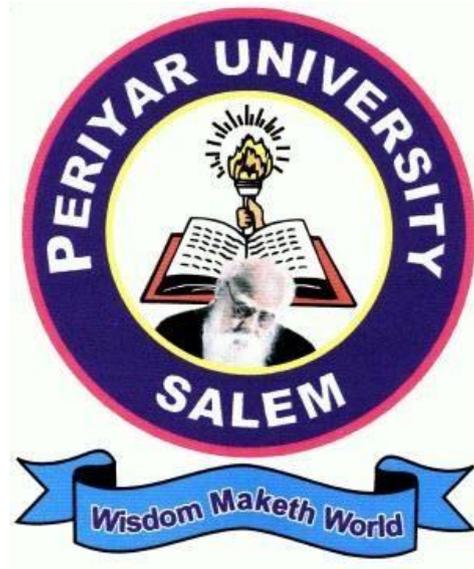


PERIYAR UNIVERSITY
PERIYAR PALKALAI NAGAR
SALEM – 636 011



DEGREE OF MASTER OF SCIENCE
CHOICE BASED CREDIT SYSTEM
SYLLABUS FOR
M.Sc. TEXTILES AND FASHION DESIGNING
FOR THE STUDENTS ADMITTED FROM THE
ACADEMIC YEAR 2021-2022 ONWARDS

RULES AND REGULATIONS FOR THE ADMISSION OF 2 YEARS

M.Sc. TEXTILES AND FASHION DESIGNING

I. ELIGIBILITY FOR ADMISSION

B.Sc - Costume Design and Fashion, B.Sc.-Textile and Fashion Designing, B.Sc-Fashion Technology and B.Sc degree related to textile or fashion.

II. DURATION OF THE COURSE

The course for the Degree of Master of Costume Design and Fashion shall consist of two academic years divided into four semesters. Each semester consists of 90 working days.

III. COURSE OF STUDY

The course of study shall comprise instruction in the following subjects according to the syllabus and books prescribed from time to time.

IV. EXAMINATIONS

The theory examinations will be conducted for 3 Hours by the University in the subjects prescribed for all the semesters in the month of November & April every year. The practical examinations will be conducted for 3 & 4 Hours by the University in all the subjects prescribed in the month of November & April.

At the end of the fourth semester project viva-voce will be conducted on the basis of the Dissertation/Project Report submitted by the student. The Viva-voce will be conducted by one Internal and One External Examiner.

V. SCHEME OF THE EXAMINATION

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

M.Sc. Textiles and Fashion Designing
Course of Study and Scheme of Examination

SEMESTER - I

S.NO	Paper code	Title of the paper	L	T	P/F	C	Exam hours	Internal marks	External marks	Total Marks
1	Core I	Advanced textile science	5	-	-	5	3	25	75	100
2	Core II	Textiles and apparel quality evaluation	5	-	-	5	3	25	75	100
3	Core III	Advanced garment construction practical	1	1	4	4	4	40	60	100
4	Core IV	Fashion sketching practical	-	-	4	2	3	40	60	100
5	Core V	CAD in fashion designing practical	-	-	6	3	3	40	60	100
6	Elective – I	Sustainability in Textile and Fashion	4	-	-	4	3	25	75	100
		Total	15	1	14	23				600

SEMESTER – II

S.NO	Paper code	Title of the paper	L	T	P/F	C	Exam hours	Internal marks	External marks	Total Marks
7	Core VI	Fashion Merchandising	5	-	-	5	3	25	75	100
8	Core VII	Technical Textiles	5	-	-	5	3	25	75	100
9	Core VIII	CAD in textile designing practical	-	-	6	3	3	40	60	100
10	Core IX	Advanced draping techniques practical	-	-	6	3	3	40	60	100
11	Elective - II	Import Export Management & documentation	4	-	-	4	3	25	75	100
12	Skill based elective I	Entrepreneurship Development in Textiles	3	1	-	3	3	25	75	100
	Common paper	Human rights	-	-	-	-	3	25	75	100
	Mooc	Mooc	-	-	-	1		-	-	-
		Total	17	1	12	24				700

Students should attend internship for 15 days and viva voce will be conducted in III Semester

SEMESTER – III

S.NO	Paper code	Title of the paper	L	T	P/F	C	Exam hours	Internal marks	External marks	Total Marks
13	Core X	Research methodology and statistics in textiles	5	0	0	5	3	25	75	100
14	Core XI	Textile Testing	5	0	0	5	3	25	75	100
15	Core XII	Textile testing practical	-	1	4	3	3	40	60	100

16	Core XIII	Advanced textile processing	5	-	-	5	3	25	75	100
17	Elective III	Online business	5	-	-	5	3	25	75	100
18	Skill Based Elective - II	Fashion portfolio practical	-	1	4	3	3	40	60	100
		Internship viva	-	-	-	1	-	40	60	100
		Total	20	2	28	27				700
SEMESTER – IV										
S.NO	Paper code	Title of the paper	L	T	P/R	C	Exam hours	Internal marks	External marks	Total Marks
19	Core XIV	Fashion Retailing	5	-	-	5	3	25	75	100
20	Core XV	Accessory designing practical	-	-	4	2	3	40	60	100
21	Core XVI	Research Project & Viva Voce	21 Hours			10	-	50	150	200
	MOOC	MOOC				1				
		Total	30			18				400
		Total credits				91				

Note: Faculty work load for Project work 2 Hrs per candidate/per week

SEMESTER-I

CORE I - ADVANCED TEXTILE SCIENCE

COURSE OBJECTIVES

- To learn about the natural and man-made fibres, properties and their uses
- To study the types of textured yarns, manufacturing of sewing threads and its types
- Provide knowledge about the advanced technologies used to produce the fabric formation methods

COURSE OUTCOMES

The students will be able to

- Differentiate the production process and properties of natural and man-made fibres
- Discuss the latest developments in high performance fibres
- Know the basic yarn making process and various fabric formation types like weaving, knitting and non- wovens.

UNIT - I

Natural fibers – classification of textile fibers according to their natural foreign cotton - Concept of varieties - Definition of grading – distinctive properties & End uses. Brief study of sustainable fibres -coffee ground fibres – nettle fibres – lotus fibres – pineapple fibres and etc.

UNIT - II

High performance fibers - Glass fibers, carbon fibers, Ceramic fibers, Chitosan fibers , Alginate fibers , bicomponent fibres, super absorbent fibres, optical fibres, melamine fibres, micro fibres – nano fibres – hollow fibres Properties & end uses .

UNIT - III

Texturization - Objects -Types of textured yarns - Flash twist texturing – Advantages of textured yarn -Manufacturing of sewing threads - Brief of fancy yarns – Slub yarns – Crimp yarns – Novelty yarns – Boucle yarns.

UNIT - IV

Weaving Process - Shuttle less loom - Working principle of Air Jet Loom - Working Principle of Water Jet Loom - Working principle of Projectile Loom - Working principle Rapier loom.

UNIT - V

Knitting – Classification of Knitting machines – properties of knitted fabrics – Weft Knitting. Nonwoven - Definition and Classification. Fiber properties and Requirements. Web Formation. Dry laid, Parallel laid and cross laid formation - Application and End uses.

REFERENCES

1. Hall, A. J The standard hand book of Textile, Wood head Publishing 8th edition, 2004.
2. Hearle J.W.S High performances fibers, Wood head publishing Ltd Cambridge, England,2001.
3. Abinson , M. Principles of weaving. Textile Institute Manchester.
4. Corbman, B.P. Textiles Fiber to Fabric McGraw hill Publishing , 6th, Edition 1983.
5. Handbook of textile fibre structure six edition volume -2 wood head publishing
In textiles.
6. Velensky, L .D, G., E.P.G Textile Science CBS Publishers and Distribution , 2003.
- 7.Sustainable fibres for fashion industry volume 2, Subramanian Senthilkannan Muthu Miguel angel Gardetti editors. Springer.

SEMESTER-I

CORE-II – TEXTILE AND APPAREL QUALITY EVALUATION

COURSE OBJECTIVES

- To facilitate the students for understanding the concept of apparel quality management systems and quality standards in textile industry

COURSE OUTCOMES

The student will be able to

- Set up quality control program for apparel production
- To know the importance of quality and eco – standard measures in textile industry

UNIT –I

Introduction to Quality Standards, importance of Quality, British standards and ISO Standards for the Apparel Industry. Brief study about ISO 9000 Standards and ISO 14000 Standards. Total Quality management systems.

UNIT –II

Eco specification and restriction in apparel and textiles –Dry cleaning using Ozone depleting chemicals, pH values, Formaldehyde contents, Heavy metal contents, Pesticides and Herbicides, Azo dye stuffs, Nickel, Pentachloro phenols, colour fastness, brightener's and Softening agents.

UNIT –III

Garment defects – Quality followed in cutting department – sewing department –Finishing and Packing departments.

Testing of Garments –Seam strength –Seam properties of Knitted fabrics. Bow & Skewness in woven & Knitted fabrics. Soil/Stain release testing .Testing of Sewing Threads.

UNIT –IV

Introduction to care label – importance of care labels- Different systems of care labeling – American, British and International Labelling. Eco-labelling

UNIT –V

Quality control aspects for garment exports, The nature of Quality costs and Customer Returns, The functions of Quality assurance and quality control, Inspection procedure, AQL and Quality control.

REFERENCES

1. An Introduction to Quality control for Apparel Industry by PV Mehta.
- 2.Apparel Quality Control by K.Sukumar , G.S.Sivakumar ,.S.S.M ITT Staff and Students cooperative stores.
- 3.Management Quality in Apparel Industry by PV Mehta.
- 4.Physical Testing and Quality control, vol 123, No.1/2/3 textile institute (1993).

SEMESTER I

CORE III - ADVANCED GARMENT CONSTRUCTION PRACTICALS

COURSE OBJECTIVES

- To develop skill in transforming designs to drafting.
- To understand the consumption of raw materials, costing, lay plan, construction and display techniques in garment making.
- To develop skill in evaluating design, fitting and quality defects in garment.
- To know about specific garments that society needs from apparel manufacturer.

COURSE OUTCOMES

The student will be able to

- Acquire designing, drafting, sewing skills and technique in advance garment making.
- Evaluate and problem-solving techniques in designing, drafting, cutting, sewing, fitting and finishing in garments.
- Execute fabric programming and costing.
- Create garments that society needs for special purpose and protection.
- Become a designer, pattern master, garment technician, planning, programming and production in apparel industry.

Designing, Constructing and Evaluating the Garment

1. Children's Garment - Frock /Middy & Middy Top/ Boy shirt
2. Women's Garment - Salwar & kameez / Maxi
3. Men's Garment - Shirt/ Kurtha
4. Special Purpose Garment 1 - Physically challenged/ Old Age People/ Maternity & Lactation Period.
5. Special Purpose Garment 2 - Full protected Medical suit with hand gloves, Mask and foot covers.

TEXT BOOK

1. Practical clothing construction - Part I & Part II Mary Mathews, cosmic Press, Chennai -1986.
2. Zarpakar system of cutting, K.R. Zarpakar Navneet Education Limited, Silvassa.
3. Practical Dress Design, by Mabel Deane Erwin, 1954 revised edition, MCMILLAN Company, New York

REFERENCES

1. <https://style2designer.com/apparel/adaptive-clothing-best-for-physically-disabled-fashion-lovers/>
2. Clothing and textiles for disabled and elderly people Harriet Meinander & Minna Varheenmaa VTT Processes.

SEMESTER I

CORE IV - FASHION SKETCHING PRACTICALS

COURSE OBJECTIVES

- To create new designs for garment through sketching
- Designing and sketching designs for home furnishing item
- Innovation towards accessories designing

COURSE OUTCOMES

- To be a good design illustrator for the trendy garments towards market
1. Illustrate a gesture components parts from head to toes.
 2. Create a 10 head stick figure, block figure and flesh figure and convert pose to garment like straight pose, "S" curve, open pose, „T" pose.
 3. Stylized illustration in 10 head flesh figure – garments for cine field.
 4. Create a contemporary style garment in 12 head theory.
 5. Free hand drawing techniques.
 6. Model drawing by using pencil shade.
 7. Still drawing using color pencil shading.
 8. Develop live model drawing.
 9. Draw a fashion figure in 2D and 3D form using finishing techniques.
 10. Fashion accessory drawing. [any 5 items]
 11. Creation of Home Furnishing items. [any 5 items]

REFERENCE BOOKS

1. Abling Bina, Fashion sketch book, Fairchild publishers, New York
2. Seaman Julian, Professional Fashion illustration, B.T. Batford Ltd, London.
3. Ireland Patrick John, Fashion illustration, B.T. Batford Ltd, London.
4. Allen Anne Seaman Julian, Fashion Drawing- The basic principles, B.T. Batford Ltd, London.

SEMESTER I

CORE V - CAD IN FASHION DESIGNING PRACTICALS

COURSE OBJECTIVES

- To create and grade patterns for garments.
- To gain knowledge about fashion designing softwares

COURSE OUTCOMES

- Skilled to become CAD designer in garment industry.

PART - A

DESIGN AND DEVELOP THE PATTERN FOR THE FOLLOWING STYLE

KIDS WEAR

A-Line/Yoke frock

Baba suit

Knickers

WOMEN'S WEAR

Blouse

Salwarkameez

Skirt and Top

MEN'S WEAR

Basic Shirt

Pant

Trousers

PART-B

Grade the pattern to S, M, L, XL and estimate the length & marker efficiency

File the pattern style and apply the grade rule

Estimate the length and marker efficiency

SEMESTER I

ELECTIVE I – SUSTAINABILITY IN TEXTILE AND FASHION

COURSE OBJECTIVES

- To understand the importance of energy source.
- To acquire knowledge in sustainable concepts and its importance in Textile and fashion industry.
- To develop ideas in environmental impact and sustainability associated to fashion Industry.

COURSE OUTCOMES

The student will be able to

- Execute environmentally friendly textile manufacturing in working place.
- Improve their ability to creative ideas in research and development to make sustainable textiles.
- Manufacture sustainable textile products for all types of customer needs.

UNIT I

Introduction concepts and definitions- Renewable energy, non-renewable energy and sustainable development - Design's – Slow, Participatory, Open source, Biomimicry and Sustainable designs. Fast fashion, Passive Fashion, New Fashion Ethics and New Aesthetic Ethics.

UNIT II

Alternative fibers, Practice in Fiber & Fabric Processing, Spinning, Weaving and Knitting - Fabric Finishing, Bleaching, Dyeing, Printing and Specialist fabric finishing. Cut, Make and Trim.

UNIT III

Reuse, Recycle and Reduce, Innovating to Reduce the Impact of Use Phase- Process, Product and Consumer Focus, Locally Made Globally Relevant, Distinctiveness, Durability, Appropriateness.

UNIT IV

Textiles and Fashion Industry Impacts, Life Cycle Analysis, techniques used in LCA, standard test method for textiles sustainability, eco labels.

UNIT V

The Consumer and Future Challenges - Future of Fabric: Healthy and sustainable - Reversing the Escalators of Consumption- Reform.

TEXT BOOK

1. Kate Fletcher, Sustainable Fashion and Textiles, Published by Earthscan in the UK and USA in 2008, ISBN-13: 978-1-84407-463-1 Hardback ISBN-13: 978-1-84407-481-5 Paperback.

REFERENCES

1. SUSTAINABLE TEXTILES, Antonela Curteza, www.2bfuntex.eu MDT Sustainable Textiles.
2. https://books.google.co.in/books/about/Sustainability_in_the_Textile_and_Apparel

SEMESTER II

CORE VI - FASHION MERCHANDISING

COURSE OBJECTIVES

- To learn about the role and responsibilities of merchandiser and buyer
- To understand the structure of buying and merchandising departments
- To know the fashion merchandising, budgeting and planning

COURSE OUTCOMES

The student will be able to

- Understand the importance of merchandising in apparel industry
- Apply the merchandising skills in garment industry

UNIT-I

Introduction to Merchandising: Merchandising terminology - role and responsibilities of merchandiser - types of merchandisers - fashion merchandiser, export merchandiser, retail merchandiser and visual merchandiser.

UNIT-II

Roles of buyer and merchandiser: Rights of fashion merchandising - roles of buyer - skill set of good fashion buyer- role of fashion merchandiser - skill set of good fashion merchandiser - own label versus branded buying and merchandising- fashion buyer and merchandiser job description

UNIT-III

Organizing the buying and merchandising function: Structure of buying and merchandising departments - Assistant buyer - buying administration assistant - assistant merchandiser - allocator - buyer and the key contact - merchandiser and their key contact - meeting schedules - how buyer & merchandiser work with other activities in the value chain

UNIT-IV

Fashion Merchandising Budgeting: KPI budgeting - sales turnover budget - mark down spending budget - intake margin budgeting- stock target budgeting

Fashion Merchandising: Open to buy: What is open to buy - creating an open to buy budget -open to buy budgeting process

Fashion merchandising range planning: Introduction to range planning- range plan- optional plan -qualitative and quantitative aspects-range planning process

UNIT-V

Fashion merchandising: Sizing, deliveries and allocation: Merchandiser supplier relationship, size curves, initial allocations-managing purchase orders and deliveries

Trading: Planning versus trading, repeats and cancellations, promotional planning, end of season sale

E-retailing: E-retailing and product management, E-retailing and stock management and E-retail and drop shipping activities

REFERENCES

1. *David Shaw, T.J. Mastering Fashion Buying and Merchandising Management,16-Nov-2000 - Business & Economics.*
2. *Palgrave Macmillan, J.C. Fashion Merchandising, Principles and Practice,28-Nov-2014 - Business & Economics.*
3. *Tata McGraw, P. Retail Merchandising, Hill Education, 2010.*

SEMESTER II

CORE VII - TECHNICAL TEXTILES

COURSE OBJECTIVES

- To acquaint students with the conventional and latest fibres used in technical textiles.
- To enable the students to know the various application of technical textiles.
- To understand the concepts of smart and intelligent textiles.

COURSE OUTCOMES

The student will be able to

- Gain knowledge in technical textiles applications and the latest developments in fibres.
- Know many career options in various fields of technical textiles.
- Create innovative eco-friendly products in the field of technical textiles.

UNIT – I

Technical Textiles: Definition, developments in fibres used in technical textiles, Applications of technical textiles, Globalisation and Future of technical textiles industry.
Technical Fibres: High – Strength and high-modulus organic fibres, high chemical and combustion - Resistant organic fibres, high performance inorganic fibres, ultra-fine and novelty fibres.

UNIT –II

Medical Textiles: Classification – fibres Used. Non –Implantable, implantable, Extra Corporeal Devices, Health Care and Hygienic Products. **Agro Textiles** – Introduction, Fibres Used, types, functions and properties, characteristics and applications of Agrotexile products.

UNIT III

Build Tech - Introduction, Fibres Used, types functions and properties characteristics and applications in Architecture and in Building Construction. **Geotextiles** – Introduction, Fibres Used, types functions and properties characteristics and applications in its Field. **Indu Tech** – Introduction, Fibres Used, types, functions and properties, characteristics and applications – Theory of Dust Collection.

UNIT –IV

Protective Textiles: Introduction, Fibres Used, types functions and properties, characteristics and applications fire protective clothing, heat resistant garments, water proof Materials, ballistic resistant vest. Biological and Chemical Vest, Military protective Clothing.

Mobil tech Textiles- Introduction, Fibres Used, types functions and properties, characteristics and applications of mobile tech, applications in all kinds of road transport vehicles, rail and air crafts.

UNIT – V

Sports Textiles: Introduction, fibers used, Types, functions and properties, Characteristics and Applications of Sports Tech. **Smart and intelligent Textiles** - Classification - Active smart, passive smart and very smart textiles and phase change materials shape memory polymers, chromic and conductive materials and its applications in various fields.

REFERENCES

1. Dr. V. K. Kothari, Technical Textiles, Technology, Developments and Applications , IAFL Publications, New Delhi, (2008).
2. H. Mattila, Intelligent Textiles and Clothing, Publishing Ltd, England, (2006).
3. J W S Hearle, High Performance Fibres, Woodhead Publishing Ltd, England, (2001).
4. R Senthil Kumar, Textiles for Industrial Applications CRC Press (2013).
5. Sabit Adanur, Wellington Sears Handbook of Industrial Textiles CRC Press (1995).

SEMESTER II

CORE VIII – CAD IN TEXTILE DESIGNING PRACTICALS

COURSE OBJECTIVES

- To create basic and dobby weave patterns using textile CAD software
- To analyze a woven fabric, examine the fabric and plot in the interlacement mode in textile CAD

COURSE OUTCOME

- Skilled to become a CAD designer in textile designing

Prerequisite

Open source software – Weave point/ Weavelt pro/DB weave (Anyone)

Windows 7, Windows 8, Windows 10

1. Create weave patterns for the following weaves:

- Plain
- Twill – 2/1 twill, 1/2 twill, 3/1 twill, 1/3 twill (2/1, 2/3 twill)
 - 3/3-pointed twill
 - 3/3 Herringbone twill
 - Combined twill weave

- Huck a back
- Honeycomb- ordinary & brighter honey comb
- Mock leno

2. Create the following weave pattern based on design

- Striped pattern – pin stripe, Bengal stripe, bar stripe, barcode stripe
- Checked pattern – checker board, Madras checks, Tartan checks

3. Design a saree border, pallu and bodice design using **Adobe Photoshop /Adobe Illustrator software**

SEMESTER II

CORE IX – ADVANCED DRAPING TECHNIQUES PRACTICAL

COURSE OBJECTIVES

- To strengthen original expression while creating new silhouettes.
- To develop the important skill of visualizing how a two-dimensional sketch moves into a three- dimensional form.

COURSE OUTCOMES

The student will be able to

- Design varieties of skirts through draping technique
- Create Blouses for ladies by adopting the variations of darts and fullness
- Drape advanced trousers and check the fit
- Drape Camisole and princess line on bias
- Drape knits tops and visualize the fit

EXERCISES

1. Draping the Woven Panel

Preparing the calico, Draping the three grains, Visualizing calico VS Fabrics.

2. Draping Skirts: Skirt silhouettes: Kilt, Dirndl, Ballet skirt, Straight skirt, A line skirt, Bias circle skirt. **Variations** yoked skirt with gathers and flare.

3. Blouses with sleeve (Ladies Tops): Peasant blouse, Gibson girl blouse, Variations tunic with bell sleeve.

4. Draping and Fitting Trousers: Harem pants, Wide leg trousers with front tucks

5. Knits: Cotton Knit top with ribbed neckline

6. Draping on the Bias: Bias draped camisole, Bias chemise with princess line

REFERENCES

1. Draping: The Complete Course, Karolyn Kiisel, Laurence King Publishing, 13-Sep-2013
2. Draping for Fashion Design, Hilde Jaffe, Pearson Education India, 2000

SEMESTER II
ELECTIVE II –IMPORT EXPORT MANAGEMENT AND
DOCUMENTATION

COURSE OBJECTIVES

- To obtain knowledge in import and export management features and procedures.
- Understanding about the benefits and supports provided by Government of India.
- To be familiar with approvals and assistance provided by Government institutes.
- Familiar about Documents need for shipment.

COURSE OUTCOMES

The students will be able to

- Become Familiar in import and export trade policy.
- Gain Knowledge in export and import procedure and documentation
- Know the way for getting finance assistance for export and import from government organisation.
- Work out import and export shipment documents.

UNIT I

Import Export Management Introduction; Concept Key Feature; Foreign Trade - Institutional Framework and Basics; Trade Policy; Foreign Trade -Simplification of Document; Reduction in Document to Five for Custom Purpose – Exporting and Importing Counter Trade- Promise and Pitfall of Exporting; Improving Export Performance - Counter Trade.

UNIT II

Export Procedures - Preparation for exports: Registration of firms with authorities, PAN No., IE code, BIN No., EPC, Central Excise etc.,- Category of exports: Direct, indirect, third party exports.- Category of Exporters: Manufacturer exporter, merchant exporter, EOU/SEZ/ - Five types of Export Houses - Export benefits: Duty drawback, advance authorization scheme, duty free import authorization, duty exemption entitlement scheme, EPCG, duty entitlement pas book scheme, market development assistance - GSP and GSTP rules as per the FT policy.

UNIT III

Import Procedures – Import management, procurement planning, and project imports regn. - Identification, selection of suppliers - Purchase contract, terms of payments - Terms of

Delivery Inco terms- Import policy ITC HS- Role of a customs house agent and freight forward agents- Type of customs duties, valuation rules- Complete documentation and procedures for import clearance at sea port- Customs clearance of imports by sea and air documents, procedures. etc. -Imports under various imports notification issued by customs.

UNIT IV

Export Assistance of India: Introduction, Importance of Export Assistance, Export Promotion Measure in India -Expansion of Production Base for Exports; Relaxation in Industrial Licensing Policy /MRT/ FER/ Foreign Collaborations; Liberal Import of Capital Goods; EPZ / EOU -Assured Supply of Raw-Material Imports -Eligibility for Export/ Trading/Star Trading/Super Star Trading Houses - Export Houses Status for Export of Services- Rendering Exports Price Competitive; Fiscal Incentives; Financial Incentives; Strengthening Export Marketing Effort.

UNIT V

Export documentation – Introduction and various types of export documents – Pre- shipment and Post-shipment documents – Pre-Shipment and Post- Shipment finance. - conditions in LC for stipulated documents legalization shipping consignment certificates. Export duty draw back – pass book – capital goods import license and assistance. Types of bill of lading.

TEXT BOOKS

1. Export import procedures, C.Rama gopal, New Age International (P) Limited, Publishers New Delhi.
2. EXPORT/IMPORTPROCEDURES and DOCUMENTATION, Thomas E. Johnson And Donna L. Bade, American Management Association, New York.
3. Foreign Trade – Theory, Procedures, Practices and Documentation, Dr. Khushpat S. Jain, Himalaya Publishing House Pvt. Ltd, New Delhi.
4. Export-Import Theory, Practices and Procedures, Belay Seyoum, PhD, SECOND EDITION, Routledge, New York.

REFERENCES

1. Export Import Policy, Publisher: Ministry of Commerce, Government of India, New Delhi.
2. Electronic Commerce by N. Janardhan, Publisher: Indian Institute of Foreign Trade, New Delhi.
3. Nabhi's New Import Export Policy, Publisher: Nabhi Publication, New Delhi.
4. Export-What, Where, How by Ram Paras, Publisher: Anupam, Delhi.
5. Import Export Management, EIILM University, Sikkim.

SEMESTER II
SKILL BASED ELECTIVE I - ENTREPRENEURSHIP DEVELOPMENT
IN TEXTILES

COURSE OBJECTIVES

- To learn about the entrepreneurial skills involved in Apparel industry.
- To know the financial supporting sectors for starting new business

COURSE OUTCOMES

The students will be able to

- Apply knowledge while starting a new business
- Become aware of the tax regulations, patent rules and exemptions

UNIT I

Entrepreneurship: Meaning – Analysis – Types and Functions –Growth of entrepreneurs in India – Influence of Environmental Factors – Help in EDP – training and development of entrepreneur. Entrepreneurship development programme – role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.

UNIT II

Business planning – starting a new venture related to apparel industry, essentials of a successful center. Formalities involved in starting up of a firm. Ownership details - individual proprietor / partnership / PVT. Limited company and public Ltd Company, bank formalities, term loan, working capital, project financing.

UNIT III

Location and plant layout – factors influencing plant location, building structure, lighting, ventilation, material handling, availability of labor, material management and transportation. Plant layout, ergonomics safety and security to be considered while planning the layout.

UNIT V

Role of support institutions and management of small business: Director of industries – DIC, SIDCO, SIDBI, SIDC, SISI, NSIC, NISBUD, State Financial Corporation Sic, Financial assistance by central government through MSME scheme, PMYK scheme, MUTHRA

scheme in detail. Subsidy schemes supporting for apparel industry by AEPC, ATDC PEDEXCIL, Marketing Management, Production Management, Finance Management, Human resource Management, Export Marketing,

UNIT IV

Industrial Sickness and remedies, tax planning, GST, patent rules, factory ACT, minimum wages, knowledge of exemptions and deductions, Environmental considerations and social responsibilities

REFERENCE BOOKS

1. Desai Vasani, Small scale industries and entrepreneurship, Himalaya Publishing House, Delhi, 2003.
2. Kaul Aruna, Entrepreneurship management, Vikas Publishing House, Delhi, 2003.
3. Cynthia L. Greene, Entrepreneurship ideas in Action, Thomson Asia PVT Limited, 2004.
4. David Otes, A guide to Entrepreneurship, Jaico Books Publishing House, Delhi, 2004.

SEMESTER II

VALUE EDUCATION - HUMAN RIGHTS

COURSE OBJECTIVES

- To gain knowledge in human, civil, political, economic and women rights
- To know the emerging trends in terrorism and human rights

COURSE OUTCOMES

The students will be able to

- Understand the basic principles, declaration and classification of human rights
- Differentiate the civil, political and women rights

UNIT – I

Human Right – Definition – Historical evaluation- classification of rights – universal declaration of Human Rights – International covenants on economic & social rights constitutional provisions for Human Rights – Fundamental Rights. Direct to Principle of the state policy – Indian constitution.

UNIT-II

Civil & political rights – rights to personal freedom – right to freedom of expression – right to property – right to educate – right to equality – right to religion – right to form association & unions – right to movements – right to family – right to contract – right to constitutional – remedies – right to vote & contest in election – right to hold public offices – right to petition – right to information-right to criticize the government – right to democratic governance.

UNIT – III

Economic rights – right to work – right to adequate wages – right to reasonable hours of work – right to fair working condition – right to self-government in industry – consumer rights – social & cultural rights – rights to life – right to clean environment.

UNIT – IV

Women's rights – rights to inheritance – right to marriage, divorce & remarried – right adoption – right to education – right to employment & career advancement – rights to relating to dowry – right for quality – right for safe working condition – children's rights – right to protection & care – right to education issues related with female infanticide – street children – child labour – bonded labour – refugees rights – minority rights – details rights – tribal rights – no modes rights.

UNIT- V

Human rights violence – international – national – regional level – organization to protect human rights – UNO – national commission for human rights – state commission – non – government organization & human rights – Amesty international – Asia watch – PUCL – OCDR – people watch. Emerging trends to terrorism & human rights – emergency & human rights – judiciary & human rights – police & human rights.

REFERENCES

- 1. Human Rights - Text Book by University*

SEMESTER III
CORE X - RESEARCH METHODOLOGY AND STATISTICS IN
TEXTILES

COURSE OBJECTIVES

To make the students to learn about the

- Problem formulation, analysis and solutions.
- Technical paper writing / presentation without violating professional ethics
- Analysis of Variance and Non-Parametric Tests and testing of hypothesis

COURSE OUTCOMES

At the end of this course, the students will be able to

- Formulate research problem, carry out research analysis and follow research ethics
- Design the experiment, conduct statistical tests and analyze the results to arrive at the conclusions
- Study the capability of process and control the process based on data available and Make decisions with minimum error from available data.

UNIT I

Research: Meaning, Types of research, Significance of research, Research process

Literature Review: Effective literature studies approaches, analysis and research ethics.

Research Problem Formulation: Meaning of research problem- Sources of research problem, criteria and characteristics of a good research problem, errors in selecting a research problem, scope and objectives of research problem.

UNIT II

Variables: What is Variable and types of Variable

Define the terminologies: Control, Confounded relationship, Research Hypothesis, Experimental and Non-Experimental Hypothesis testing research, Experimental and Control groups, Treatments, Experiment, Experimental Units(s)

Research Design: Methods of research design: Research design for Exploratory research studies, Descriptive and diagnostic research studied, Hypothesis testing research studies. Principles and methods of experimental design. Design for sample surveys

UNIT III

Selecting a Method for Data collection: Methods of Data Collection, Difference between Primary and Secondary data, Collection of data through primary sources: Observation, Interview, Questionnaire. Collection of data through Secondary sources.

Processing of Data: Editing, Coding and analysis

Displaying of Data: Methods of communicating and displaying analyzed data, Text, Tables, Graphs.

UNIT IV

Technical Writing /Presentation: Types of research report: Dissertation and thesis, Research Paper, review paper, review article, short communication, conference presentation etc., Referencing and referencing styles, research journals, indexing, and citation of journals, intellectual property, plagiarism, Effective technical writing, how to write report, paper, developing a research proposal, format of research proposal, a presentation and assessment by a review committee.

UNIT V

Descriptive Statistics: Percentage, Mean, Standard deviation, Standard error, Skewness, Kurtosis, Rank Correlation

Hypothesis Testing: Chi-Square test, Anova, t test (one sample, Independent, Paired), Correlation Analysis, Regression Analysis, (Linear, Multiple), Non-Parametric test: sign test, rank test, concordance test.

Process Control and Capability Analysis: Control charts for variables and attributes - basis, development, and interpretation, sensitizing rules, average run length; process capability analysis

REFERENCES

1. Ranjit Kumar, 2nd Edition, "Research Methodology: A Step by Step Guide for beginners" 2010
2. Montgomery D.C., "Introduction to Statistical Quality Control", John Wiley and Sons, Inc., Singapore,
3. Leaf G.A.V., "Practical Statistics for the Textile Industry, Part I and II", The Textile Institute, Manchester, 1984,

SEMESTER III

CORE XI - TEXTILE TESTING

COURSE OBJECTIVES

- To impart knowledge in basics of testing and the testing atmospheric conditions in a testing lab.
- Helps in determining the testing of fibres, yarns and fabrics.
- Enables the students to know about the various textile testing equipment as well as their working principles.

COURSE OUTCOMES

The student will be able to

- Understand the importance of standard atmospheric conditions required for testing.
- Handle the equipment without any assistance in carrying out the testing of fibres, yarns and fabrics.
- Examine the determination of color fastness of dyed materials

UNIT I

Introduction to testing – definition, objectives, importance and types of testing, International Quality parameters and standards like AATCC, ASTM, BIS etc. Humidity- absolute and relative (moisture content and regain) , Standard atmospheric conditions, Moisture and Humidity – its importance and relationship to textiles, Determination of humidity – Wet and Dry bulb hygrometer and sling hygrometer ,Measurement of moisture regain and content by Conditioning oven method.

UNIT II

Fiber testing - Cotton fiber length –determination of fibre length by Baer sorter method, Fineness – Air flow principle – determination of fibre fineness by Sheffield micronaire method, fibre maturity – Caustic soda swelling method, fibre strength – determination of fibre strength by Pressely bundle strength tester and Stelometer method, Determination of trash and lint in cotton by Shirley trash analyzer method.

UNIT III

Yarn testing - Yarn numbering system – conversion of count from one system to another, Instruments for count determination – Quadrant balance, Beesely balance.

Yarn strength testing – principles of CRT, CRL, CRE – Single yarn strength tester, Lea strength tester. Yarn twist- Direction of twist, Twist testers – Tension type twist tester, Yarn evenness – classification of variation, methods of measuring evenness using black board method, Uster evenness tester, determination of yarn hairiness and yarn crimp.

UNIT IV

Fabric testing – fabric weight, cover factor, fabric thickness. Fabric strength – fabric tensile strength tester, tearing strength tester, hydraulic bursting strength tester. Fabric abrasion resistance- Martindale abrasion tester, Fabric pilling – ICI pill box tester. Fabric drape – Measurement of drape, fabric stiffness – Shirley stiffness tester. Fabric crease resistance - crease recovery tester, Fabric permeability – Shirley air permeability tester.

UNIT V

Color fastness in textiles – importance and factors affecting colour fastness, colour fastness to Crocking - dry and wet, perspiration – acid and alkaline, sunlight, laundering, pressing and dry-cleaning aspects. Grey scales and ratings.

REFERENCES

1. Dr. Arindam Textile Testing, SITRACoimbatore (2001).
2. Elliot B Grover and Hamby D S, Handbook of Textile Testing and Quality Control, WilleyEastern limited, New Delhi(1988).
3. Saville BP Physical Testingof Textiles , Woodheadpublishing, Cambridge(2004).
4. Gopalakrishnan. R,A.P.Textile Testing, SSM Institute of Technology, Komarapalayam. (2002).
5. Newnes Butterworths, B.J.E.(nodate) Principlesof Textile Testing, London (1976).

SEMESTER III

CORE XII - TEXTILE TESTING PRACTICALS

COURSE OBJECTIVES

- To practice the various textile testing equipment in standard atmospheric conditions

COURSE OUTCOMES

The students will be able to

- Operate the equipment without any assistance while carrying out the testing of fibres, yarns and fabrics.
- Interpret the data more accurately on their own

1. Determination of fabric weight of the given fabric.
2. Determination of Thickness of the given Fabric.
3. Determination of Tensile Strength of the given Fabric.
4. Determination of Stiffness of the given Fabric.
5. Determination of Abrasion Resistance of the given Fabric.
6. Determination of Crease Recovery of the given Fabric.
7. Determination of Drape of the given Fabric.
8. Determination of Tearing strength of the given fabric.
9. Determination of Bursting Strength of the given Fabric.
10. Determination of Colour Fastness of the given Fabric by Crock meter.
11. Determination of Colour Fastness of the given Fabric by Perspirometer.
12. Determination of Colour Fastness of the given Fabric by Laundrometer.
13. Determination of Colour Fastness of the given Fabric by Pressing.
14. Determination of Shrinkage of the given Fabric.

SEMESTER III

CORE XIII – ADVANCED TEXTILE PROCESSING

COURSE OBJECTIVES

- Gain knowledge in natural sources required for Bio Processing and Natural dyeing.
- Understanding the use of chemicals, processing methods and quality requirement for garment dyeing.
- To know the range of advanced printing technology used in present scenario.
- Acquire knowledge about pollution cause by using various chemicals and processing method.

COURSE OUTCOMES

The students will be able to

- Describe the ecofriendly processing of textiles from fiber to fabric stage.
- Develop ecofriendly sustainable textile products.

UNIT I

Application of Enzymes in Textile Chemical Processing – Enzymes used in de-sizing process, Bio-scouring process and its advantages, Bio – Bleaching and its advantages. Natural dyes – Various Sources of Natural dyes. General procedure for application of natural dyes on cotton and other fibers. Advantages and disadvantages of NaturalDyes.

UNIT II

Garment dyeing – Basic theory of Garment Dyeing – special chemical for garment dyeing – Advantages of garment dyeing – Precaution steps to be taken before garment dyeing–Qualitycontrollinggarmentprocessing.

UNIT III

Finishing – Definition and Advantages – Bio polishing – Enzymes used for Bio polishing – Bio Polishing of cotton fabrics – Bio polishing of polyester and its blends, UV protective finish, Anti-microbial finish, Fragrance finish, Burn out finish, Denim finish.

UNIT IV

Printing: Preparation of hosiery cloth for printing – Tubular and slit open forms, Khadi printing, Pearl printing, Glitter and Metallic printing, Flock printing by electrostatic method.

Working of Garment printing machine. Digital Inkjet printing – Advantages and Limitations. Capsule printing, Crimp and Crepon style of printing.

UNIT V

Pollution – Types- Land, Water, Air and Noise Pollution – Causes and remedies related to textile industry. Effluent treatment – methods – color removal- Bio – degradation. ETP plant, Need for Eco-friendly Textile Processing.

REFERENCES

1. Dr. V. A. Shenai Textile Finishing, Sevak Publications.
2. K. B. Krishnakumar Pollution in Textile Industry, SSM ITT Staff & students Co-operative stores Ltd.
3. S. Duhayamarthandan Technology of Textile Printing, SSM ITT Staff & students Co-operative stores Ltd.
4. Dr. S. Jayaprakasam, D.G.N.T extile Finishing.
5. R. Shanmugaraj, S.U. Eco friendly Textile Processing, SSM ITT Staff & students Co-operative stores Ltd.
5. Dr. D. K. Aggarwal, Housekeeping management Amman publication, New Delhi.

SEMESTER III
ELECTIVE III - ONLINE BUSINESS

COURSE OBJECTIVES

- Understand the significant need of Online business in market.
- To develop website and software for online business.
- Understand the legal requirement like copy right, trademarks and accounting process.
- Obtain knowledge in buying, selling, payment handling and social network marketing.

COURSE OUTCOMES

The students will be able to

- Gain sound knowledge in creation of online business.
- Apply knowledge in creating website, software and social media pages.
- Become a successful branded entrepreneur in online business.

UNIT I

Overview of online business: Introduction to Online Business, Success Stories of how entrepreneurs started online business, Benefits of online business, software required to create web pages

UNIT II

Website development: Web Page Designing-Classification of websites, building a website-steps in building a website, Website hosting –web hosting options.**Content creation, delivery and management-Content management and maintenance**

UNIT III

Keeping Business legal: Copy rights, trademarks and other legal concerns, basic accounting practices, **Online business models:** Affiliate Programs, Online Advertising, Selling Products and Services.

UNIT IV

Handling payment: Online Payment Solution-Anticipating your online customers purchasing needs-applying for credit card merchant status-finding short cuts to processing credit card data-providing shoppers with electronic purchasing system-delivering products and services

UNIT V:

Social Networking and Marketing: Attracting customers and services-Word of mouth advertising, Social networking and other advertising, **The future of online business:** Building your Business for the Future.

REFERENCES

1. Kenneth C. Laudon E-Commerce : Business, Technology, Society, 4th Edition, Pearson.
2. Porter, M. E Strategy and the Internet,HBR March 2001.
3. Kamlesh N., Amit Lal and Deeksha Agarwala, A. Business on the Net: An Introduction to the Whats and Hows of E -Commerce, Macmillan India Ltd.
4. Liewyi, L.V.K. Online business made easy, Kindle edition ,2009.
5. Sons, G.H., John Wiley Starting an Online Business For Dummies, 14-Jun-2013.
6. The Business of E-Commerce – From Corporate Strategy to Technology,Cambridge University Press, 2000 .

SEMESTER III

SKILL BASED ELECTIVE II- FASHION PORTFOLIO PRACTICALS

COURSE OBJECTIVES

- To Understand the importance of making Portfolio.
- To develop designs based on forecasting for future fashions.
- To be familiar with suitable selection of fabric, trims and accessories.
- Acquire multi skills technique in design, draft, construct and making accessories.

COURSE OUTCOMES

- Ability to visualize the outcome of entire costume.
- Capability to start up Boutiques and designer shop.
- Skill to become a fabric technician, garment technician, accessory maker, fashion merchandiser and fashion designer.

Develop the following three different portfolios in three different bases:

1. Fashion forecasting
2. Indian tradition
3. Individual creativity

The Portfolio should contain the following boards and construct the garment for the same:

1. Design development
2. Theme Board
3. Story Board
4. Mood Board
5. Inspiration Board
6. Customer Profile
7. Flat Sketches
8. Illustration Board
9. Component Board
10. Colour Board
11. Fabric Board
12. Accessories Board

13. Ornaments Board
14. Garment Construction
15. Photo shoots with different pose on stage.

SEMESTER IV

CORE XIV- FASHION RETAILING

COURSE OBJECTIVES

- It aims to provide the learners with a basic understanding of how contemporary retailers operate.
- It enables to have broad look at consumer behavior and markets and how the markets differ within emerging retail communities from corporate office to shopfloor.
- It incorporates the concepts of store merchandising, strategic planning and trends in retailing.

COURSE OUTCOMES

The students will be able to

- Explain the basic concepts of retailing
- Discuss important concepts of retail consumer markets such as consumer behavior, consumer assessment theories, Consumer analysis
- Elucidate the Corporate level departments in retail and the Roles and responsibilities of manager
- Describe the model for strategic planning, store merchandising and emerging trends in retailing

UNIT-I

RETAILING

What is retailing? The History of Retail, Understanding the difference between retailing and retailer, Fashion supply chains, **Classification of retailers:** Boutiques, Specialty shops, Department stores, off price merchants, Fashion manufacturers outlets, Discount operations, Warehouse clubs, Franchises. **On-site vs. off-site retailing:** Difference between On-site retailing and off-site retailing, Catalogs, Televending. **Multichannel retail approaches.**

UNIT-II

RETAIL CONSUMER MARKETS

Consumer behavior: Rational motives, Emotional motives, Patronage motives, **Consumer assessment theories:** Maslow's hierarchy of needs, Consumer perception theory, Psychographic segmentation. **Consumer Analysis:** Demographics, Population concentration, Climate differences, Age groups, Occupations, Income, Education, Social class groupings, Family Life cycle, Demographics vs the target audience, Mapping the target audience. **Site selection and Store location:** Area characteristics, Shopping districts, Downtown central districts, Regional Malls, Mixed-use centers, Power centers, Outlet centers, Site selection.

UNIT-III

CORPORATE OFFICES AND THEIR ROLE

Corporate level departments: Executive board, Human resources, Merchandising and buying, Creative services, Information technology, store operations. **Strategic Planning:** What is Strategic Planning, Dunne and Lusch Model of Strategic planning in retail. **Supporting Store teams. Ethics and corporate social responsibility.**

STORE MANAGEMENT AND THE BACK OF HOUSE

Managerial roles: Store manager, Operations/facilities manager, Hiring manager, Apparel /accessories department manager, Receiving manager, Visual manager. **Functions of the Back of house. Daily routines of Managers on the basis of shift. Employee management:** Interviewing and employee files, Hiring process, Training and development. **Store logistics:** Retail logistics management model, Distribution, Communication and Value-added services.

Merchandise controls and Loss prevention: Deterring theft, methods to deter theft,

UNIT-IV

STORE MERCHANDISING

Understanding the merchandising division, Merchandising and front of house, Merchandising vs visual merchandising, Visual merchandising Key performance indicator matrix. Merchandising the store environment: The store merchandisers role, Visual areas, Consumer circulation, Accessibility, floor sets

UNIT-V

TRENDS IN RETAILING

Understanding E commerce and the online shopper, E commerce process, Cross channel integration, Shipping differentiation, Alternative currencies. Mobile retail, pop-up and concept shops, **Retailer and designer collaborations, Technology in the retail sector.**

REFERENCES

1. Fashion Retailing: From Managing to Merchandising, Dimitri Koumbis, Bloomsbury Publishing, 2020
2. Fashion Retailing: A Multi-Channel Approach, Jay Diamond, Ellen Diamond, Sheri Litt, Bloomsbury Publishing, 2015

SEMESTER IV

CORE XV- ACCESSORY DESIGNING PRACTICALS

COURSE OBJECTIVES

- To provide knowledge in accessory designing and making

COURSE OUTCOMES

- Provides knowledge in selecting raw materials for accessory designing
- Helps to start a new business in ornament designing

Prepare the following Samples using the available raw materials / any base material.

1. Hand bags -4 varieties.
2. Purses / Wallets - 4 varieties.
3. Slippers / Shoes - 5 models.
4. Belts - 5 models.
5. Gloves-3 models.
6. hats- 3 models.
7. scarves-3 models.
8. Cell Phone covers- 4 varieties
9. A set of bridal ornaments – select a bridal costume of any religion
10. A set of ornaments for a dress designed for a fashion show

Question Paper Pattern for Theory Examination

Time: Three Hours

Maximum Marks: 75

Part - A (15 X 1 = 15 Marks)

Answer **ALL** Questions Multiple Choice

Part - B (2 X 5 = 10 Marks)

Answer **ANY TWO** Questions out of **Five**

Part - C (5 X 10 = 50 Marks)

Answer **ALL** Questions

Either (or) Type Five Questions

(One question from Each Unit)