocades of Benares.</li> <li>• Special Saris of different States of India: Paithani saris of Aurangabad, Temple saris of Tamil Nadu, Tangail, Baluchori, Dhonekhali and Jamdani of Bengal</li> <li>• Textiles of North-Eastern India, Khadi and other textiles from cottage Industry of India.</li> </ul>	
<b>TOTAL</b>		



FAD/A/I/GE-2(PR) - Textile Crafts and Costumes ( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Creation and Practice of Surface Ornamentation through Printing & Painting: Block, stencil, spray, screen, tie-dye, batik, discharge, hand painting on fabrics.
2	Creation of surface ornamentation and establishment by Miscellaneous Methods of Surface Ornamentation: Quilting, patchwork, jariwork, sarawski and beadwork, appliqué and hand knitting, crocheting, macramé, tatting, use of trimmings, etc.
3	Accessories Design: Designing of Jewellery footwear, hats and headgears, gloves, hair – styling, bags and purses, etc matching and befitting with style, design and colour of the garment.

## References

1. S.N.Dar, *Costumes of India and Pakistan*, D B Taraporewala Sons and Co. Pvt. Ltd., Mumbai.
2. J B Bhushan, *The Costume and Textiles of India*, Taraporewala's Treasurechome of Books, Mumbai.
3. *Aria: Costume – Fanciful, Historical and Theatrical*, Macmillan and Co. Ltd., London.
4. Francois Boncher, *A History of Costume in the West*, Thames and Hudson.
5. Hilare Hiler, *An Introduction to the Study of Costume*, W and G Foyle Ltd., London.
6. G S Ghurye, *Indian Costume*, Popular Prakashan, Bombay.
7. K N Lester, *Historic Costumes*, Chas A Benette and Co., New York.
8. C C Eoan, *Costumes Throughout the Ages*, J B Limancott, New York.
9. Millia Davenport, *The Book of Costume: Vol I and II*, Corown Publishers, New York.
10. Moti Chandra, *Costumes, Textiles, Cosmetics Design,cs and Coiffure in Ancient and Mediaeval India*, Orient Publishers, New Delhi.
11. Roshan Akazi, *Ancient Indian Costumes*, Art Heritage, New Delhi.
12. James Laver, *Costume through the Ages*, Simon and Schinter, New York

## Schedule of Papers for Semester-I

**FAD/A/I/GE-3 (TH) - Visual Art and Principles of Design**

**Visual Art and Principles of Design (Theory)**

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Visual Arts: Observing and recording of information through various kinds of drawings; developing skills to release and manipulate visual imagery; observational studies through a variety of media and techniques using colour qualities	
2	Design Studio and its utility in garment design: Design development of garments with design studio activities. Visualization of garments and dress forms from various angles and perspective with accessories. Elements of commercial design studios (wood / plastic / metal / paint and Leather studio activity) for design developments of garments. Use of new media services, web – information, multimedia design studio and design communication studio activities etc for garment design. Visual illustration of textile art and fashion	
3	Introduction: definition of art, definition and sense of beauty, distinction between art and beauty, art and aesthetics, distortion in art, the importance of good taste and colour. Drawing and designing any art object.	
4	Principles of Design: Concept and Concern. History of textile art, craft and designs, Definition of Design and Textile Design. Different Forms of Design and its purposes. Rules of Design Development: <ul style="list-style-type: none"> <li>• Balance, Harmony, Proportion, Rhythm and Emphasis</li> </ul>	
5	Elements of Design , <b>Line</b> : straight, radiating, vertical, horizontal, curved and diagonal, <b>Form</b> : how form follows function, different forms of design and its functional and aesthetic characteristics. <b>Motifs</b> : Different motifs and their sources. <b>Texture</b> : types of texture, hard, medium, soft; importance of texture in design. <b>Light</b> : importance of light as an art element and effect of light on colour and texture. <b>Dimension, Shape and Space</b> : Shaping and organization of space for any design with measured dimension fitting to its purpose and aesthetic look. <b>Pattern</b> : units of design and repeat development .  Colour: importance, primary, secondary and tertiary colours, colour harmony complimentary colours. Colour aspects of garments, colour dimension, illusion created by elements, principle and colour on apparel.	
<b>TOTAL</b>		

<b>FAD/A/I/GE-3 (PR) - Visual Art and Principles of Design ( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Basic design drawing in scale and use of Different Drawing Media: Scaled Drawing as an aid to design; Writing Alphabets and different elemental unit of design in specific dimension and shapes, concepts of proportion – balance of proportion, rhythm of proportion etc. Drawing of lines/ motifs and other objects using different medium.
<b>2</b>	Basic Designing and Sketching (on paper sheet):Line, form and motif: geometrical, simplified, naturalized, stylized and abstract and animated. <ul style="list-style-type: none"> <li>• Motifs inspired from traditional Indian arts and crafts, sculpture and historical traditions followed,</li> <li>• Design development: growth of motif, enlarging and reducing a motif, placement for all over pattern.</li> </ul> Colour: colour wheel, intensity chart, value, scale, colour harmonies and colour groups – one colour, two colour and multi-colour groups.
<b>3</b>	Designing use of concept for different fabrics, garments and other household textiles using different colour with reference to various styles such as: <ul style="list-style-type: none"> <li>• Geometric designs.</li> <li>• Naturalized designs: floral and animal motifs</li> <li>• Abstract designs.</li> <li>• Animated design: object based designs</li> <li>• Paper cut and calligraphy patterns.</li> <li>• Aquatic motifs like pebbles, shells.</li> <li>• Kalka and paisley motif.</li> <li>• Ornamental designs and motifs from Indian mythology/traditional arts and crafts.</li> </ul> Designs from sculptures / historical evidence /architecture etc.
<b>4</b>	Learning to record information through various kinds of drawings; developing skills to release and manipulate visual imagery; observational studies through a variety of media and techniques using colour qualities
<b>5</b>	Visualization of garments and dress forms from various angles and perspective with accessories.
<b>6</b>	Use of new media services, web – information, multimedia design studio and design communication studio activities etc for garment design. Visual illustration of textile art and fashion

## References

- 1.Jackson, F. G., Lessons on Decorative Design, Chapman and Hall, London, 1891. [Google Scholar](#)
- 2.Johnson, M., The Elements and Principles of Design: Written in Finger Jello?, Art Education, 48, pp. 57–61, 1995
- 3.Hashimoto, A., Visual Design Fundamentals: A Digital Approach, Charles River Media, Boston, Massachusetts, 2007.

**Schedule of Papers for Three Years**  
**Semester-II of B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

**2. Schedule of Papers for Semester-II**

<b>Schedule of Papers for Semester -II</b>		
<b>FAD/A/II/CC-3(TH)- Fabric Formation and Textile Design</b>		
<b>Fabric Formation and Textile Design (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Fundamentals of weaving, Principles of working of looms (hand looms and power looms), primary and secondary motion of looms and their functions. Working of a loom and its role in fabric formation.	
2	Weaving design: analysis of basic weaves; Plain and twills, Checks and Stripes, colour and weave interaction, derivatives of basic weaves; Satin and sateen weave, dobby, jacquard, pile weave including cut and uncut pile, leno, mockleno, gauze, and other fancy weaves, bedding or nesting. Representation of simple weaves on graph paper with drafting and lifting plan. Fabric identification and design analysis. Fabric specifications of some common fabrics like cambric, poplin, canvas, satin and sateen, drill, gabardine, denim, gauge, corduroy, etc.	
3	Weave notations; plan view and sectional view of cloth; drafting, lifting and pique plan. Design of Plain weave and its derivatives, regular and other twill weaves, twill derivatives, sateen and satin weave and derivatives, simple colour and weave effects, woven stripes and checks, diamond and diaper, mock leno, ordinary honey comb, brighton honey comb, huck-a-back, crepe, bedford cord. Construction and design of terry pile, corduroy and velveteen, etc. Designing of dobby and jacquard weaving. Design analysis of fabric samples of different types and designs. Construction / specification of common commercial fabrics	
4	Principles of knitting, properties and specialty of knitted fabric kinds of yarn and fibres used, types of knitting. Knitting machines.  Weft (hand knitting): stockinet or jersey stitch; rib stitch and circular knitting; machine knitting – single knit, double knit and circular knit.  Warp knitting: tricot, raschel, simplex and Milanese; different knitting designs.	
5	. Types of Knitting: Terms and definition used in warp and weft knitting, comparison of wrap and weft knitting, classification of warp and weft knitting machines. <ul style="list-style-type: none"> <li>• Weft Knitting: Basic structure stretches, designing of weft knitted structures, needle and yarn selection, general calculation of weft knits.</li> <li>• Warp Knitting: Development of warp knitting machines, basic warp knit structure and their representation, patterning mechanisms for warp knit designs, yarns for warp knits, general calculation for wrap knit, Tricot and Raschel Knits: Principles of working of knitting Machines and Production Methods.</li> </ul> Knitting design and structure – property relationship.	
6	Principles of forming non-woven fabrics. Different techniques and mechanism of non-woven fabric formation. Properties of non-woven fabrics.	

<b>FAD/A/II/CC-3 (PR)- - Fabric Formation and Textile Design( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
1	Fabric identification and design analysis. Fabric specifications of some common fabrics like cambric, poplin, canvas, satin and sateen, drill, gabardine, denim, gauge, corduroy, etc.
2	Development of colour and weave effect in fabric samples by hand loom/ sample loom
3	Fabric identification of different woven and knitted samples
4	Development of fabrics by the technique of warp knitting and weft knitting
5	Collection of fabric sample and analysis of the same for file work

## **References**

1. Booth J E, '*Principles of Textile Testing – An Introduction to Physical methods of Testing Textile Fibres, Yarns and Fabrics*', Heywood Books, Temple Press Books Ltd., London, 2 Edition (1964).
2. Grover Elliot and Hamby D S, '*Handbook of Textile Testing and Quality Control*', Wiley Eastern Ltd., Mew Delhi, 1<sup>st</sup> edition (1960).
3. Banerjee N N , '*Weaving Mechanism*', Vol – I, Textiels Book House, India, 10<sup>th</sup> Revised Edition (1993).
4. Blinov I, Shibabow Belay, '*Design of Woven Fabrics*', Mir Publishers, Moscow, 1<sup>st</sup> Edition (1998).

## Schedule of Papers for Semester -II

**FAD/A/II/CC-4 (TH) - Apparel Construction-II (Fundamentals of Cutting and Sewing)**

**Apparel Construction-II (Fundamentals of Cutting and Sewing)(Theory)**

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Standard body measurement and pattern making for adult garments: Standard body measurements and allowances. Sizing and Development of size chart for garments. Basic bodice block drawing of flat layout of different garments according to the standard body measurement for basic skirts, trousers, shirts, frock, Kameez, salwar etc.	
2	Introduction to basic process sequences of garment production and each unit operation involved: objective, principles of working, fundamental concepts of garment styling, designing and drawing (flat sketch), pattern making, marker planning, cutting, sewing and finishing.	
3	Sewing: Different types of seams, different stitches, code of stitches and stitch numbers. Details of different types of industrial and domestic sewing machines and feed mechanism, sewing needles and its specifications, sewing threads; types and requirements. Sewing problems. Testing of sewability and tailorability.	
4	Different types of sewing machine needles used for garment construction and its different parts, causes of needle heating and the ways of minimizing needle heat	
5	Study on different types feeding mechanism and machine beds of sewing machine	
6	Different types of work aids, attachments and folders used in garment sewing	

<b>FAD/A/II/CC-4 (PR)- Apparel Construction-II (Fundamentals of Sewing)( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Development of various types of seams, pleats and their application in garments
<b>2</b>	Sample development with decorative stitches for surface ornamentation and surface embellishment of other accessories.
<b>3</b>	Cutting and sewing of different components of garments as per pattern and marker and their joining by sewing using different seams
<b>4</b>	Practise on Dart Manipulation: shifting of darts, combining darts, dividing darts, concealing darts in yokes and seams lines, converting darts to gathers
<b>5</b>	Practise on Drafting, Adaptation, Layout, Cutting and Construction of the following Garments: skirt, kurta, men and women casual wear – casual trouser, payjama, panjabi, skirt; sari- petticoat, princess line kurta, kalidar kurta, nightie / dressing gown with a shawl collar; sari-blouse, ladies and gent’s casual shirt, lined and reversible jacket, trouser and pants and coat (suit), ladies-salwar/churidar and kameez etc.
<b>6</b>	Development of different garments and decorative samples with surface embellishment.
<b>7</b>	Development of different garments and decorative samples with surface embellishment

### **References**

1. Natalie Bray, *Dress Fitting*, Crosby Lockwood Sons Ltd., London.
2. Lovi A. Knowles, *The Practical Guide to Pattern Making for Fashion Designers, Juniors, Misses and Women*, Fairchild Publication, 2005
3. Cavolyn J. Kundel, Norma R. Hollen, *Pattern Making by the Flat-pattern Method*, Prentice-Hall

## Schedule of Papers for Semester -II

**FAD/A/II/SEC-A (TH)- Computer Theory and Applications**

**Computer Theory and Applications (Theory)**

**Full Marks: 50, Total Credit: 2**

Units	Particulars	No. of Contact Hours
1	What is Computer? Components of Computer; Peripherals; Hardware and Software; History of Computer from 1 <sup>st</sup> Generation to Present. MS Windows: What is Windows? General features of MS Windows	
2	Introduction to MS Word: starting with Word; parts of MS Word screen; starting a new document; navigating the document; file handling; editing the text; formatting the text.	
3	What are graphics? Function of Graphics? Vector tools and Raster tools, Difference between Vector objects and Bitmap images.	
4	Fundamentals of CAD Software and its use: Introduction to CAD Software for designing and drawing of any object with specific shape and dimension. CAD – tools and their uses. Working with art work, scanning, colour fill up, colour reduction, editing and clearing of drawn image using CAD software. Preparation of colour effects on different designs. Two-dimensional and three-dimensional drawing. Use of Auto – CAD and textile design CAD for drawing of objects and designed patterns.	
5	Introduction to different operation systems for effective use of the followings: Inserting Objects, hyperlink and Placing Tables: Inserting of Header and Footer, Page Number, Date and Time, pictures, charts, hyperlink; Placing of Tables in Document, Table Auto Format; Merging and Splitting of Cells; Converting Tables to text and text to table.  Mail Merge, Views, Printing and Creating Styles: Mail Merge; Views; Ruler; Zooming; Summary information; Print setup and Print	
6	Corel Draw: introduction to Corel draw; usage of interactive tools; grouping / ungrouping objects; text editing; special effects; crop tools; magic wand tool; pencil tool; gradient tool; sharpen mode; linear and gradient fill; colour picker; brushes; palettes; import – export; saving files with different extension names; specifying a colour range; to define a colour; to fill a selection with a colour; colour table; to invert an image; equalize image size; to change the size of an image; converting a bitmapped image to a grayscale image; importing images; exporting images.	
7	Photoshop: Introduction to Photoshop and editing of raster images; Using of toolbox and layers; Understanding image parameters, such as image size, resolution, colour modes, Design editing and manipulation using Adobe Photoshop, Colour Correction rendering 2D images. Theme based project using CorelDraw and Adobe Photoshop	

### References

1. W Aldrich, *CAD in Clothing and Textiles*, Blackwell Science Ltd.
2. Manuals of the Software Being Used. - For Corel draw Flash I & II etc
3. Donald Hearn and M. Pauline Baker '*Computer Graphics*, Prentice hall of India, New Delhi
4. Steve Baine, *Using Coreldraw*, Prentice Hall of India, New Delhi
5. Deke McClelland, *Photoshop CS2*, Wiley Dreamtech India Pvt. Ltd.



## Schedule of Papers for Semester-II

**FAD/A/II/GE-4 (TH)- Elements of Fashion Illustration**

### Elements of Fashion Illustration (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Introduction to Fashion: Definition of fashion and fashion life cycle, consumer and fashion relationship. Creative fashion and Fashion season. Fashion sketch and drawings, Fashion based garment design and illustration Factors influencing fashion, style and buying decision of consumers. Style and fashion survey and forecasting.	
2	<b>Fashion illustration and various mediums used in fashion illustration</b>	
3	<b>Study of Normal figure and illustrated figure including 8 heads, 10 heads and 22 heads</b>	
4	Flat drawings: different types of flat drawing and their usages. Model draping: definition and usages	
5	Figure analysis, proportion and disproportion of human figure, different types of figures for both men and women	
6	Study of types and techniques of fashion illustration and study of human anatomy	
7	Application of drawing as an integral part of design process; model drawing and draping; study of proportion, balance and movement of fashion trend.	
8	<b>Rendering of fabrics and its different techniques</b> Fall of the garments.  Different looks of the fabric rendering.  Different ways of surface texture development.  Representation of surface; ornamentation and embellishment.  Appliqués. Basics of Visual Art for Fashion Illustrations.	
9	Different presentation techniques of various wears of children, women and men. A detailed study on illustration of children wear.  A detailed study on illustration of women wear. A detailed study on illustration of men's wear.	
<b>TOTAL</b>		

FAD/A/II/GE-4 (PR)- Elements of Fashion Illustration ( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	<p>Practical Garment design based on theme Rendering: Designing and developing a line of garment based on a particular theme (beachwear; swimwear; casual wear; sportswear; nightwear; cocktail wear; eveningwear; ramp wear; executive wear; traditional Indian costume of different states and their variations in design. Understanding and sketching theme based fashion forecast and garment designing – sourcing of raw materials, developing a line of garment based on theme and fabric selected for specific purpose of wear. Specification sheet preparation, Analysis of garment drape and illustration from different angle. Design and actual preparation of the garment based on pattern and marker. Costing of the garment. Suggested sales promotional measures for marketing a new live of fashion garment.</p>
2	<p>Garment designing and draping with rendering.            Rendering on the croqui using different colour media along with pencils;            Rendering detailed limbs and face drawings on the croqui            Designing of different necklines such as round neckline, square neckline, V neckline etc.            Designing of different sleeves like puff sleeve, raglan sleeve, kimono sleeve etc.            Designing of different skirts like pleated skirt, gathered skirt, gored skirt, skirt with yoke, skirt with waist band; ethnic and western pockets, drapes, folds and gathers, frills, flounces, bias cuts.</p>
3	<p><u>Fashion Illustration Practical for Garments.</u>            Figure drawing and sketching of body features on Paper.            Drawing of human figure from different angles: front, side and back and draping of garments by sketches.            Drawing of different silhouettes            Sketching of styles of different garments for different age groups for varying garment design for children, teenagers and adults and their draping and illustrations.            Preparation of few garments components with variations in necklines, collars, plackets, sleeve, pockets and their variations and actual garment draping and illustration on croquies.            Preparation of garment with variation in Fullness of garments-variations and manipulations of dart, gather, pleat, folds and decorative cuts etc. and their illustrations.            Design and Illustration of different Garments like skirts &amp; tops, pants and shirts blouses and sari, pant, coats &amp; jackets, casual shirts / nightgown, house coats etc.            Illustration of Garment accessories: drawstring &amp; fastenings, tassels &amp; tucks, frills, fringes &amp; gathers, cowls &amp; cascades, hemlines &amp; insertions, lacing, macramé and patch work, pleats, quilting &amp; ties, shirring, smocking and zips, yokes &amp; underskirts.            Sketching and Illustrations of accessories: hats and headgears, footwear; bags &amp; purses, jewellery matching with garment style, design, colour and purpose of wear.            Basic rendering techniques: colour matching using different mediums; stripes, checks; gingham and plaids, patterns and textures, reducing a print, shading</p>
4	<p>Illustration of Textile Garments with variation of components / fabrics / of different textures and patterns by different ways.</p> <p>Design and variation of Different components of garments: sleeves; collars, plackets, pocket and their variations for styling and designing and illustration.            Draping of different types fabrics and garments and their fall.            Illustration of different fabric having varied patterns and textures and colours and weaves for additional draping and styles on garment.            Illustration of different men, women and children wearing practice..</p>

## References

1. Everett F, *Fashion Design*, Usborne Publishing Ltd., London.
2. Kandisky W, *Draw It ! Paint It ! Drawing Course*, Eaglenose Publications Ltd, London, (1983).
3. Turpenny J M, *Fashion Design and Illustration*, Hutchinson Education, London, 4<sup>th</sup>ed., (1986).
4. H Carr and J Poneroy, *Fashion Design and Product Development*, Blackwell Science, London.

## Schedule of Papers for Semester-I I

### FAD/A/II/GE-5 (TH)- Design of Fashion Accessories

#### Design of Fashion Accessories (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Origin of fashion Accessories. Introduction to various fashion accessories.	
2	Study on the development of fashion accessories through ages	
3	History of fashion accessories like jewellery,belts, shoes, footwear, hats, caps, bags etc	
4	Study on various types of bags and their application in regular life. Review on the various raw materials used in bag making.	
5	Study on various types of shoes used in our daily life. Review on the process of making shoes using various types of raw materials	
6	Study on the principles of design of Fashion accessories and the problems in designing fashion accessories.	
7	Study on various types of bag, hats and caps	
8	Study on various types of jewellery by both men and women. History of development of jewellery through ages.	
9	Study of development of decorative and fashionable footwear	
TOTAL		

### FAD/A/II/GE-5 (PR) - Design of Fashion Accessories ( Practical)

Full Marks: 50, Total Credit: 2

Units	Particulars
<b>1</b>	Creation of various types of bags using various types of raw materials like fabric, cord, beads,plastic mat, leather etc
<b>2</b>	Creation of various types of hats and caps by using various raw materials.
<b>3</b>	Deigning of shoes
<b>4</b>	Design development of various types of jewellery

## References

1. Stephens Frings Gini, 2007, Fashion: From Concept to Consumer (9th Edition), Prentice Hall
2. Genova Aneta 2011, Accessory Design, Fairchild Pubns; 1 edition
3. Schaffer Jane, Saunders Sue 2012, Fashion Design Course: Accessories: Design Practice and Processes for Creating Hats, Bags, Shoes, and Other Fashion Accessories, Barron's Educational Series
4. Lau John 2012, Basics Fashion Design 09: Designing Accessories: Exploring the design and construction of bags, shoes, hats and jewellery, A Publishing; 1 edition
5. Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York.
6. Fringes, G.S. (1999), Fashion from Concept to Consumer, 6th edition, NJ, Prentice Hall.
7. Jarnow, J. Dickerson Kitty G (1987), Inside the Fashion Business, New Jersey, Merrill, Prentice Hall.

## Schedule of Papers for Semester-II

### FAD/A/II/GE-6 (TH) - Entrepreneurship Development

#### Entrepreneurship Development (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	<p>Entrepreneurship Development: Concept and social context for entrepreneurship development.</p> <ul style="list-style-type: none"> <li>• Enterprise: Survival enterprise, Micro enterprise and small enterprise.</li> <li>• Different sector: Manufacturing, trading and service sector and traditional sector and non-traditional sector. Entrepreneurial infrastructure.</li> </ul> <p>Entrepreneurship: Definition and motivational characteristics importance women's Entrepreneurship in the Indian Economy. Scope of Entrepreneurship in garment and textile sector. Role of technical and managerial knowledge for entrepreneurship development.</p>	
2	<p>Business environment for the Entrepreneur: Government of India's policy towards promotion of Entrepreneurship, reservation and sanctions for small-scale sector, medium scale sector and large-scale sector. Importance of business communication procedures.</p>	
3	<p>Government role and regulation in business:</p> <ul style="list-style-type: none"> <li>• Agencies for development of Entrepreneurship: Role of SSI, procedure and formalities for setting up SSI, role of industrial development bodies (e.g. MIDC), Development and role of government and non-government bodies (e.g. NISC) in terms of supplying machinery and equipment on higher purchase, voluntary organization, Bank loan, raising finance, financial institutions, institutional network and linkage building, taxation in business.</li> <li>• Governmental regulation and reviews in business, legal matters – licenses, registration, etc.</li> </ul> <p>Selection of location of enterprises, acquiring land and preparation of building, Layout and plan of manufacturing unit, market information and survey, product selection, Raw material sourcing, Manpower development and training, consultancy services and Project cost evaluation.</p>	
4	<p>Launching and Survival of business:</p> <ul style="list-style-type: none"> <li>• Sample production and test marketing, launching new products.</li> <li>• Product design and costing production bottlenecks, financial resourcing.</li> <li>• Project formulation, planning and appraisal.</li> <li>• Buy-outs, franchise, amalgamation and take over.</li> <li>• Support and ancillary services and business communications. Managing financial and non-financial resources.</li> <li>• Some cost studies and economic feasibility study for entrepreneurship development in textile sector.</li> <li>• Entrepreneurial effectiveness, causes of failures and remedies,</li> <li>• Techno-economic feasibility study of any business proposal / project report, Project review and its mid term evaluation.</li> </ul> <p>Legal matters: Licensing, registration, Municipal/ Corporation Laws, Environmental regulations, Labour Laws and Industrial dispute acts, Consumer redressal forum and consumer protection laws.</p>	
5	<p>Market survey, Project preparation and Business communication: Knowledge and skills for market survey and research. Importance of business communication. Elements of project preparation: Principles, procedure, formatting and formulation of project proposal, budget estimate and techno-economic feasibility study of the Project report. Information management, E-commerce. (Factory Act, labour laws and personnel management issues).</p>	
<b>TOTAL</b>		

<b>FAD/A/II/GE-6 (PR) - Entrepreneurship Development ( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Assignment to Develop a project proposal for setting up a yarn making and woven garment factory
<b>2</b>	Assignment to Develop a project proposal for setting up an apparel manufacturing or textile manufacturing factory
<b>3</b>	Project preparation for establishing a dye house or printing factory
<b>4</b>	Project preparation for establishing a knitting factory

## References

1. Deshpandey M V Entrepreneurship of Small Scale Industries, Concept, Growth and Management, Deep and Deep Publication, New Delhi.
2. Stoner Jaf and Vankel C, Management, Prentice Hall of India, New Delhi.
3. Nickell P & Dorsey, J, Management in Family Living, Wiley Estern Limited, 4<sup>th</sup> ed., New Delhi.

**Schedule of Papers for Three Years**  
**Semester-III of B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

**3. Schedule of Papers for Semester-III**

<b>Schedule of Papers for Semester -III</b>		
<b>FAD/A/III/CC-5 (TH) - Textile Chemical Processing -I (Preparatory and Dyeing)</b>		
<b>Textile Chemical Processing -I (Preparatory and Dyeing)(Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Preparatory processes for different textile fabrics before dyeing and printing: Desizing, scouring, bleaching and drying of textiles from natural, man-made fibres and their blends. Mercerisation of cotton, woolenisation of jute, degumming of silk, and scouring of raw wool.	
2	Dyeing: Classification of dyes, Chemical constitution and colour of dyes. General theory of dyeing and application of direct, acid, basic, vat, reactive, disperse, azo dyes on cotton, wool, jute, silk and synthetic fibres using standard methods. Dyeing of textiles with natural dyes.	
3	Colour Science: Colour measuring parameters and colour communication. Colour matching manual and computer – aided. Test of colour fastness to wash, light, rubbing, perspiration and heat etc.	
5	Study on application of various dyes on natural and man-made textiles and their blends	

<b>FAD/A/III/CC-5 (PR)- - Textile Chemical Processing -I (Preparatory and Dyeing)( Practical)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars</b>	
1	Fabric identification and design analysis. Fabric specifications of some common fabrics like cambric, poplin, canvas, satin and sateen, drill, gabardine, denim, gauge, corduroy, etc.	
2	Development of colour and weave effect in fabric samples	
3	Fabric identification of different knitted samples	
4	Development of fabrics by the technique of warp knitting and weft knitting	

## References

1. Needles Howard L, *Textile Fibres, Dyes, Finishes & Processes*, Standard Publishers & Distributors, Delhi, 1<sup>st</sup>ed., 2001.
2. Cook, *Textile Fibres (Vol.5: natural fibres): Vol-2: Synthetic fibres*.
3. Gohl E PG & L D Vilensky, *Textile Science: An Explanation of Fibre Properties*, CBS Publishers & Distributors, Delhi, 2<sup>nd</sup>ed., 1983.
4. Jayaprakashan S, R Gopalakrishan & V Kasinathan, *Fibre Science and Technology*, Komarapalayam, 1<sup>st</sup>ed., 1997.
5. Chakraborty R R & Trevedi SS, '*Technology of Bleaching & Dyeing of Textile Fibres*', Vol – I, Part-2.
6. Gohl E P G & Vilensky L D, '*Textile Science: An Explanation of Fibre Properties*', CBS Publishers and Distributors, Delhi, 1<sup>st</sup> Edition (1987).
7. Hall A J, '*Textile Finishing*', Heywood Books, London, 3<sup>rd</sup> Edition (1966).
8. Marsh J T, '*An Introduction to Textile Finishing*', Chapman & Hall Ltd., London, 5<sup>th</sup> Impression (1953).
9. Marsh J T, '*An Introduction to Textile Bleaching*', B I Publication, New Delhi, 1<sup>st</sup> Indian Edition (1979).
10. Needles Howard L, *Textile Fibres, Dyes, Finishes & Processes*, Standard Publishers & Distributors, Delhi, 1<sup>st</sup>ed. (2001).
11. Shenai V A, '*Technology of Bleaching and Mercerizing*', Vol – III, Sevak publications, Mumbai, 2<sup>nd</sup> Edition (1996).
12. Shenai V A, '*Technology of Textile Processing – Chemistry of Textile Auxiliaries*', Sevak publications, Mumbai, 1<sup>st</sup> Edition (1976).
13. Trotman E R, '*Textile Scouring and Bleaching*', B I Publishing Pvt. Ltd., New Delhi, 1<sup>st</sup> Indian Edition (1993)



### Schedule of Papers for Semester -III

**FAD/A/III/CC-6 (TH) - Textile Surface Ornamentation**

**Textile Surface Ornamentation(Theory)**

**Full Marks: 50, Total Credit: 2**

Units	Particulars	No. of Contact Hours
1	Brief history of Indian textiles from ancient times to the present.	
2	Social, economic, religious, geographical, cultural and other factors which have influenced the development of design and colour in Indian textiles and their significance. Design status of costumes of different states of India and their specialty for men, women and children of respective states.	
3	Study of the textiles, costumes and surface ornamentation of all Indian states	
4	Embroideries <ul style="list-style-type: none"> <li>• Kashida of Kashmir.</li> <li>• Chamba Rumals of Himachal Pradesh.</li> <li>• Phulkari and Baghs of Punjab.</li> <li>• Beadwork, appliqué, ari and mirror work of Gujarat.</li> <li>• Kasuti of Karnataka.</li> <li>• Applique of Pipli (Orissa).</li> <li>• Kanthas of Bengal.</li> <li>• Zardosi and Chikankari of Lucknow.</li> <li>• Manipuri of Manipur.</li> </ul> Machine Embroideries	
5	Dyed, Painted and Printed Traditional Textiles of India: <ul style="list-style-type: none"> <li>• Ikat Textiles of India: Patolas of Gujarat, Bandhas of Orissa, Telia Rumals and Pochhampalli Ikats of Andhra Pradesh.</li> <li>• Tie and Dyed Textiles: Bandhunis of Gujarat and Rajasthan and Leharias of Rajasthan.</li> <li>• Direct Printed Fabrics: Block printed textiles of Sanganer, Masulipatnam &amp; Gujarat and Roghan Printing of Gujarat and Rajasthan.</li> <li>• Resist Printed textiles; Ajrakh, Dabu, Batik.</li> <li>• Painted Textiles: Kalamkari, Matta-ne-pacheri, Pichwai, Pattachitra and Madhubani. Block Prints of Rajasthan. , Andhrapradesh, and Gujarat</li> </ul>	

<b>FAD/A/III/CC-6 (PR)- Textile Surface Ornamentation( Practical)</b>	
<b>Full Marks: 50, Total Credit: 4</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Hand and Machine Embroidery Practice in general.
<b>2</b>	Creation and Practice of Surface Ornamentation through stitching/ surface embellishment/ trimmings and tie-dye and Printing & Painting: Block, stencil, spray, screen, discharge, hand painting on fabrics.
<b>3</b>	<p>Studies and practice of following Traditional Embroideries of India</p> <ol style="list-style-type: none"> <li>Kantha of Bengal</li> <li>Chikankari of Uttar Pradesh</li> <li>Kathiawari of Gujarat</li> <li>Zardozi of Uttar Pradesh</li> <li>Pipli of Orissa</li> <li>Kashida of Kashmir</li> <li>Manipuri of Manipur</li> <li>Chamba of Himachal Pradesh</li> <li>Phulkari of Punjab</li> <li>Kasuti of Karnataka</li> </ol> <p>Study and practice of popular Embroideries of the countries other than India.</p>
<b>4</b>	Creation of surface ornamentation and establishment by Miscellaneous Methods of Surface Ornamentation: Quilting, patchwork, jariwork, sarawski and beadwork, appliqué and hand knitting, crocheting, macramé, tatting, use of trimmings, etc.

## **References**

1. Reader's Digest, *Complete Guide to Sewing*, Reader's Digest Association.
2. Heidi Kummli et al, *The Art of Bead Embroidery: Techniques, Designs and Inspiration*, Kalmbach Publishing Company, Books Division, 2007
3. Katherine Shaughnessy, *The New Crewel: Exquisite Designs in Contemporary Embroidery*, Sterling Publishing, 2005
4. T. D. Dillmont-Encyclopedia of Needle work.
5. Anchor Book of Lace Crafts –B.T. Batsford Ltd, London.

**Schedule of Papers for Semester -III****FAD/A/III/CC-7 (TH)- Advance Pattern Making and Garment Construction****Advance Pattern Making and Garment Construction (Theory)****Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Standard body measurement and pattern making for adult garments: Standard body measurements and allowances. Sizing and Development of size chart for garments. Basic bodice block drawing of flat layout of different garments according to the standard body measurement for basic skirts, trousers, shirts frock etc.	
2	Study of basis of garment construction and pattern making for children, men and women's wear, pattern making for woven fabrics and knitted fabrics methods of fabric laying marker planning and cutting for garment construction for children, men's and women's wear. According to the pattern preparation of marker plan, study on different types of garment	
3	Pattern making for men's wear; drafting men's shirt and trouser; block designing of different shirt and trousers with variations of different components and measurements. Casual jacket and sloper construction. Development of style and designing of men's garments with variations in collars, sleeves, pleats, pockets, darts, gathers etc.	
4	Pattern making for women's wear. Drafting Women's top or shirt, trouser, skirt, salwar-kameez with variations and manipulation of design element having balance and fit.	
5	Introduction to basic process sequences of garment production and each unit operation involved: objective, principles of working, fundamental concepts of garment styling, designing and drawing (flat sketch), pattern making, marker planning, cutting, sewing and finishing.	
6	Selection of fabrics for garment construction depending on its end use Classification and selection of fabric. Fabric and garment relationship.	
7	Drafting, adaptation, layout for construction of adult formal wear garments and occasion wear (festival / party dress, etc), garments, Pattern modifying and draping of different patterns of men's and women's casual wear, party wear, beachwear and sports wear.	

**FAD/A/III/CC-7 (PR)- Advance Pattern Making and Garment Construction ( Practical)****Full Marks: 50, Total Credit: 4**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Pattern making of fashionable ladies wear
<b>2</b>	Pattern making for men's wear
<b>3</b>	Cutting, laying and stitching of garments for ladies and gents wear for different seasons and occasion

**References**

1. H J Armstrong, *Pattern Making for Fashion Design*, Harper Collins Publishers, NewYork, 1987.
2. Natalie Bray, *Dress Pattern Designing: The Basic Principles of Cut and Fit*, 5<sup>th</sup>Ed, Blackwell Science, London, 1996.
1. Reader's Digest, *Complete Guide to Sewing*, Reader's Digest Association.
2. Heidi Kummli et al, *The Art of Bead Embroidery: Techniques, Designs and Inspiration*, Kalmbach Publishing Company, Books Division, 2007
3. Katherine Shaughnessy, *The New Crewel: Exquisite Designs in Contemporary Embroidery*, Sterling Publishing, 2005

## Schedule of Papers for Semester -III

**FAD/A/III/AECC-2 (TH) Environmental Science**

### **Environmental Science(Theory)**

**Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Fundamentals of environment, ecology, environmental pollution	
2	Natural resource management. sustainable development and environmental management	
3	Eco system, earth science, geological hazards, earth resources, water resources	
4	Natural resources, water resource management	
5	Environmental management in industries and sustainable development	
6	Different types of pollution and its concept	

### **References**

1. C.S.Rao, Environmental Pollution Control Engg, New – Age- International (P) Ltd, Publishers, India, 2004.
2. P. R. Enrlich & J.P. Heldren, Human Ecology, 1973

## Schedule of Papers for Semester-III

### FAD/A/III/GE-7 (TH) - Fashion Marketing (Visual merchandising, Retail and E Tail Management)

#### Fashion Marketing (Visual merchandising, Retail and E Tail Management) (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Marketing Management: Role of marketing; strategic management and marketing processes; market segmentation and target marketing; marketing communication decisions; physical distribution decisions; pricing decisions; marketing information system and marketing research and Brand Building	
2	Textile Merchandising: Consumer demand and fashion marketing; creation of fashion trend, trend setting change of fashion cycle and consumer acceptance. Factors influencing consumer's demand / acceptance / buying decisions.	
3	Costing and Pricing – Pricing: economic concept and objectives Factor influencing price of garments. Costing of garments and pricing decisions, pricing practices, strategies and policies. Costing and pricing methods based on breakeven analysis and other methods.	
4	Quality control in textile merchandising quality assurance and customers satisfaction	
5	Reinforcement of pricing policies and sales promotion techniques. Problems faced by Indian consumer and suggested remedies.	
6	Retail fashion merchandising: Concept, types of retail organization, fashion retailing, value- satisfaction and quality. Sales Promotional policies, supply chain management and retail distribution management.	
7	Consumer Protection: quality control, standardization, labeling, consumer Association / organization for protection	
8	Marketing of fashionable garments, different plans for utilizing market demand for the fashion trend, different incentive schemes related to marketing of fashionable articles / garments. Understanding fashion movement, prediction of fashion life cycle, analysis of customer's fashion preferences. CRM and case studies.	
9	Fashion Marketing: Fashion forecasting, research and analysis, fashion dynamics, factors for change in fashion trends. Important fashion terms, fashion cycle, fashion costing- work sheet – specification sheet, etc. Customer Identification with fashion cycle	
10	International Marketing and export formalities: Multinational and textile export companies. Practice and problems of international marketing. Regulations of export and international trade in textiles. Government schemes and assistance Export formalities for garment export. Export market chain management.	
11	Visual merchandising (VM) : Concept , purpose and role. Different modes of display and sales counter planning.Preparation of visual plates/photo/chart for promotional measures for visual merchandising. Use of different media/places/forms etc. For visual merchandising of fashion through different mode. Fashion photography and its utilization. Role of Colour and texture inVM. Concept of line and composition in VM. Types of display, Store planning, Design and Interior of Show room, POP Display, formulating VM Plan.	
<b>TOTAL</b>		

**FAD/A/III/GE-7 (PR) -Fashion Marketing (Visual merchandising, Retail and E Tail Management) ( Practical)**

Full Marks: 50, Total Credit: 2

Units	Particulars
1	Assignment on Development of project for visual merchandising of specific product by drawing and planning
2	Assignment of Development of a store house/ display house with proper illumination and application of light in visual merchandising concept
3	Assignment or survey for supplychain management for retail and E-tail marketing
4	Market survey and fashion photography and their critical analysis

**References**

1. Cotler Philip, '*Principles of Marketing*', Prentice Hall, 3<sup>rd</sup> Edition.
2. Sherlekar S A, '*Marketing Management*', Himalaya Publishing Hpuse, Bombay, 2<sup>nd</sup> Edition (1982).
3. D. Amarchand and B. Varadarajan, '*An Introduction to Marketing Management*', Vikas Publishing House Pvt. Ltd., 1981.
4. R S Davar, '*Modern Marketing Management*', Progressive Corporation Pvt. Ltd., Bombay – Madras, 1<sup>st</sup>Ed.
5. Leslie David Burns, Nancy O. Bryant , 2011The Business of Fashion Fairchild Publications
6. Elaine Stone, 1987, Fashion Buying, McGraw- Hill
7. Mary Frances Drake, Janice Harrison Spoone, Herbert Greenwald, 1992 ,Retail Fashion Promotion and advertising Macmillan
8. Michele M. Granger, Tina M. Sterling , 2011 ,Fashion Entrepreneurship Retail Business Planning, Fairchild Publications
9. Lynda Gamans Poloian, 2009, Multichannel retailing, Fairchild Publications

### **Schedule of Papers for Semester-III**

**FAD/A/III/GE-8 (TH) - Financial Management and Costing**

#### **Financial Management and Costing (Theory)**

**Full Marks: 50, Total Credit: 4**

<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Sources of finance, Investment decision, public and government borrowings.	
2	Working capital, bank funding, calculative risks, financial planning and control, inventory control and purchase technique, marketing link and sales promotion measures.	
3	Cost-Vs-revenue and profit.	
4	Financial statement analysis, Financial indicators and ratios. Profit volume ratio. Break-even analysis. Accounting ratios. Debt–equity ratio, DSCR, IRR etc., Turnover, Govt. duties and taxes.	
5	Budgeting and preparation of budget estimates, Balance Sheet, Profit and loss account.	
6	Principles and object of costing. Different method of costing.	
7	Revenue generation. Manufacturing cost-control techniques. Cost reduction approaches in garment manufacturing industry. Factor affecting cost and pricing. Cost-volume-profit analysis (yarn and fabrics). Costing applicable for textile product / and garments etc. Analysis of fund flow, cash flow.	
<b>TOTAL</b>		



<b>FAD/A/III/GE-8 (PR)- Financial Management and Costing ( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Assignment for Preparation of budget for a garment company for the current financial year
<b>2</b>	Assignment for Preparation of cost sheet of garments and its pricing
<b>3</b>	Assignment of Project planning in terms of cashflow for setting up a textile or garment industry.

### References

1. Deshpandey M V Entrepreneurship of Small Scale Industries, Concept, Growth and Management, Deep and Deep Publication, New Delhi.
2. Stoner Jaf and Vankel C, Management, Prentice Hall of India, New Delhi.
3. Nickell P & Dorsey, J, Management in Family Living, Wiley Estern Limited, 4<sup>th</sup> ed., New Delhi.
4. Cost Accounting: methods and Problems: B K Bhar
5. Any other standard textbook on 'Financial Management' and 'Costing' and 'Management Accounting' as suggested by Class teacher.

**Schedule of Papers for Three Years**  
**Semester-IV of B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

**Schedule of Papers for Semester-IV**

<b>Schedule of Papers for Semester-IV</b>		
<b>FAD/A/IV/CC-8 (TH)- Textile Chemical Processing- II (Printing and Finishing)</b>		
<b>Textile Chemical Processing- II (Printing and Finishing) (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Printing : Different styles of printing: direct, resist, discharge, flock and transfer printing. Different methods of printing: block, stencil, roller, screen and rotary screen printing. Brief idea about the printing tables .Printing with different dyes and pigments. Process of printing and print fixation method.	
2	<p>Aesthetic and Functional Finishing: Conventional finishes (general, mechanical and chemical finishing) and special functional finishes to be given to textiles from cotton and man-made fibres and their blended articles, garments:</p> <ul style="list-style-type: none"> <li>• Calendaring and pre-shrinking, Softening and stiffening, Crease resistance or wrinkle recovery finishes, Water repellent finishes and water proofing, Antimicrobial / rot resistance finishes, Flame retardant / flame proof finishes of cellulosic textiles, Bio polishing of cotton, Enzyme washes - Vs - stone wash of cotton denim / jeans</li> <li>• Soil release / stain resistance finishes, Antistatic finishes, UV Protection finishes of synthetic textiles and Silky finish of polyester (weight reduction of polyester).</li> <li>• Weighting of silk fabrics, Scroopy - Finish of silk fabrics.</li> <li>• Decatizing of woolen and silk goods, Shrink proofing of woolen goods, Milling of woolen goods etc.</li> <li>• Special finishing like chemolonic, costume/ fragrance, thermo-tropic, chromotropic and other smart polymeric finishes</li> </ul> <p>Fault free finishes on textiles and garments.</p>	

FAD/A/IV/CC-8 (PR)- Textile Chemical Processing- II (Printing and Finishing) ( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Printing using different dyes: Block, and screen, khadi, stencil & spray; Resist (Tie & dye, Batik) and discharge printing. <i>Preparation of an article using any of the above method and using own design.</i> Preparation of printing screen and pigment printing.
2	Chemical Finishing: Application of common finishes such as softening agent, stiffening agent, optical brighteners, bleaching agent, etc. on cotton and other textiles and garments and their evaluation.  Application of anti-crease, water repellent /water proof, flame retardant and rot resistant finishes on cotton and other textiles and garments.  Application of anti-static and soil release finishes on synthetic textiles and garments. Application of enzyme on cotton textile fabrics i.e. bio-polishing etc.  Evaluation of important functional properties of textiles and garments before and after different finishing

## References

1. Chakraborty R R & Trevedi SS, '*Technology of Bleaching & Dyeing of Textile Fibres*', Vol – I, Part-2.
2. Gohl E P G & Vilensky L D, '*Textile Science: An Explanation of Fibre Properties*', CBS Publishers and Distributors, Delhi, 1<sup>st</sup> Edition (1987).
3. Hall A J, '*Textile Finishing*', Heywood Books, London, 3<sup>rd</sup> Edition (1966).
4. Marsh J T, '*An Introduction to Textile Finishing*', Chapman & Hall Ltd., London, 5<sup>th</sup> Impression (1953).
5. Marsh J T, '*An Introduction to Textile Bleaching*', B I Publication, New Delhi, 1<sup>st</sup> Indian Edition (1979).
6. Needles Howard L, '*Textile Fibres, Dyes, Finishes & Processes*', Standard Publishers & Distributors, Delhi, 1<sup>st</sup>ed. (2001).
7. Shenai V A, '*Technology of Bleaching and Mercerizing*', Vol – III, Sevak publications, Mumbai, 2<sup>nd</sup> Edition (1996).
8. Shenai V A, '*Technology of Textile Processing – Chemistry of Textile Auxiliaries*', Sevak publications, Mumbai, 1<sup>st</sup> Edition (1976).
9. Trotman E R, '*Textile Scouring and Bleaching*', B I Publishing Pvt. Ltd., New Delhi, 1<sup>st</sup> Indian Edition (1993)

## Schedule of Papers for Semester-IV

**FAD/A/IV/CC-9 (TH) - Fashion Design Development and Fashion Illustration**

### Fashion Design Development and Fashion Illustration (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	<p>Fundamental knowledge of Illustration: Demonstration and understanding of the historical evolution and visual characteristics of the work of artists, designers and craft people.</p> <p>Investigation of historical, contextual and contemporary practice, understanding of others' writings and critiques about a range of art, craft and design work and present a personal view.</p> <p>Exploration of professional work to develop understanding of visual language, analysis of visual studies of eminent fashion designers and developing and understanding.</p> <p>Exploring internal and external architecture, perspective, developing of personal approach in life drawing.</p>	
2	<p><b><u>Fashion Illustration</u></b></p> <p>Principles of figure drawing and sketching of body features.</p> <p>Drawing the human figure form from different angles: front, side and back.</p> <p>Drawing different silhouettes.</p> <p>Sketching styles of garments for different age groups: children, teenagers and adults</p> <p><b>Illustrations of Garments &amp; garment design details:</b> Variations in necklines &amp; collars, sleeve details, skirts &amp; pants, blouses, coats &amp; jackets; drawstring &amp; fastenings, tassels &amp; tucks, frills, fringes &amp; gathers, cowls &amp; cascades, hemlines &amp; insertions, lacing, macramé and patch work, pleats, quilting &amp; ties, shirring, smocking and zips, yokes &amp; underskirts and their illustrations.</p> <p>Design and sketching of accessories, hats and headgears, footwear; bags &amp; purses, jewellery matching and befitting with garment style / design / colour and purpose.</p> <p>Basic rendering techniques: colour matching using different mediums; Different shading – Deep and Light. stripes, checks; gingham and plaids, patterns and textures, enlarging and reducing a print, shading and texturing differently, etc.</p> <p>Theme Rendering: developing a line of garment based on a theme (beachwear; swimwear; casual wear; sportswear; nightwear; cocktail wear; eveningwear; ramp wear; executive wear; traditional Indian costume and festival or occasional party wear).</p>	
3	<p><b>Garment Design and Analysis:</b> Elements of Textile Design: forms, balance, rhythm, symmetry, colours, relation of colour with fashion.</p> <p>To analyze trends of fashionable garments and cause of fashion or design preferences and related market research, analysis of customer behaviour, application of fashion analysis (fashion elements, and market research, fashion awareness and combination of factors in fashion / design selection). Identification and forecast of colour and fashion preferences and search of fashion elements for visual merchandising of garments.</p> <p>Current fashion trends and market intelligence, exploitation and experimentation with the formal elements of fashion design, development and expansion of visual awareness.</p> <p>Development of conceptual thinking and visual identity, designing creatively for a number of customers, functions and markets, implementation of visual rendering in the patterns and development of textile fabrics and garments.</p>	
<b>TOTAL</b>		

FAD/A/IV/CC-9 (PR)- Fashion Design Development and Fashion Illustration ( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Working on individual themes, comparative study between the various materials while developing individual themes; personal investigation and experimentation of different materials.
2	Students' assignment to solve problems with the understanding of market and production constraints, street scenario and designing of various types of dresses like formal, casual, semi-formal, leisure by line sketch.
3	<b>Fashion Illustrations details:</b> figure studying with different styles, hand, feet, hairstyles, face etc. Rendering and types of rendering (with water colour, steadler colour, pen rendering), draping of garments in croqui.
4	Spatial representation through colour and line. Basics of visual language and knowledge to use materials and media in art, craft and design.

## References

- 1 Everett F, *Fashion Design*, Usborne Publishing Ltd., London.
- 2 Kandisky W, *Draw It! Paint It! Drawing Course*, Eaglenose Publications Ltd, London, (1983).
- 3 Turpenny J M, *Fashion Design and Illustration*, Hutchinson Education, London, 4<sup>th</sup>ed., (1986).
- 4 H Carr and J Poneroy, *Fashion Design and Product Development*, Blackwell Science, London.

**Schedule of Papers for Semester-IV****FAD/A/IV/CC-10 (TH)- Sizing, Draping and Texture Mapping of Garments****Sizing, Draping and Texture Mapping of Garments (Theory)****Full Marks: 50, Total Credit: 4**

<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Garment Sizing: Sizing of garments in different countries, principles of sizing and development of size charts. Standardization of garment sizes.	
2	Grading: Introduction, grading terminology, methods of grading: stacked and track and types of grading	
3	Grading of Patterns to Various Sizes: Basic Bodice, Basic Skirt, Basic shirt and Trouser, Princess-Line Bodice, Bodice with Yokes, Panel Skirts, etc.	
4	Application of computer in garment sizing and size standardization.	
5	Sizing of different components of men's, women's and children wear, (shirts/ trousers/salwar – kameez, skirts and tops, blouses, petticoat, pants etc), and their assembling. Fitting of garments as per size.	
5	Introduction to Draping of garments and preparation of an adhesive dress-form.	
6	Draping of Basic Bodice and Variations by Dart manipulation including variations in yokes and style-lines neckline and other components.	
7	Draping a basic skirt with its variation (Drindle Skirt, Dome Skirt, Flared Skirt, Gored Skit, Pleated Skirt, Hip Yoke Skirt)	
8	Draping Collars (Manderin Collar, Band Collar, Convertible Collar, Peter Pan Collar, Shawl Collar, etc.) and Sleeves (Basic Sleeve, Dolman Sleeve, Raglan Sleeve, Kimono Sleeve, etc.)	
9	Draping of Different Pattern and construction of men and women garments with draping of different components	
<b>TOTAL</b>		

**FAD/A/IV/CC-10 (PR) - Sizing, Draping and Texture Mapping of Garments ( Practical)****Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Draping of Basic Bodice and Variations by Dart manipulation including variations in yokes and style-lines neckline and other components.
<b>2</b>	Draping a basic skirt with its variation (Drindle Skirt, Dome Skirt, Flared Skirt, Gored Skirt, Pleated Skirt, Hip Yoke Skirt)
<b>3</b>	Draping Collars (Manderin Collar, Band Collar, Convertible Collar, Peter Pan Collar, Shawl Collar, etc.) and Sleeves (Basic Sleeve, Dolman Sleeve, Raglan Sleeve, Kimono Sleeve, etc.)
<b>4</b>	Draping of Different Pattern and construction of men and women garments with draping of different components

**References**

1. Natalie Bray, *Dress Fitting*, Crosby Lockwood Sons Ltd., London.
  2. Gerry Cooklin, *Pattern Grading for Women's Clothes*, Blackwell Science.
  3. Hilde Jaffe and Nurie Relis, *Draping for Fashion Design*, Prentice Hall, New Jersey.
  4. C A Crawford, *The Art of Fashion Draping*, Fairchild Publication, New York.
  5. Hilde Jaffe and Nurie Relis, *Draping for Fashion Design*, Prentice Hall, New Jersey.
  6. C A Crawford, *The Art of Fashion Draping*, Fairchild Publication, New York.
- Lynn Hillson, *Practical Home Dressmaking*, Odhams Press Ltd., Long Acre, London

<b>Schedule of Papers for Semester-IV</b>		
<b>FAD/A/IV/SEC-B (TH)- Fashion Event Management and Seminar Presentation</b>		
<b>Fashion Event Management and Seminar Presentation (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Introduction to event Management- types, categories, sports, rallies, wedding, Fashion corporate events.	
2	Principles of event management, key roles, fashion show, fairs and trade show, product launch.	
3	Role of event co-ordinator, administration, design, marketing, operations, risks etc.	
4	Preshow marketing and post event follow up.	
5	Creating a pre and post event promotion plan, building media relations, preparing press release, post show evaluation, ensuring legal compliance, safety and security.	
6	Licenses and permission obtained, Risk management for prevention of hazards, security for people and merchandise.	
7	Event planning, costing and man power planning.	
<b>TOTAL</b>		

## References

1. Everett Judith C., Swanson Kristen K. (2012), Guide to Producing a Fashion Show (3rd Edition), Fairchild Publications, NY
2. Silvers Julia Rutherford (2012), Professional Event Coordination, Wiley; 2nd edition
3. Taylor Paula,(2012), How to Produce a Fashion Show, from A to Z , Pearson Prentice Hall



## Schedule of Papers for Semester-IV

**FAD/A/IV/GE-9 (TH) - Fashion Journalism and Communication**

### Fashion Journalism and Communication (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	<b>Fashion Journalism: introduction to fashion journalism, role of fashion journalism in promoting fashion industry, impact of fashion journalism in today's fashion trend, fashion journalism as a career</b>	
2	<b>Elements of reporting on fashion events and shows in journals and dailies highlighting fashion forecast, creativity and inspiration of designers with emphasis on accessories and textiles art and design for fashion garments and utility garments.</b>	
3	<b>Fashion Photography: introduction to fashion photography; role of fashion photography in fashion industry; demand of fashion photography; maestros in fashion photography; impact of fashion photography in modern fashion trend; future of fashion photography as a career</b>	
4	Fashion communication: introduction to fashion communication, role of fashion communication in marketing of garments, role of computer in fashion communication, tools of fashion communication	
<b>TOTAL</b>		

### FAD/A/IV/GE-9 (PR)- Fashion Journalism and Communication ( Practical)

**Full Marks: 50, Total Credit: 2**

Units	Particulars
<b>1</b>	Learning to do fashion photography
<b>2</b>	Learning about various ways of fashion communication and uses of various techniques of fashion communication
<b>3</b>	Preparation of small video recording on fashion show and reporting on the same and do critical analysis

### References

1. By Don E. Schultz, Stanley I. Tannenbaum, Anne Allison- Advertising Strategy
2. By Paul Fifiield- Marketing Strategy
3. By Darren Gelder, Paul Woodcock - Marketing and Promotional Strategy
4. Nancy Hall-Duncan -The history of fashion photography
5. Michael Langford -Photography
6. Catherine Chermayeff -Fashion photography

<b>Schedule of Papers for Semester-IV</b>		
<b>FAD/A/IV/GE-10 (TH) - Behavioral Science and Human Resource Management</b>		
<b>Behavioral Science and Human Resource Management (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	<b>Human Resource Management, leadership, human resource planning and selection policy</b>	
2	<b>Management information systems, Organisational management, organisational theory and behaviour</b>	
3	<b>Performance appraisal</b>	
4	<b>Human resource development and staffing</b>	
5	<b>Business organization and communicative skill</b>	
6	<b>Organisational decisions, employee development and managerial skill</b>	
<b>TOTAL</b>		

<b>FAD/A/IV/GE-10 (PR)- Behavioral Science and Human Resource Management( Tutorial)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars of assignments</b>	
<b>1</b>	Assignment on development of organizational structure of garment industry and planning the personnel management	
<b>2</b>	Assignment on preparing a project report on the staff selection process and training of personnel	

## References

1. Dessler, G. Fundamentals of Human Resource Management (4th Edition, Pearson)
2. D'Cenzo, David A., Stephen P. Robbins, and Susan L. Verhulst, Human Resource Management, John Wiley and Sons, NewDelhi.
3. Gomez-Mejia, Luis R., D. B. Balkin, and R. L. Cardy, Managing Human Resources, Prentice Hall, NewJersey.
4. Ian, Beardwell, and Len Holden, Human Resource Management, Prentice Hall.
5. Dessler, Garry, Human Resource Management, Prentice Hall of India.

**Schedule of Papers for Three Years**  
**Semester-V of B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

**Schedule of Papers for Semester-V**

<b>Schedule of Papers for Semester-V</b>		
<b>FAD/A/V/CC-11 (TH) - Computer Aided Fashion Designing</b>		
<b>Computer Aided Fashion Designing (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Learning about tools of M.S. paint, paint brush; use of various colours and to edit colours. Drawing, copying, scanning and transforming images.	
2	Learning about interactive tools of corel draw; import and export of images; resize image. Drawing, shaping, aligning, editing and grouping and ungrouping images.	
3	Learning about tools of Flash for graphics design and animation; editing graphics and animation; adding movies and sound with text; creating pattern layers.	
4	Learning about Adobe Photoshop; manipulating colour table; CMYK colour conversion; adjusting hue saturation. Photoshop: Introduction to Photoshop and editing of raster images; Using of toolbox and layers; Understanding image parameters, such as image size, resolution, colour modes, Design editing and manipulation using Adobe Photoshop, Colour correction and rendering 2D images.	
5	Introduction to Auto CAD; drawing of simple objects in scale using Auto CAD; design of components and assembling layout of a factory shed; design and drawing of three dimensional objects; use of different Auto CAD tools.	
<b>TOTAL</b>		

<b>FAD/A/V/CC-11(PR) - Computer Aided Fashion Designing ( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	Practice to get acquainted with tools of M.S. paint, paint brush; use of various colours and to edit colours. Drawing, copying, scanning and transforming images.
<b>2</b>	Practice to get acquainted with interactive tools of corel draw; import and export of images; resize image. Drawing ,shaping, aligning, editing and grouping and ungrouping images.
<b>3</b>	Practice to get acquainted with tools of Flash for graphics design and animation; editing graphics and animation; adding movies and sound with text; creating pattern layers.
<b>4</b>	Practice to get acquainted with Abode Photoshop; manipulating colour table; CMYK colour conversion; adjusting hue saturation. Photoshop: Introduction to Photoshop and editing of raster images; Using of toolbox and layers; Understanding image parameters, such as image size, resolution, colour modes, Design editing and manipulation using Adobe Photoshop, Colour correction and rendering 2D images.
<b>5</b>	Preparation of Motifs in lattices and placement of different repeats; Using digital colour theory and derivation of screens for flat screen printing; Transferring the file from vector to raster image. Making of Digital Flat Sketches and illustrations using freehand, Bezier and Shape tool.
<b>3</b>	Theme based assignment on designing using Coreldraw , Adobe Photoshop and Flash-I and II softwares.

## References

1. W Aldrich, *CAD in Clothing and Textiles*, Blackwell Science Ltd.
2. Manuals of the Softwares Being Used.
- 3 Donald Hearn and M. Pauline Baker '*Computer Graphics*, Prentice hall of India, New Delhi
4. Steve Baine, *Using Coreldraw*, Prentice Hall of India, New Delhi
5. Deke McClelland, *Photoshop CS2*, Wiley Dreamtech India Pvt. Ltd.

### Schedule of Papers for Semester-V

FAD/A/V/CC-12 (TH)- Creative Pattern Making and Garment Design

#### Creative Pattern Making and Garment Design (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Standard body measurement and pattern making for adult garments: Standard body measurements and allowances. Sizing and Development of size chart for garments. Basic bodice block drawing of flat layout of different garments according to the standard body measurement for basic skirts, trousers, shirts frock etc.	
2	Study of basis of garment construction and pattern making for children, men and women's wear, pattern making for woven fabrics and knitted fabrics methods of fabric laying maker planning and cutting for garment construction for children, men's and women's wear. According to the pattern preparation of marker plan, study on different types of garment	
3	Pattern making for men's wear; drafting men's shirt and trouser; block designing of different shirt and trousers with variations of different components and measurements. Casual jacket and sloper construction. Development of style and designing of men's garments with variations in collars, sleeves, pleats, pockets, darts, gathers etc.	
4	Pattern making for women's wear. Drafting Women's top or shirt, trouser, skirt, salwar-kameez with variations and manipulation of design element having balance and fit.	
5	Introduction to basic process sequences of garment production and each unit operation involved: objective, principles of working, fundamental concepts of garment styling, designing and drawing (flat sketch), pattern making, marker planning, cutting, sewing and finishing.	
TOTAL		

FAD/A/V/CC-12 (PR) - Creative Pattern Making and Garment Design ( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Design Development of garments for men's wear with special reference to designer costumes and special purpose wear
2	Design Development of garments for women's wear with special reference to designer costumes, special purpose wear
3	Design development for maternity wear, swim wear, beach wear etc.

## References

1. H J Armstrong, *Pattern Making for Fashion Design*, Harper Collins Publishers, NewYork, 1987.
2. Natalie Bray, *Dress Pattern Designing: The Basic Principles of Cut and Fit*, 5<sup>th</sup>Ed, Blackwell Science, London, 1996.
4. Reader's Digest, *Complete Guide to Sewing*, Reader's Digest Association.
5. Heidi Kummli et al, *The Art of Bead Embroidery: Techniques, Designs and Inspiration*, Kalmbach Publishing Company, Books Division, 2007
6. Katherine Shaughnessy, *The New Crewel: Exquisite Designs in Contemporary Embroidery*, Sterling Publishing, 2005

### Schedule of Papers for Semester-V

FAD/A/V/DSE-A-1 (TH)- Apparel Industry, Production Planning and Control

#### Apparel Industry, Production Planning and Control (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Production, systems of production, people and production	
2	Production planning, flow chart process of production, two handed process chart, outline process chart, network analysis	
3	Production planning, long term planning, short term planning, capacity analysis	
4	Plant layout, line layout, material handling, production control	
5	Work study, Method study, Garment engineering, line balancing, activity sampling, cycle checks, time study, etc	
TOTAL		

FAD/A/V/DSE-A-1(PR)- Apparel Industry, Production Planning and Control ( Practical)

Full Marks: 50, Total Credit: 2

Units	Particulars
1	Development of activity sampling chart of an industry
2	Preparing charts on work study, method study
3	Preparing sample plant layout under different production systems

### References

1. A.J. Chuter., " Introduction to Clothing Production Management ", Blackwell Scientific Publications
2. David J. Tyler., " Materials Management in Clothing Production ", Blackwell Scientific Publications Professional Books.

### Schedule of Papers for Semester-V

FAD/A/V/DSE-A-2 (TH) - Colour Science, Dyeing and Finishing of Garments

#### Colour Science, Dyeing and Finishing of Garments (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Colour Science and Computer Aided Colour Measurement and Matching: Introduction to colour science, colour terms and definitions, colour communication, computer aided measurement of colour parameters of textiles. Theory of computer aided colour matching and formulation generation. Preparation of colour database for textile dyes. Special representation of colours, lines and knowledge to use different material and media in art, craft and textile design work through use of computer aided tools and software.	
2	Wet processing and different methods of washing of garments for specific purpose, dry & steam processing of garments. Specific garment processing machines and their working.	
3	Softening of garments by different methods: aerodynamic principles, hydro entangling method, chemical method etc. chemical finishes. Speciality mechanical finishes like, raising, peach-skin finish. Speciality chemical finishes.	
4	Garment washing, bleaching, fading and dyeing; garment processing and washing machines and their working.	
5	Different types of garment finishing: Finishing of cotton denims - regular/irregular fading, sandblasting, Acid washing and stonewashing. Enzyme washing, stone washing, stain repellent finish, soil release finish, fire retardant finish, wrinkle resistance finish, fragrant finish, thermotropic or chromotropic and colour reversal finish, cosmeto finish, ice touch finish, UV protective finish and other protective finishes like protection against heat/cold/rain/sun/fire, etc. Fault free garment finishes.	
TOTAL		



FAD/A/V/DSE-A-2 (PR)- Colour Science, Dyeing and Finishing of Garments( Practical)	
Full Marks: 50, Total Credit: 2	
Units	Particulars
1	Wet processing and different methods of washing of garments
2	Softening of garments by different methods:
3	Different types of garment finishing:
4	Measurement of colour values

## References

1. Chakraborty R R and Trivedi SS, '*Technology of Bleaching & Dyeing of Textile Fibres*', Vol – I, Part-2.
2. Gohl E P G and Vilensky L D, '*Textile Science: An Explanation of Fibre Properties*', CBS Publishers and Distributors, Delhi, 1<sup>st</sup> Edition (1987).
3. Marsh J T, '*An Introduction to Textile Finishing*', Chapman & Hall Ltd., London, 5<sup>th</sup> Impression (1953).
4. Marsh J T, '*An Introduction to Textile Bleaching*', B I Publication, New Delhi, 1<sup>st</sup> Indian Edition (1979).
5. Shenai V A, '*Technology of Bleaching and Mercerizing*', Vol – III, Sevak publications, Mumbai, 2<sup>nd</sup> Edition (1996).
6. Shenai V A, '*Technology of Textile Processing – Chemistry of Textile Auxiliaries*', Sevak publications, Mumbai, 1<sup>st</sup> Edition (1976).
7. Shenai V A, '*Technology of Dyeing*', Vol – VI, Sevak publications, Mumbai, 2<sup>nd</sup> Edition (2000).
8. Trotman E R, '*Textile Scouring and Bleaching*', B I Publishing Pvt. Ltd., New Delhi, 1<sup>st</sup> Indian Edition (1993).
9. Prayag R S, '*Bleaching, Mercerizing & Dyeing of Cotton Material*', Shree J. Printers, Pune, 3<sup>rd</sup> Revised Edition (1996).

<b>Schedule of Papers for Semester-V</b>		
<b>FAD/A/V/DSE-A-3 (TH)- Eco- Textiles Eco-fashion and sustainability</b>		
<b>Eco- Textiles, Eco-fashion and sustainability (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Eco-friendly textiles and processes: Concept of green technology and clean processing and products in textile and garments.	
2	Concept of eco friendly textiles, Parameters for eco friendly textiles as per German (OTN-100,) European (OEKO-TEX-100) and Indian (Eco-mark) standards.	
3	Eco parameters and their testing and control. Testing of eco-friendly products.	
4	Sustainability of eco-friendly products	
5	Different techniques of producing eco-friendly textiles and garments	
<b>TOTAL</b>		

<b>FAD/A/V/DSE-A-3-(PR)- Eco- Textiles Eco-fashion and sustainability( Practical)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars</b>	
<b>1</b>	Testing of eco-friendliness of textile products	
<b>2</b>	Practising eco-friendly dyeing, printing and finishing processes	
<b>3</b>	Different types of garment finishing:	

## **References**

1. Sustainable Fashion and Textiles: Design Journeys by Kate Fletcher, 2012.
2. Eco Fashion, Sass Brown, Laurence King Publishing, 2013.
3. Future Fashion White Papers by Earth Pledge, 2013.
4. The Eco-chick Guide To Life by Starre Vartan, 2012.
5. Eco-Chic, The Fashion Paradox by Sandy Black, Black dog Publishers.
6. Green Is The New Black-How To Change The World With Style by Tamsin Blanchard, 2013.
7. Sustainable Fashion: Why Now? A Conversation Exploring Issues, Practices and Possibilities by Janet Hethorn and Connie Ulasewicz, 2012.

### Schedule of Papers for Semester-V

#### FAD/A/V/DSE-A-4 (TH)- Fashion Forecasting and Designing

#### Fashion Forecasting and Designing (Theory)

Full Marks: 50, Total Credit: 4

Units	Particulars	No. of Contact Hours
1	Review of contemporary fashion and development of costumes through ages	
2	Creation of fashion according to season, buying habit of consumers etc	
3	Fashion forecast, fashion cycle	
4	Fashion forecasting agencies, fashion forecasting journals, Colour forecast, colour forecasting agencies	
5	Fashion centres, product lifecycle, product development	
6	Designing of costumes according to age, gender and purpose	
7	Design analysis and adaptability in garments	
TOTAL		

#### FAD/A/V/DSE-A-4 (PR)- Fashion Forecasting and Designing ( Practical)

Full Marks: 50, Total Credit: 2

Units	Particulars
1	Learning to do market survey and accordingly develop the fashion forecast plan
2	Learning to design garments on the basis of market survey, research and development and fashion forecast.

### References

- 1.Aspelund Karl ,2010, Design Process, Fairchild Publication
- 2.Seivewright Simon 2012, Basics Fashion Design -Research and Design, Bloomsbury Publication India

**Schedule of Papers for Three Years**  
**Semester-VI of B.F.A.D. Hons. Degree Course**  
**in FASHION AND APPAREL DESIGN**  
**Under the University of Calcutta**

**Schedule of Papers for Semester-VI**

<b>Schedule of Papers for Semester-VI</b>		
<b>FAD/A/VI/CC-13 (TH)- Term Paper on Assignment Basis Internship(Field Visit and training in apparel industry)</b>		
<b>Term Paper on Assignment Basis Internship(Field Visit and training in apparel industry) (Theory)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Each student shall be required to undergo a course on field visit to an industry arranged by the Institute, for a specific period (1 month at the end of sixth semester) at the beginning of sixth semester. Students shall submit 3 copies of typed written report on the field visit and appear in a seminar and viva-voce examination to be conducted by a common board of examiners (internals and externals covering all important areas) coordinated by the Principal or a coordinator selected for the purpose by the University of Calcutta	
2	Each students has to go for 8 weeks internship after the end of Part II examination or at the start of Part-III course of studies in any relevant industrial organization / export house related to textiles or garments or related to marketing organization.	
<b>TOTAL</b>		

**FAD/A/VI/CC-13 (PR)- Term Paper on Assignment Basis Internship(Field Visit and training in apparel industry)( Practical)**

**Full Marks: 50, Total Credit: 4**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Assignment during internship on textile design collection and garment designing and sewing, to get 1 <sup>st</sup> hand knowledge on textile fabric design development and garment design related to fashion design and garment designing on specific themes. Collection of designed garments ,their analysis and market survey to develop an understanding of requirement of various fabric type and texture in relation to design aspects of the garments of men ,women and children or home textiles/ home furnishings.
<b>2</b>	Assignment to understand the role of textile and garment designers and to understand different market sectors, production methods and related construction of fabrics and garments for creating and developing own design skills. To create some own designed garment of furnishing article with the help of internship organization.

**Schedule of Papers for Semester-VI**

**FAD/A/VI/CC-14 (TH)- Project Work (Garment Designing, Dyeing, Printing, Finishing) and Port folio Preparation**

**Project Work (Garment Designing, Dyeing, Printing, Finishing) and Port folio Preparation**

**Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Each student shall be required to carry out under supervision of one or more teacher or teachers as guide and/or co-guide , by carrying out an original investigation work on any problem related to textile processing or garment production / finishing / design, marketing etc. related to his/her studies. Each student shall submit three copies of typed written and bound dissertation embodying the survey, questionnaires/photographs/design work or experimental work and results of their investigation along with analysis and collected designs with specification sheets and other details of the product development / other work done.	
2	Each student shall be required to work under supervision of one or more teacher or teachers and prepare a portfolio on garment design and collection development.	
<b>TOTAL</b>		

**FAD/A/VI/CC-14 (PR)- Project Work (Garment Designing, Dyeing, Printing, Finishing) and Port folio Preparation( Practical)**

**Full Marks: 50, Total Credit: 4**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Each student shall be required to carry out under supervision of one or more teacher or teachers as guide and/or co-guide , by carrying out an original investigation work on any problem related to textile processing or garment production / finishing / design, marketing etc. related to his/her studies. Each student shall submit three copies of typed written and bound dissertation embodying the survey, questionnaires/photographs/design work or experimental work and results of their investigation along with analysis and collected designs with specification sheets and other details of the product development / other work done.
<b>2</b>	Each student shall be required to work under supervision of one or more teacher or teachers and prepare a portfolio on garment design and collection development.

<b>Schedule of Papers for Semester-VI</b>		
<b>FAD/A/VI/DSE-B-1 (TH)- Textile Care and Conservation</b>		
<b>Textile Care and Conservation(Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Importance, history, types of textile museums in India	
2	Basics of textile conservation, principles, materials, types of conservation-preventive and curative	
	Factors causing deterioration in textiles, damages that occur, restoration	
	Collection maintenance, workspace and equipment, housekeeping, checking and monitoring, handling and packeging	
	Storage and display, Different ways of storage	
<b>TOTAL</b>		

<b>FAD/A/VI/DSE-B-2 (PR)- Textile Care and Conservation( Practical)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars</b>	
<b>1</b>	Study on museums, examination of textiles in order to know their behaviour	
<b>2</b>	Collection of conservation quality materials and documentation on textile conservation	
<b>3</b>	Wardrobe Planning	
<b>4</b>	Insect or pest control plan	
<b>5</b>	Efficiency of washing and detergency etc	

## **References**

1. Agarwal, O.P., 1977, Care and Presentation of Museum projects – II, NRL
2. Finch K. and Putnam G, 1985, The Care and Preservation of Textiles
3. Landi, S. 1991, Textile Conservator's Manual, Routledge

<b>Schedule of Papers for Semester-VI</b>		
<b>FAD/A/VI/DSE-B-2 (TH)- Textile Testing and Quality Control</b>		
<b>Textile Testing and Quality Control (Theory)</b>		
<b>Full Marks: 50, Total Credit: 4</b>		
<b>Units</b>	<b>Particulars</b>	<b>No. of Contact Hours</b>
1	Selection of samples for testing, sampling procedures and statistical quality control	
2	Testing of physical parameters of textile fibres, yarns and fabrics	
3	Testing of chemical properties of different fibres, yarns and fabrics	
4	Special testing procedures for nonwoven and technical textiles	
5	Quality control in textile industry, quality circles and standardisation of textiles	
TOTAL		

<b>FAD/A/VI/DSE-B-2 (PR)- Textile Testing and Quality Control ( Practical)</b>		
<b>Full Marks: 50, Total Credit: 2</b>		
<b>Units</b>	<b>Particulars</b>	
<b>1</b>	Testing of physical parameters of fibres, yarns and fabrics	
<b>2</b>	Testing of chemical properties of fibre, yarn, fabrics	
<b>3</b>	Testing of non-woven and technical textiles	

## References

1. Grover Elliot and Hamby D S, *Handbook of Textile Testing and Quality Control*, Wiley Eastern Ltd., Mew Delhi, 1<sup>st</sup> edition (1960).



## Schedule of Papers for Semester-VI

**FAD/A/VI/DSE-B-3 (TH)- CAD in Garment Design and Construction**

### **CAD in Garment Design and Construction (Theory)**

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	2D & 3D Computer aided pattern making (Using TUKA – CAD / GERBER / LECTRA Technology). Computer aided pattern making, marker planning, sizing, grading and draping of garments for different types of men/women/children wear. Computer aided Fashion illustration techniques, using fashion illustration software.	
2	Use of computer for Fashion cycle, fashion forecasting, fashion marketing. Role of designers in creating fashionable garments & its merchandising	
3	Study of different computer software for textile weaving design. Preparation of Checks and Stripes or dobby designs using computer aided weaving CAD module. Computer aided print design preparation for surface embellishment and decoration.	
4	Computer aided garment designing: Preparation of Basic block, Skirt Block, Trouser Block using the Pattern Drafting by Tuka-CAD Software. Pattern Drafting of Skirt variations and shirt patterns. Grading of Basic Block and Understanding Digital Grading System.. Preparation of layout on the basis of Shirt and Skirt patterns and their sizes. Design presentation techniques & design development sheets by use of computers.	
5	<p>Computer aided textile design and garment design</p> <ul style="list-style-type: none"> <li>• Familiarization with auto – CAD software in general for drawing of object in specific dimension and design.</li> <li>• Familiarization with Tuka studio and Printex / Nedgraphics software for developing textile print designs and repeats.</li> <li>• Preparation of checks and stripes and dobby / jacquard designs using computer aided weaving design module.</li> <li>• Computer aided grading and sizing of basic blocks and understanding digital grading systems.</li> <li>• Preparation of basic block, skirt block, trouser block, shirt block etc. using computer aided pattern drafting by Tuka – CAD software.</li> </ul> <p>Computer aided pattern drafting of skirt variations and shirt patterns with collar variations etc.</p>	
<b>TOTAL</b>		

<b>FAD/A/VI/DSE-B-3 (PR)- CAD in Garment Design and Construction( Practical)</b>	
<b>Full Marks: 50, Total Credit: 2</b>	
<b>Units</b>	<b>Particulars</b>
<b>1</b>	<p>Computer aided textile design and garment design</p> <ul style="list-style-type: none"> <li>• Familiarization with auto – CAD software in general for drawing of object in specific dimension and design.</li> <li>• Familiarization with Tuka studio and Printex / Nedgraphics software for developing textile print designs and repeats.</li> <li>• Preparation of checks and stripes and dobby / jacquard designs using computer aided weaving design module.</li> <li>• Computer aided grading and sizing of basic blocks and understanding digital grading systems.</li> <li>• Preparation of basic block, skirt block, trouser block, shirt block etc. using computer aided pattern drafting by Tuka – CAD software.</li> </ul> <p>Computer aided pattern drafting of skirt variations and shirt patterns with collar variations etc.</p>
<b>2</b>	<p>Computer aided garment designing: Preparation of Basic block, Skirt Block, Trouser Block using the Pattern Drafting by Tuka-CAD Software. Pattern Drafting of Skirt variations and shirt patterns. Grading of Basic Block and Understanding Digital Grading System.. Preparation of layout on the basis of Shirt and Skirt patterns and their sizes. Design presentation techniques &amp; design development sheets by use of computers.</p>

## **References**

- 1.W Aldrich, *CAD in Clothing and Textiles*, Blackwell Science Ltd.
- 2.Manual of the Software Being Used.
- 3.Mikell P. Groover and Emony W. Zimmers, Jr., 'CAD/CAM Computer Aided Design and Manufacturing' Pearson Prentice Hall.

## Schedule of Papers for Semester-VI

**FAD/A/VI/DSE-B-4 (TH)- Garment Testing and Quality Control**

### Garment Testing and Quality Control (Theory)

**Full Marks: 50, Total Credit: 4**

Units	Particulars	No. of Contact Hours
1	Introduction to quality concept: Definition and concept of quality, product specifications and standards. Quality Need of customers, product features, quality conformance to specification & to customers requirements, Quality trilogy-availability, reliability, and maintainability Importance of standards and quality control, definition of standard, quality control for conforming standard specification	
2	Sampling: Sampling technique and random sampling procedures. Calculation of minimum number of samples to be taken. Sampling errors and rectifications.	
3	Quality Assurance: Concept, audit of quality Plans, planning & performing quality audits, quality survey and product auditing. Fabric defects and Pareto-chart. Defects in garments and their remedies. Waste control and reduction of loss in productivity.	
4	Statistical Quality Control: Fundamental statistical calculation of mean, median, mode, coefficient of variations, percent mean deviation etc. Introduction of process control & product control concept / process control charts for variables and control charts for attributes for constant and varying sample sizes, cumulative sum control charts, Product Control (acceptance sampling inspection plans – O.C. curve, single and double attribute sampling plans, sequential and multiple attribute sampling plans, special attribute sampling procedures, acceptance sampling by variables). Sampling and inspection procedure for textile and apparel product.	
5	Total Quality Management: Concept, creating quality from design stage, raw material purchase stage, Process control in the manufacturing stage, Product control for different customers. Organizing effective quality management involving every person. Human factors in quality management, quality circle and its roles and importance.	
6	ISO 9000(ISO-9001-2000) & ISO 14000 Concept and its Study: Quality compliance and environment compliance systems, model for quality assurance in design / development, production, installation and servicing; model for quality assurance in production and installation; Model for quality assurance in final inspection, Quality management and environmental management elements-guidelines and accreditation procedure. Social accountability (SA-1800). Environmental Management for quality maintenance of eco-friendly textile products	
7	Apparel Production and quality control: Work study, time and motion study and line – balancing / assembly line layout, optimization of space and infrastructure (Plant lay - out), utilization of maximum available machine hour and man-hour, reduction of idle time, Production bottlenecks. Specification of garments for customer need and their control measures during production. Quality check, inspection and process / production control measures for quality assurance in garment production. Standards of garments and its components as per different countries' national and international standards (SA - 1000). Standard sizes of garments and trims / accessories and labels etc. Effective role of supervision in garment industry and duties of a production and quality control of a supervisor.	
8	Quality Control and Cost: Cost of quality; managing quality in centralized and decentralized industry for textile mills and garment industry. Cost reduction techniques	
<b>TOTAL</b>		

**FAD/A/VI/DSE-B-4 (PR)- Garment Testing and Quality Control ( Practical)****Full Marks: 50, Total Credit: 2**

<b>Units</b>	<b>Particulars</b>
<b>1</b>	Quality checking of garments
<b>2</b>	Learning techniques of quality checking of garments
<b>3</b>	Quality control chart preparation

**References**

1. Grover Elliot and Hamby D S, *Handbook of Textile Testing and Quality Control'*, Wiley Eastern Ltd., Mew Delhi, 1<sup>st</sup> edition (1960).