

**MANONMANIAM SUNDARANAR UNIVERSITY
TIRUNELVELI**

UG COURSES - AFFILIATED COLLEGES

**B.Sc. Costume Design and Fashion Design
(Choice Based Credit System)**

(With effect from the academic year 2016-2017 onwards)

(45th SCAA meeting held on 09.02.2017)

Se m.	Pt. I /II/I II/I V/V	Sub. No.	Subject status	Subject Title	Hrs./ Week	Cre- dits	Marks				
							Maximum			Passing minimum	
							Int.	Ext.	Tot.	Ext.	Tot.
V	III	29	Core - 6	Apparel Production Management	4	4	25	75	100	30	40
		30	Core - 7	Garment Costing	4	4	25	75	100	30	40
		31	Core - 8	Textile Testing and Quality Control	4	4	25	75	100	30	40
		32	Major Practical -5	Construction of Men's Wear	8	4	50	50	100	20	40
		33	Major Elective -II	Technology of Textile Finishing	6	5	25	75	100	30	40
	IV	34	Skill Based subject (Common)	Personality Development/ Effective Communication/ Youth Leadership	4	4	25	75	100	30	40
				Subtotal	30	25					

Se m.	Pt. I /II/I II/I V/V	Sub. No.	Subject status	Subject Title	Hrs./ Week	Cre- dits	Marks				
							Maximum			Passing minimum	
							Int.	Ext.	Tot.	Ext.	Tot.
VI	III	35	Core - 9	Clothing Care	4	4	25	75	100	30	40
		36	Core - 10	Technical Textile	4	4	25	75	100	30	40
		37	Core - 11	Quality Control in Apparel Production	4	4	25	75	100	30	40
		38	Core - 12	Organization of Garment Unit	4	4	25	75	100	30	40
		39	Major Practical -6	Textile Testing and Care	8	4	50	50	100	20	40
		40	Major Elective -III	Home Textiles	6	5	25	75	100	30	40
				Subtotal	30	25					

MSU/2016-2017/UG-Colleges/Part – I (B.Sc. Costume Design and Fashion)

Semester – V / Ppr.no.29/Core - 6

APPAREL PRODUCTION MANAGEMENT

UNIT – I

Introduction to structure and sectors of clothing industry – functions and types of organizational structure. Introduction to garment industry plant location. Types of plant layout – process, product and combination layout.

UNIT – II

Study of different production systems – batch – group- individual systems – advantages and disadvantages of complete garment system. Individual part system – Progressive bundling system – synchronized straight line products.

UNIT – III

Study and planning of process involved up to fabric storage, study and planning for processing involved in the process for various garments. Preparation

Of production process flow charts. Preparation of production schedule for children's, women's and men's wear. Difference between production schedule for woven and knitted garment production.

UNIT – IV

Production planning and control of raw material – machinery – labour. Estimation of machinery requirements. Estimation of labour requirements. Study of

Fabric waste and utilization of fabric waste – Maintenance of machinery and equipments – Maintenance schedule for preventive maintenance.

UNIT – V

Job shop, open job shop, closed job shop, forecasting, technological forecasting, planning to meet seasonal sales of demand. Economical batch quantity various records, charts and data used in garment industry. Production planning for Export markets.

Reference:

1. Ravindranath V Bedi ,Prof. Narayanase V.Bedi ‘ ‘ Modern Production Management’’ Vrinda Publications Ltd.,
2. Rajesh Bheda Managing Productivity i the Apparel industry’’ CBS Publications 2003.
3. Chuter A.J. ‘ ‘Introduction to clothing production management Blackwell Publishing House 1995.
4. Harold Carr and Barbara Latham ‘ ‘ Technology of clothing Manufactures’’ Blackwell Publishing House, 1994.

MSU/ 2016-2017/ UG-Colleges / Part – II (B.Sc. Costume Design and Fashion)

Semester – V / Ppr.no.30 / Core – 7

GARMENT COSTING

UNIT – I

Principles of costing – requirement of good costing system – cost unit- types of cost – Fixed cost – Variable cost – Semi variable cost – Conversion cost – Replacement cost – Differential cost – Imputed cost – Sunk cost – Research cost – Development cost – Policy cost – Shutdown cost.

UNIT – II

Elements of cost – Direct material cost – Direct expenses – Direct wages – Indirect material cost – Indirect expenses – Indirect labour overheads – Production overhead - Administrative overhead – selling overhead – Distribution overhead – Work cost – Cost of production – Total cost.

UNIT – III

Cost estimation of yarn, fabric and components, dyeing, printing and finishing. Cost estimation for cutting, stitching, checking, packing, forwarding, shipping and insurance.

UNIT – IV

Cost of product development. Analysis of Design cost – profit design – product profitability. Function of cost control – Apparel manufacturing cost categories – sales cost control – purchasing cost control – production cost control – Administration cost control –cost rating policies. Manufacturing budget. Cash flow control – standard cost sheet – Break even Charts.

UNIT – V

Costing of various garments – Children’s wear, Women’s wear, Men’s wear.

Reference:

1. Apparel Manufacturing Analysis – Solinger Jacob
2. Production Costing – Khanna Publications
3. Development Banks and Enterprises
4. Fashion Design and product Development – Harold Carr/ John
5. Garment Technology for fashion Designer - Gerry Cooklin.

MSU/ 2016-2017/ UG-Colleges / Part – III (B.Sc. Costume Design and Fashion)

Semester – V / Ppr.no.31 / Core – 8

TEXTILE TESTING AND QUALITY CONTROL

UNIT – I

Introduction to Textile and Quality Control – Definition, General aspects of Textile testing and quality control, Routine tests performed in Textile Industry. Benefits of testing, International standards for textile and apparel testing.

UNIT – II

FIBRE ANALYSIS:

Identification of Textile Fibre – Burning, Solvent , Longitudinal and cross sectional view of Cotton, Wool, Polyester, Nylon, Acrylic fibres. Cotton fibre length, Cotton fibre strength, Fibre fitness and Nep Potential –Trash.

UNIT – III

YARN ANALYSIS:

Yarn numbering, yarn strength, Twist testing, Additional test for fibres and yarn – Microscope, Weight method, Air flow method, Wet strength and elongation of filament yarn, Crimp.

UNIT – IV

FABRIC ANALYSIS:

Length, Width, Bow, Skew ness, Weight, Thickness, Breaking Strength, Abrasion Resistance, Crease Recovery, Stiffness of fabrics and drapability.

Reference:

1. Booth J.E. Principles of Textile Testing, CBS Publishers,1996.
2. Elliot. B.Grover and Hamby. D.S. Textile Testing and Quality Control, Eastern Ltd.,
3. Satish K. Bhardwaj and Pradip, V. Metha, Managing Quality in Apparel Industry, New age International Publishers, 2000.

MSU/ 2016-2017/ UG-Colleges / (B.Sc. Costume Design and Fashion)

Semester – V / Ppr.no.32 / Major Practical - 5

CONSTRUCTION OF MEN'S WEAR

- **Designing, drafting and constructing the following garments for the features prescribed.**
 - **List the measurements required and materials suitable**
 - **Calculate the cost of materials.**
 - **Calculate the material require layout method and direct measurement method.**
1. **SLACK SHIRT** – Collar, patch pocket, Half sleeve.
 2. **T – SHIRTS** - Front half open, Zip attached, Collar.
 3. **FULL SLEEVE SHIRT** – Collar, Patch pockets, Full sleeve with cuff.
 4. **PLEATED TROUSERS** – Pleats in front, Draft at back, Side pockets, Fly with buttons (or) zip, Belt with adjustable strap
 5. **BELL BOTTOM** - Bell bottom, Pleatless, Side Pockets, Fly with Zip/button
 6. **KALIDAR KURTA** – Kali piece, Side pocket, round neck, Half open
 7. **NEHRU KURTA** – Half open, stand collar, With (or) without pockets, Full sleeve
 8. **JEANS** – Tight fitting, Jeans cut, Pockets
 9. **PYJAMA** –Tape (or) Elastic attach waist, Fly
 10. **SINGLE BREAST VEST** - With or without Collar, Sleeveless, Button attached
 11. **SINGLE BREAST COAT** – Coat collar, Coat sleeve, pockets
 12. **HOUSE COAT** – Round neck (or) collar attached, Overlap front, Tape attached

REFERENCES:

Easy Cutting –JUVEKAR.
Commercial System of Cutting - JUVEKAR.
Zarapkar System of Cutting – K.R.ZARAPKAR.
Practical Clothing Construction Part I and II – MARY MATHEW.

MSU/ 2016-2017/ UG-Colleges / (B.Sc. Costume Design and Fashion)

Semester – V / Ppr.no.33/ Elective - 2

TECHNOLOGY OF TEXTILE FINISHING

UNIT - I

Introduction to finishing – Definition, Importance, Classification.
Mechanical Finishing – Sanforising – calendaring – Brushing – Decating – Milling.

UNIT - II

Chemical finishing – wash and wear finishing. Anti – crease finish, durable finish, Stiff Finish, Denim Finish, stone wash finish.
Application of silicones in finishing processes.

UNIT - III

Functional finishes –water proof finishes – water repellent finish – flame retardant finish – soil release finish, antimicrobial finish.
Nano Technology in Textile finishing.

UNIT - IV

Eco – friendly processing – Definition and importance. Study of conventional processing with eco – friendly processing. Enzymes – characteristics, Types. Application of enzymes in textile

UNIT - V

Effluent plant – effects from various plants –various process for treating waste water.

Reference:

1. Shenai V.A. “ Technology of Finishing” Sevek Publications, Mumbai (1996)
2. Manivasaga. N. Treatment of Textile Processing Effluents”, Sakti Publications.
3. Bernard. P. Corbmann” Textile Fibre to Fabric” – McGraw Hill, 1983.

MSU/ 2016-2017/ UG-Colleges / Part – III (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.35 / Core –9

CLOTHING CARE

UNIT - I

Water – hard and soft water, methods of softening water.

Laundry soaps - Manufacture of soap (Hot process, cold process), composition of soap types of soap, soap less detergents, chemical action, detergent manufacture, advantages of detergents

UNIT – II

Finishes – Stiffening Agents – Starch (cold water and hot water), Other stiffening agents, preparation of starch.

Laundry blues, their application.

UNIT - III

Laundry equipment – for storage, for steeping and Washing – Wash board, suction Washer, Wash boiler, Washing machine.

Drying equipments – outdoor and indoor types.

Irons and ironing board- types of iron (box, flat, automatic, steam iron). Ironing board –different types.

UNIT -IV

Principles of washing – suction washing, washing by kneading and squeezing, washing by machine – process details and machine details.

Laundering of different fabrics- cotton and linen, woollens, coloured fabrics, silks, rayon and nylon

UNIT - V

Special types of Laundry –water proof coats, silk ties, leather goods, furs, plastics, lace.

Dry cleaning – using absorbents, using grease solvents.

Storing – points to be noted.

Stain removal – food stains, lead pencil, lipstick, mildew, nose drops, paint, perfume,

Perspiration / mildew, tar, turmeric and Kum- Kum.

Care labels- washing, bleaching, Drying, ironing and different placements of label in garments.

References:

1. Textiles fabrics and their Selection – Wingate I B, Allied publishers Ltd, Chennai
2. Fundamentals of Textiles and their Care - Susheela Dantygai , Orient Longmann Ltd (1980).
3. Family Clothing – Tate of Glession, John Wiley & Sons I n c, Illinois.
4. Household Textiles and Laundry Work – Durga Duelkar, Amla ram & Sons, Delhi

MSU/ 2016-2017/ UG-Colleges / Part – III (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.36 / Core – 10

TECHNICAL TEXTILES

UNIT – I

Technical Textiles – Definition and Scope. Categories of Technical Textiles

UNIT – II

Medical Textiles – Classification. Fibres used and their properties required. Medical textile Products – Properties, functions.

UNIT – III

Geo textiles – Definition, Fibers used in geo textiles –requirement of fibers.
Functions of Geo Textiles – separation, Filtration, Drainage, Reinforcement.

UNIT - IV

Textiles for automotive industry. Suitable fibers for automotive industry
Safety devices –Airbags – Materials used- types of fabric – Seat belts – Types, Fabrics used.

UNIT - V

Brief study on Protective textiles – Bullet Proof fabrics –fire retarding fabrics- high temperature fabrics –High visibility clothing. Fibers used and Properties of fabrics, smart textiles and Intelligent .

Reference:

1. The design of Textiles for Industrial Application – P.W.Harrison
2. Protective Clothing – Bajaj. P. And Sengupta A.K
3. Textiles : Fibre to fabric – Corbmann. B.P.
4. Performance of Protective Clothing – Johnson. J.S. and Mansdork. S.Z.

MSU/ 2016-2017/ UG-Colleges / Part – III (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.37 / Core –11

QUALITY CONTROL IN APPAREL PRODUCTION

UNIT – I

Statistical quality control:

Quality definition – Quality and its importance – Meaning of Quality control – SQC – Control Charts. Sampling – Importance and types of sampling techniques.

UNIT – II

Standards for quality

Established Merchandising Standards – Standards for Quality – ISO implementation

Procedure ISO 9000 and ISO 14000 – six sigma

UNIT – III

Quality Systems:

Total Quality Management- Objective and phases of TQM, Quality Circle – AQL – Accepted Quality Level.

UNIT - IV

Production Control:

Types of Control forms –Basic Production systems, flow process grids for production – Control Scheduling Calculation – types of Schedule.

UNIT - V

QUALITY CONTROL IN APPAREL INDUSTRY

Quality control in designing, Pattern making. Warehousing. Quality Control Trims, Fasteners, Sewing thread, Needle and Accessories. Inspection – stages and systems of inspection.

Reference:

1. Pradip V.Metha, Introduction to quality control for Apparel Industry ASQC Quality Press, Marcel Dekker, Inc. 1992
2. Chuter A.J. Introduction to clothing Production Management, Blackwell Publishing House, 1995
3. Preadip. V. Metha, Managing Quality the Apparel industry, Satish K. Bhardwaj, New age International (P) Ltd, Publishers, 2006.
4. Ruth. E. Glock Grece I Kunz, Apparel Manufacturing and Sewn Product Analysis, 2005.
5. Anita A Stephen Sue Hamphrice Sharp, Linde B Donnel, Evaluation Apparel Quality, Fair Child Fashion Group, New group.

MSU/ 2016-2017/ UG-Colleges / Part – III (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.38 / Core –12

ORGANISATION OF GARMENT UNIT

UNIT – I

Entrepreneurship-meaning definition and types, need for entrepreneurs, qualities and types of Entrepreneurship, Difference between entrepreneur and Manager.
Management – Definition, Management as a process – Planning, Organising, Directing, Controlling, Co-Ordination.

UNIT – II

Institutions supporting Entrepreneurs – DIC, NSIC, SISI, SIPCOT, TIIC, KVIC, CODISSIA, Commercial Banks – SBI.
Organizational structure of a garment unit – Hierarchical Organisation, Production planning and control.

UNIT – III

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

UNIT – IV

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

UNIT – V

Performance of Indian garment export, SWOT Analysis, setting up of garment unit for export market, Export document, Export finance – payment method, Export shipping.

Reference :

1. Principles of Management – Dinakar Pagare, Sultan Chand and sons, Delhi.
2. Entrepreneurship Development in India – DR. C.B.Gupta, Dr.N.P.Srinivasan, Sultan Chand and sons, Delhi.
3. Garment Exports – Darlie . O. Koshy
4. Introduction to Clothing production Management – A.J.Chester 2nd Edition, Wrenbury Associates Ltd.

MSU/ 2016-2017/ UG-Colleges / (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.39/ Major practical – 6

TEXTILE TESTING AND CARE

- Fibre Testing
- Longitudinal view test using Microscope
- Fibre Length using Baer Sorter
- Fineness test using Sheffield Micronaire
- Bundle Strength using Stelometer

Yarn Testing

- Yarn Count using Wrap Reel and Electronic Balance
- Yarn Count Beesley Balance and Quadrant Balance
- Yarn Twist using Twist tester
- Yarn Strength using Lea Strength Tester

Fabric Testing

- Fabric length and Width
- Fabric thickness
- Fabric Weight
- Bursting Strength
- Crease Recovery
- Stiffness
- Drape
- Fabric warp and weft Crimp
- Rubbing fastness
- Washing fastness
- Perspiration Fastness
- Light Fastness

Clothing care

- Preparation of Soap by Hot and Cold Process
- Preparation of Detergent
- Starch Preparation by Hot and Cold Process
- Blue Preparation
- Stain removal.

MSU/ 2016-2017/ UG-Colleges / (B.Sc. Costume Design and Fashion)

Semester – VI / Ppr.no.40/ Elective - 3

HOME TEXTILES

UNIT – I

Definition – Different types of furnishing materials – Woven and Non-woven, Factors affecting selection of home furnishes. Recent Trends in Home Furnishing

UNIT – II

Floor coverings – Hard floor coverings, Resilient floor coverings. Soft floor coverings – Rugs and carpets, Use and care. Wall covering – Use and care.

UNIT – III

Doors and Windows – Definition, Different types of doors and windows, their application. Curtains and Draperies – Choice of fabrics, calculating the amount of material needed, hints on making curtains hang well, methods of finishing draperies at the top – Use of drapery rods, hooks, tape rings and pins.

UNIT – IV

Living room furnishing – sofa covers, wall hangers, cushion, cushion covers, upholsteries, Bolster and Bolster covers.
Bed Linens – Definition, Different types of bed linens, sheets, blanket covers, comfort covers, bed spreads, mattress covers and pads, pillows and pillow covers, use and care.

UNIT – V

Kitchen and Table Linens – Definition – Types of Kitchen linens, Dish cloth, Hand towels, Fridge cover, Fridge handles, Mixi cover, Grinder cover, their use and care.

Reference :

1. Jay Diamond, Ellen Diamond – Fashion Apparel Accessories and Home Furnishings.
2. Premavathy Seetharaman, Praveen Pannu – Interior Design and Decoration.
3. Durga Delukar, House hold Textiles and laundry work.