

Bharathiar University – Coimbatore – 641046

B.Sc Fashion Apparel Management Degree Course

(Syllabus for the students admitted during the academic year 2017-2018 Batch onwards)

Scheme of Examination

Part	Study Components	Course Title	Hours per week	Examinations			Credit	
				Dur. Hrs.	CIA	Marks		Total Marks
Semester – I								
I	Language I		6	3	25	75	100	4
II	English I		6	3	25	75	100	4
III	Core Paper I - Principles & Elements of Fashion Design		4	3	20	55	75	3
	Core Paper II - Textile Science		4	3	20	55	75	4
	Core Paper III - Practical I - Computer Application Practical		4	3	40	60	100	3
	Allied Paper I - Principles of Management		4	3	25	75	100	4
IV	Environmental Studies #		2	3	-	50	50	2
Semester – II								
I	Language II		6	3	25	75	100	4
II	English II		6	3	25	75	100	4
III	Core Paper IV – Fabric Science		4	3	20	55	75	3
	Core Paper V - Textile Coloration & Finishing		4	3	20	55	75	3
	Core Paper VI - Practical II - Fabric Analysis		4	4	30	45	75	4
	Allied Paper II - Accounting for Managers		4	3	25	75	100	4
IV	Value Education – Human Rights #		2	3	-	50	50	2
Semester III								
III	Core Paper VII – Pattern Development		5	3	25	50	75	3
	Core Paper VIII - Apparel Manufacturing Technology		5	3	20	55	75	3
	Core Paper IX – Fashion Communication		5	3	25	75	100	4
	Core Paper X - Practical III - Pattern Making		4	3	40	60	100	4
	Allied Paper III - Retail Management		5	3	40	60	100	4
	Skill based Subject I – Computer Aided Pattern Making Practical		4	3	20	55	75	3
IV	Tamil @ / Advanced Tamil# (OR) Non-major elective - I (Yoga for Human Excellence)# / Women’s Rights#		2	3	50	50	50	2

	Semester IV						
III	Core Paper XI - Apparel Quality Assurance	5	3	20	55	75	3
	Core Paper XII – Materials Management	5	4	40	60	100	4
	Core Paper XIII - Apparel Costing	5	3	20	55	75	3
	Core Paper XIV - Textile Testing Practical	4	3	25	75	100	4
	Allied Paper IV - Human Resource Planning	5	3	20	55	75	4
	Skill based Subject II - Stitches & Seams Practical	4	3	25	75	100	3
IV	Tamil @ /Advanced Tamil # (OR)Non-major elective - II (General Awareness #)	2	3	-	50	50	2
	Semester V						
III	Core Paper XV – Apparel Merchandising	4	3	25	75	100	4
	Core Paper XVI – Garment Construction Practical	4	3	25	75	100	4
	Core Paper XVII - Statistics for Management	4	3	25	75	100	4
	Core Paper XVIII – TQM in Apparel Industry	4	3	25	75	100	4
	Elective Paper I	4	3	25	75	100	4
IV	Skill based Subject III – Internship	10	3	20	55	75	3
	Semester VI						
III	Core Paper XIX – Entrepreneurship and Small Business Development	4	3	25	75	100	4
	Core Paper XX – Supply Chain Management	4	3	20	55	75	3
	Core Paper XXI - ERP in Apparel Industry	4	3	20	55	75	3
	Elective Paper II	4	3	25	75	100	4
	Elective Paper III	4	3	25	75	100	4
IV	Skill based Subject IV – Project Work & Viva Voce	10	3	40	60	100	3
V	Extension Activities @	-	-	50	-	50	2
	Total					3500	140

@ No University Examinations. Only Continuous Internal Assessment (CIA)

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List of Elective papers (Colleges can choose any one of the paper as electives)		
Elective – I	A	Fashion Marketing
	B	Industrial Engineering
	C	Industrial Economics
Elective – II	A	Visual Merchandising
	B	International Trade & Documentation
	C	Industrial Psychology
Elective - III	A	Apparel Brand Management
	B	Lean Six Sigma
	C	Human Values and Professional Ethics

Semester – I Core Paper I – Principles & Elements of Fashion Design

Unit I - Introduction to fashion

Fashion Definition – Fashion terminologies – Classification of fashion – Fashion cycle – Fashion forecasting – Factors influencing in fashion – Role and responsibilities of a fashion designers – Types of fashion designers.

Unit II - Elements of design

Introduction to design – Types of design – Elements and their importance in a design – Line – Types – Application of line in a garment – Influence of line in various illusion - Shape – Types – Importance of shape in garment design – Texture – Determinants of texture – Effect of texture on color & physical proportion

Unit III - Color & Color theory

Introduction to color theories – Dimensions of color – Color systems – Warm and cool colors – color schemes – Application of color in fashion design – Visual impact of color in a garment – Importance of color psychology

Unit IV - Principles of design

Importance of principles of design in fashion – Balance and its types – Proportion and its application in garment design – Emphasis – Creating emphasis in a garment using various techniques – Harmony and its impact in garment design – Rhythm – Application of rhythm in garment design

Unit V - Introduction to fashion style details and various garments

Importance of details in apparel design – Various types of neck, collar & sleeve – Different types of waist & hem lines – Types of plackets, Pockets- Garments for men, women and kids – Unisex garments – Intimate , active and functional garments

References

1. *Injoo Kim & Mykyung Uh*, Apparel Making in Fashion Design, Fairchild Publications, New York (2002).
2. *Bride M. Whelan*, Colour Harmony – A Guide To Creative Colour Combinations, Rockport Publishers, USA (1997).
3. *James Stockton*, Color, Chronicle Book Publishers, San Francisco (1984).
4. *Axel Venn*, Color Kaleidoscope, Mode... Information Group (1997).
5. *Sumathi.G.J*, Elements of Fashion and Apparel Design, New Age International (P) Ltd, New Delhi (2002).
6. *Patric John Ireland*, Fashion Design Drawing and Presentation, B.T.Batsfort Ltd, London (1982).
7. *Jenny Davis*, A Complete Guide to Fashion Designing, Bharat Bhushan Abhishek Publication (2006).
8. *Kathryn Mckelvey & Janine Munslow*, Fashion Source Book, Blackwell Publication (2006).
9. *Kathryn Mckelvey & Janine Munslow*, Fashion Design, Blackwell Publication (2003).
10. *Patric John Ireland*, Encyclopedia of Fashion Details, Prentice Hall, NJ (1987).

Semester – I Core Paper II - Textile Science

Unit I : Natural Fiber

Introduction- Classification of textile fibres - Properties of textile fibres. Cotton : Grading of cotton - Properties of cotton fibre - Production, morphological structure, properties and end uses of: Flax – Jute. Introduction to protein fiber - Production of silk - Morphological structure of silk - Properties of silk - varieties of silk - Morphological structure of wool - Composition of wool fibres – Properties of wool fibres – Woollen Vs Worsted Yarns

Unit II: Regenerated fiber

Introduction -Manufacturing sequence of viscose fibre - Viscose fibre properties, Introduction of cuprammonium rayon- Introduction of cellulose acetate rayon - Introduction of Modal,Llyocell & Bamboo fibres. Filament Spinning Techniques.

Unit III: Synthetic Fiber

Introduction to Polymer – Types of Polymer & Polymerization. Fibre manufacturing & Properties of Polyester, Nylon, Acrylic & Spandex fibres - Brief study about micro fibre, Aramid fibres.

Unit IV : Yarn Formation

Introduction to yarn classification – Staple spinning system – Production sequence for cotton yarn – Comparison of carded and combed yarn – Yarn winding – waxing – Study of yarn quality parameters – Various yarn package defects – Introduction to blended textiles – types and benefits– Double yarn production.

Unit V : Latest trends in textile fibers and yarns

Introduction to organic cotton & specialty natural fibers such as, banana, pineapple, spider Silk – Brief study about OE & Airjet Spinning. Study about Fancy yarns and sewing threads , properties and end uses – Introduction to fibers and yarns used in technical textiles.

References:

1. *Mishra, S.P.* A Text Book of Fibre Science and Technology, New Age International (P) Ltd Publishers, New Delhi (2000).
2. *Goswami.J.C., Martindale.J.G, Scardino.K.L.,* Textile Yarns,Technology, Structure & Applications, Mahajan Book Distributors, Ahmedabad (1995).
3. Progress in textiles: Science and technology Vol.-2 By Dr. V.K. Kothari, I.I.T. Delhi.
4. Hand book of textile fibres by J.Gordon Cook
5. Manufactured fibre technology by V.B. Gupta & V.K. Kothari
6. Essential fibre chemistry by M.E. Cartor
7. Synthetic fibres by Fournel 184. New fibre by T.Hongu, G.O. Phillips, Woodhead publications.
8. Fibre chemistry by M. Lewin, E.M. Pearce, Marcel & Dekkan Inc.
9. Regenerated Cellulosic fibres by C. Wooding, Woodhead publishing Ltd.
10. The technology of short-shape staple spinning – W. Klein
11. Spun yarn technology – Oxtoby
12. New Spinning Technology Vol. 4 & 5 –W.Klien

Semester – I Core Paper III - Computer Application Practical**MS Office**

1. Prepare an interview call letter and send using mail merge in MS Word.
2. Design the given advertisement using in MS word. Apply various fonts and pictures.
3. Create line, bar and pie charts for the given data using MS Excel.
4. Prepare students mark statement with the following fields Roll No, Name, Sub1, Sub2, Sub3, Sub4, Sub5. Calculate Total, Average, Result and Grade. Apply Conditional formatting.
5. Prepare employee salary list with fields Employee No, Employee Name, Experience, Basic Pay, HRA,DA,LIC,PF. Calculate Gross Salary & Net Salary based on the following conditions

Experience	HRA	DA	LIC	PF
5 Years & Above	30%	15%	3%	700
Less than 5 Years	15%	5%	3%	700

6. Prepare a power point presentation about a product. Apply animation and slide timing.
7. Create an EMail ID and use various mail features.

Corel Draw

8. Design a T Shirt and apply patterns.
9. Design a wedding invitation

Photoshop

10. Create the given design

HTML

11. Design five web pages with hyperlinks linking all pages

Semester –I Allied Paper I - Principles of Management**Unit I**

Nature and scope of management – Management and Administration – Evolution of Management thoughts –Taylor & Scientific Management, Fayol’s Principles of Management - **Planning** : Meaning and purpose of planning – Planning Process – Types of planning - Measures of effective Planning, Barriers to Effective Plan, Management by Objectives; Decision making: Process of Decision making - types of Decisions.

Unit II

Organizing: Types of organization – Organizational structure & Process –Departmentation- Span of control – Committees. Delegation and centralization line & staff relationship. **Staffing**: Sources of recruitment – Selection process - Training methods – Performance appraisal.

Unit III

Direction: Meaning, nature, scope and principles of direction, supervision; Motivation - Meaning, nature and importance of motivation, Theories of motivation. **Controlling**: Need for co-ordinating – Meaning and importance of control - Control process –Types of control. Communication -Meaning, process, oral, written, Non-verbal, pictorial communication, communication channel, barriers in communication. Decision making – Process of decision making – Types of decisions – Problems involved in decision making.

Unit IV

Human Resource Function: Human Resource Philosophy – Changing environments of HRM – Strategic human resource management – Trends in HRM – Organisation of HR departments – Line and staff functions – Role of HR Managers. Job Analysis - Recruitment & Selection Process – Employee Testing & Selection.

Unit V

Employee Orientation & Training: Training Process – need analysis – Training techniques. Developing Managers: management development – on the job & off the job development. **Performance appraisal:** Methods - MBO approach. Compensation : basics – factors determining pay rate - Job evaluation – incentives.

References

1. *L.M.Prasath*, Principles Of Management
2. *O.P.Khanna*, Industrial Engineering And Management, Dhanpat Rai Publications, New Delhi (2006).
3. *Patrick.J.Montana and Bruce.H.Charnov*, Management, Barrows (2000).
4. *Harold Koontz and Heinz Weihrich*, Essentials of Management, Tata McGraw Hill (1998).
5. *James.A.F.Stoner, R.Edward Freeman and Danier.R.Gilbert.Jr.*, Management, Prentice Hall (1995).
6. *George.R.Terry and Stephen. G.Franklin*, Principles of Management, A.I.T.B.S (2003).
7. *K.Balasundaram*, Industrial Engineering & Management – IV Edition, Shree Ramalinga Sowdeswari Publications, Coimbatore (1986).
8. Gary Dessler, "Human Resource Management", Seventh edition, Prentice-Hall of India P.Ltd., Pearson.
9. David A. DeCenzo & Stephen P.Robbins, Personnel/Human Resource Management, Third edition, PHI/Pearson.
10. VSP Rao, Human Resource Management: Text and cases, First edition, Excel Books, New Delhi - 2000.
11. Dr. R.Venkatapathy & Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
12. Robert L.Gibson and Marianne H.Mitchell, Introduction to Counseling and Guidance, VI edition, PHI, 2005.

Semester II – Core Paper IV - Fabric Science

Unit – I

Classification of fabric forming methods – Weaving preparatory processes and its objectives – Warping, Sizing & Drawing – in. Passage of material through a plain power loom – Primary, secondary & auxiliary motions of a loom.

Unit – II

Classification of Looms. Shuttle less looms: Introduction - Advantages - Types of shuttle less looms. Introduction to weaves – Plain weave & derivatives – Twill weaves & derivatives – Satin & sateen weaves.

Unit III

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

Unit IV

Description of circular Rib & Interlock knitting machine – Characteristics of basic weft knit structures – Ornamentation of basic weft knit structures - Principal weft knit stitches. Knit, tuck and miss stitch formation and properties - Representation of weft knit stitches.

Unit V

Jacquard and Speciality Knitting: Needle selection techniques - Auto stripes - Terry and Fleece. Flat Knitting – Yarn passage diagram of a flat knitting machine – Mechanical type Flat knitting machine - Needle bed assembly – Racking, Carriage and Cam box arrangement. Introduction to warp knitting – Warp knitting terminologies

References:

1. *D.B.Ajgoankar*, Knitting Technology, Universal Publishing Corporation, Mumbai (1998).
2. *David.J Spencer*, Knitting Technology, Wood Head Publishing Ltd. – Second Edition, England (1989).
3. *Samuel Raz*, Flat Knitting, Meisenbach Bamberg (1993).
4. *Peter Schwartz, Trevor Rhodes and Mansour Mohamed*, Fabric Forming Systems, Mahajan Publishers, Ahmedabad (1996).
5. *Bernard P. Corbman*, Textiles, Fibre to Fabric

Semester II – Core Paper V - Textile Coloration & Finishing

Unit – I – Preparatory processes

Water: water hardness – types - softening process: ion exchange – Lime Soda Process. Preparatory process sequence for Woven & Knitted fabrics. Preparatory process: Singeing – objectives, principles and methods - yarn and fabric singeing machines. Desizing methods. Scouring– scouring of coloured fabrics.. Bleaching: hypochlorite and hydrogen peroxide bleaching – Fluorescent brightening agents. Mercerization

Unit – II Dyeing

Colour: Electromagnetic spectrum, classification of dyes. Dye bath Auxiliary chemicals. Dyeing of blended textiles. Features and working principles of processing machines: Cheese, jigger, jet and soft-over-flow machines. Padding mangles. Garment Dyeing Machines

Unit – III - Printing

Differences between dyeing & Printing. Various methods of printing. Screen preparation. Styles of printing – direct, resist, discharge. Print paste ingredients. After treatments for printed textiles. Garment printing techniques.

Unit – IV –Finishing

Introduction to finishing- objectives- Classification of finishing. Raising and Shearing: Compacting. Calendaring. Heat Setting. Types of garment washes: Stone Wash, Enzyme Wash, Bio-Polishing , Acid Wash. Sand Blasting.

Unit V –Machines & Effluent Treatment.

Application of enzymes in textile processing. Pollution - Treatment of Textile Effluents. Eco Labels & Norms. Introduction to computer colour matching system. Wool scouring and carbonizing – Silk Degumming.

References:

1. Dyeing and chemical technology of textile fibres, Charles Griffin & Co – E.R.Trotman
2. Technology of Bleaching and Dyeing of Textile Fibres Vol.1, Part–I,1979, Mahajan Book Publishers, - *Chakravarthy RR And Trivedi S.S*
3. The Bleaching and Dyeing of Cotton Material 1983, Weaver's Service Cent *Prayag R.S.,*
4. Chemical Processing of Synthetic Fibres and Blends 1982, John Wiley & Sons, New York. *Datye K.V and Vaidhay A.A.,*
5. Processing of Manmade Fibres 1975, MIR Publishers, Moscow.- *Usenko V,*
6. Colour for Textiles: A User's Handbook, Society of Dyers and Colourists(1993) - *Wilfred Ingamells,*
7. Cellulosics Dyeing, Society of Dyers and Colourists(1995) - *John Shore,*
8. Wool Dyeing, Society of Dyers and Colourists(1992) - *Lewis.D.M.,*
9. Textile Coloration and Finishing, Carolina Academic Press, Durham, North Carolina (1996) - *Warren.S.Perkins,*

Semester II – Core Paper VI - Fabric Analysis Practical

1) Development of the following samples:

1. Single jersey & its derivatives
2. Double jersey & its derivatives
3. Auto striper
4. jacquard designs

2). Analyze the given knitted fabric sample for the following particulars:

- A) Course and Wale Density
- B) Loop length
- C) Areal Density (GSM)
- D) Tightness Factor
- E) Technical graph
- F) Cam order
- G) Needle order

3). Analyze the given woven fabric sample (Plain , Twill , Satin and its derivatives) for the following particulars and draw the design, draft and peg plan

- A) EPI
- B) PPI
- C) Warp and Weft crimp & count
- D) Cover Factor
- E) GSM

Semester II - Allied Paper II - Accounting for Managers

Unit I

Overview: Accounting concepts, conventions and principles; Accounting Equation, International Accounting principles and standards; Matching of Indian Accounting Standards with International Accounting Standards.

Unit II

Mechanics of Accounting: Double entry system of accounting, journalizing of transactions; preparation of final accounts, Profit, Policies related with depreciation, inventory and intangible assets like copyright, trademark, patents and goodwill.

Unit III

Analysis of financial statement: ; Common Size Statement ; Comparative Balance Sheet and Trend Analysis of manufacturing, service & banking organizations. Ratio Analysis- solvency ratios, profitability ratios, activity ratios, liquidity ratios, market capitalization ratios.

Unit IV

Funds Flow Statement: Meaning, Concept of Gross and Net Working Capital, Preparation of Schedule of Changes in Working Capital, Preparation of Funds Flow Statement and its analysis ; Cash Flow Statement: Various cash and non-cash transactions, flow of cash, preparation of Cash Flow Statement and its analysis.

Unit V

Budgeting & Budgetary control. Investment Decision: Appraisal of project; Concept, Process & Techniques of Capital Budgeting and its applications;.

References

- 1) Narayanswami - Financial Accounting: A Managerial Perspective (PHI, 2nd Edition).
- 2) Mukherjee - Financial Accounting for Management (TMH, 1st Edition).
- 3) Ramchandran & Kakani - Financial Accounting for Management (TMH, 2nd Edition).
- 4) Ghosh T P - Accounting and Finance for Managers (Taxman, 1st Edition).
- 5) Maheshwari S.N & Maheshwari S K – An Introduction to Accountancy (Vikas, 9th Edition)
- 6) Ashish K. Bhattacharya- Essentials of Financial Accounting (PHI, New Delhi)
- 7) Ghosh T.P- Financial Accounting for Managers (Taxman, 3rd Edition)
- 8) Maheshwari S.N & Maheshwari S K – A text book of Accounting for Management (Vikas, 1st Edition)
- 9) Gupta Ambrish - Financial Accounting for Management (Pearson Education, 2nd Edition)
- 10) Chowdhary Anil - Fundamentals of Accounting and Financial Analysis (Pearson Education, 1st Edition).

Semester III Core Paper VII - Pattern Development

Unit I

Introduction – Concept of basic pattern and grading – Different types of block pattern. Methods of pattern making with special reference to pattern drafting - Pattern making tools – Various pattern production terms–Standard body measurements for men’s wear, women’s wear and kids wear of different countries. Style wise component parts of a garment.

Unit II

Pattern positioning and lay out – Concept of pattern layout - Rules and methods of pattern layout – Adjusting the patterns to fabric. Fitting: Definition – Principles for a good fit– Checking the fit of a garment – Solving fitting problems in various garments.

Unit III

Draping – Importance of draping – Dress form and types – Draping steps for basic bodice, skirt, pants. Procedure to develop necklines: Jewel neck - Round neck - ‘U’ neck - Square neck - Pentagon neck - Star neck - Inside and outside scallop neck. Procedure to develop sleeves: Plain and puff sleeves.

Unit IV

Procedure to draft the ¼th patterns for Ladies wear: Nighty, kameez, salwar, midi, midi top. Style detailing – Plackets, Pockets, Sleeve, Collar.

Unit V

Basic principle of dart manipulation – Displacement of bust dart (waist – side seam, armhole – neck of front edge).Grading – Definition – Principles of grading - Basic back & front grades – Grading of basic sleeve, basic collar.

References:

1. *Helen Joseph Armstrong*, Pattern Making For Fashion Design, Harper Collins Publishers (1987).
2. *Winifred Aldrich*, Metric Pattern Cutting, , Blackwell Science Ltd, England (1994).
3. *Winifred Aldrich*, Metric Pattern Cutting for Men’s Wear, Blackwell Science Ltd, England (1990).
4. *Winifred Aldrich*, Metric Pattern Cutting for Children’s Wear (From 2 – 14 Years), Blackwell Science Ltd, England (1991).
5. *Gerry Cooklin*, Pattern Cutting for Women’s Outerwear, Blackwell Science Ltd, England (1992).
6. *Gerry Cooklin*, Pattern Grading for Women’s Clothes, Blackwell Science Ltd, England (1990).
7. *Gerry Cooklin*, Pattern Grading for Men’s Clothes, Blackwell Science Ltd, England (1992).
8. *Gerry Cooklin*, Pattern Grading for Children’s Clothes, Blackwell Science Ltd, England (1991).
9. *Gerry Cooklin*, Master Patterns and Grading for Women’s Outsizes, Blackwell Science Ltd, England

Semester III Core Paper VIII - Apparel Manufacturing Technology

Unit I

Introduction to garment manufacturing processes. Spreading machine: Types and working procedures. Cutting machines: Types of cutting machines and its application – Detailed study on band knife, straight knife, round knife & Die cutting machines. Computerized cutting machines. Auxiliary cutting devices – Drills, notches.

Unit II

Classification of sewing machines & applications. Lockstitch machine - function & its types - Features of advanced lock stitch machines. Over lock machine - Function & its functions. Flat lock machines. Feeding mechanism, importance & Its types. Needle mechanism. Stitching mechanism. . Bar tacking machine. Picoting Machine.

Unit III

Concept of Stitch & its classification- Federal standard & British standards. Concept of stitch geometry. Detailed study on Stitch classes and its function – advantages and disadvantages.

Unit IV

Requirements – Guides – Types (edge & curve guide) - Compensating foot - Specialized presser foot – Stitching jig- hem folders - Slack feeding and elastication – Cutting aids (threads, elastic and tapes) - Stacker. Simple automatics - Button hole – Button sew – Label sewers. Types and parts of machine needles – Needle sizes - Details of stand, table and motor for sewing machines.

Unit V

Introduction to various machines for garment finishing – Fusing – Sucking – Ironing - Packing. Pressing- Purpose of pressing –Categories of pressing-The means of pressing-pressing equipment and methods-Iron and steam presses. Packaging-Types of package forms-Types of packaging materials-Quality specification of packaging materials-Merchandising packaging-Shipment packaging-Selection of package design.

References

1. *Harold Carr and Barbara Latham*, The Technology of Clothing Manufacture, Blackwell Science Ltd, England (1994).
2. *Gerry Cooklin*, Introduction to Clothing Manufacture, Blackwell Science Ltd, England (1991).
3. *Dora.S.Lewis, Mabel Goode Bowers and Marietta Kettunen*, Clothing Construction and Wardrobe Planning, The Macmillan Company : New York (1955).
4. *Terry Brackenbury*, Knitted Clothing Technology, Blackwell Science Ltd, England.
5. *Ruth. E, Glock and Grace.I.Kunz*, Apparel Manufacturing, Pearson Education, New Delhi.

Semester III Core Paper IX - Fashion Communication

Unit- I

Design Principles and Elements –Perspective and Application to Apparel and Lifestyle products Aesthetics –Concepts and role in Design and Environment .Factors influencing Aesthetics.

Unit-II

Fashion Forecasting –Introduction Forecasting considering Fashion Cycle as a prelude. Study of Consumer Behavior Fashion Forecasting Process. Forecasting of color, forecasting of fabrics, Forecasting of Silhouettes. Forecasting of Trend. Using various resources for Interpretation of Fashion Forecasting.

Unit-III

Fashion styling-Communicate your ideas using fear sheets, storyboards, mood and concept boards, testing, writing caption and team production. Elements of style– accessing styles and trends,Elements of style, achieve visual balance, making trends. Working with color – color combination, color wheel, color characteristics, simultaneous contrasts, lights and color. Creating Fashion Story – Target market, Fashion Story, building mood and visual presentation.

Unit-IV

Fashion promotion-Advertising – definition, benefits, ethical issues in advertising. Advertising models, advertising media, advertising appropriation Production, creative strategy, fashion advertising, fashion promotion. Visual merchandising in fashion communication.

Unit-V

Introduction to 3D Introduction to space and types of spaces. Introduction to graphics and signage design for display and exhibition. Develop understanding of equipment and machinery and their limitations. Window display and Window Dressing.

Books:-

1. Uncovering fashion: fashion communications across the media, Marian Frances Wolbers, Fairchild Books, 2009 - 294 pages
2. Fashion, Media, Promotion: The New Black Magic, Jayne Sheridan, John Wiley and Sons
3. Brannon, E.L. (2005). Fashion Forecasting: Research, Analysis and Presentation. 2nd ed. New York, NY: Fairchild Publishing, INC.
4. Keiser, S.J, Garner, M.B., . (2003). Trend Forecasting. In: Beyond Design: The Synergy of Apparel Product Development. New York, NY: Fairchild Publications, Inc. p91- 119.
5. Dynamics of Fashion – Ellaine Stone
6. Promotstyle / Here and There Apparel View on color
7. Inside Fashion Business Jeanette Jernow and Kitt Dickeson
8. Mary Lynn Damhorst, Kimberly A. Miller, Susan O. Michelman, “The Meanings of Dress”
9. Barnard M. , “Fashion as communication”
10. McCracken G., “Culture and consumption”
11. Barlo, D.K., “The process of Communication”
12. Barger, A.A. “Sings in Contemporary Culture”
13. Stone, G. P. ‘Appearance and the self”
14. Davis F. “Fashion, culture and identity”

Semester III - Core Paper X - Practical III - Pattern Making

List of Experiments

Develop the pattern for the following

- | | | |
|------------------------------|-------------------------|-----------------------------|
| 1. Men’s round neck t-shirt. | 2. Men’s Polo t-shirt | 3. Men’s Vest RNS |
| 4. Men’s Hooded t-shirt | 5. Men’S Raglon T Shirt | 6. Mens’s Kimino Sleeve Top |
| 7. Men’s Trouser | 8.Men’s Permudas | 9. Men’s Track Pant |
| 10. Romber | 11. Baba Suit | 12.A Line Frock |
| 13. Ladies Basic Bodice | 14. Ladies Top | 15. Ladies Skirt |

Semester III – Allied Paper III - Retail Management

Unit – I

Retail – definition – functions –Classification of Retailers– consumerism – private label – technology – Global retail market – challenges – emergence of new markets – empowered consumer – rise of e-age – Retail as a career – buying and merchandising – marketing – store operations – LSCM

Unit – II

Evolution of retail formats – social developments –Retail lifecycle – Retail business models – on the basis of ownership – other formats – non store retailing – direct selling – direct response marketing – vending machine – cash and carry – airport retailing – services retail. Trends in retailing.

Unit – III

Retail consumer – factors influencing retail shopper – range of merchandise – convenience of shopping – family life cycle – customer decision making process – market research for setting up a retail store – international expansion – export – franchising and licensing – mergers and acquisitions – retail value chain

Unit – IV

Concept of franchising – evolution – types – advantages and disadvantages of franchising – royalty – legal issues – types of retail store locations – isolated store – steps involved in choosing a retail location – Importance of store design – interior and exterior – types of lay out – retail management information system – stocking of merchandise – factors affecting use of technology – applications of technology EDI – RFID

Unit – V

Organisation structure in retail – HRM in retail – retail economics – measures of performance evaluation – strategic profit model – retail marketing mix – STP approach – retail image – retail communication mix – pop – customer service in retail – customer loyalty strategies – CRM in retail

Text Book

Swapna Pradhan, “Retailing Management”, TMG Second Edition

Semester III Skill Based Subject I - Computer Aided Pattern Making

CAD software is used to practice the following on the styles mentioned,

1. Create Pattern on computer screen, adding details to patterns.
2. Digitizing, saving, extracting & editing patterns from stock library of Patterns.
3. Grading patterns on different size scale.
4. Making Marker plan for cutting fabrics.
5. Estimating lay length and calculating marker efficiency.
6. Fit analysis of the given pattern using 3D CAD software.

Styles

1. Men’s Basic T Shirt
2. Raglan with Pocket
3. Men’s Polo T Shirt
4. Men’s Trouser
5. Men’s T-Shirt with hood
6. Men’s Inner Garment – Vests RN / RNS
7. Ladies Skirt
8. Women’s Nighties
9. Kid’s Wear – Romber
10. Kid’s Wear – A Line frock
11. Children’s Suits And Pyjama

Semester IV Core Paper XI – Apparel Quality Assurance

Unit I

Importance of Quality. Quality terminologies. Testing: Objectives of Testing - atmospheric conditions for testing lab. Identification of textile fibres. Yarn numbering systems – Determination of yarn count. Yarn strength testing & CSP. Testing of yarn evenness , yarn twist & Hairiness measurement

Unit II

Knitted fabric specifications – Testing of Dimensional stability , Spirality & Bowing. Testing of color fastness to washing, rubbing, perspiration & light - Grey scales and ratings. Brief study about testing of woven fabric.

Unit III

Inspection : Definition - Types of Inspection. Raw materials inspection: fabric inspection systems & Testing of Sewing thread , zippers, Buttons.

Unit IV

In process inspection and its significance in apparel quality. Defects in Sewing, Ironing & Packing. Testing of Seam strength & seam slippage

Unit V

Final inspection procedures. Categories of defects. Package quality testing – care labels. Brief study about Testing Standards. Brief study about Oeko-Tex Standards.

References

1. *J.E. Booth*, Principles of Textile Testing
2. *Elliot b. Grover & D.S. Hamby* -Hand book of textile Testing & Quality Control
3. *B.P.Saville* Physical testing of Textiles
4. *Pradeep V Metha & Satish k. Bhardwaj*, Managing Quality in Apparel Industries

Semester – IV Core Paper XII –Materials Management

Unit I

Materials Management: need, scope and advantages; Materials requirement planning (MRP – I, MRP – II & ERP) and Budgeting.

Unit II

Purchase Management: Purchase policy, Systems, Procedures ; Vendor Selection ; Negotiation : Vendor Development & Evaluation ; Make or Buy decision, Legal aspects of Purchasing.

Unit III.

Stores Management: Stores Systems and Procedures; Stores Accounting & Verification, Disposal of Surplus and Scrap.

Unit IV.

Inventory Control : ABC Analysis ; VED Analysis ; EOQ models ; fast moving, slow moving and non – moving items, Just-in-Time (JIT), Kanban System, Maximum and Minimum Levels ; Perpetual Inventory System ; Selective Inventory Control.

UNIT V.

Integrated Materials Management & Evaluation : MIS for Materials Management, Criteria for evaluation, Inventory – turnover Ratio.

Books :

1. P.Gopalakrishnan & M. Sundaresan : Materials Management - An Integrated Approach, TMH
2. A.K. Dutta : Materials Management, Prentice Hall of India.
3. G.W. Plossl : Material Requirements Planning, McGraw Hill.
4. N.K.Nair : Purchase & Materials Management, Vikas
5. A.K. Dutta, Materials Management, Jaico
6. Bagade, Production & Material Mgmt., Himalaya
7. B.K. Roy Chowdhury : Management of Materials, Sultan Chand.
8. Govt. of India : Guidelines for Materials management in Public Enterprises, Indian Bureau of Public Enterprises.
9. L.C. Jhumb, Modernization of Materials Management, EPH
10. N.K.Nair : Materials Management, Asia Publishing.

Semester – IV Core Paper XIII – Apparel Costing

Unit – I

Principles of costing - requirements of good costing system - cost unit - types of costs - Elements of cost - direct material cost - direct expenses - direct wages - indirect materials - indirect expenses - indirect labour - overheads - - prime cost - work cost - cost of production - total cost. INCO terms & its relationship with costing

Unit – II

Budgeting: The budgeting process: Budgeting principles for the apparel industry- Fixed vs.variable budget - Master budget-laminations of budgets- any justification effort -Planned Vs Actual Cost.

Unit III

Cost estimation of yarn, knitted fabric, dyeing, printing & finishing. Woven Fabric Costing: fabric types, yarn consumption, weaving price Cost estimation for cutting, stitching, checking, packing, forwarding, shipping, and insurance.

Unit – IV

Estimation of factory cost for Woven & Knitted - vest, briefs , shorts, t-shirts, pajamas, children's wear, ladies wear, Woven Shirt, Woven Tops & Bottom. Various factors to be considered in costing for domestic products & international products

Unit – V

Determining Pricing of apparel products: Price elasticity of demand and supply, sample costing-marginal revenue and marginal cost, cost plus pricing methods, Full cost pricing, conversion cost pricing,

differential cost pricing ,variable cost pricing, direct cost pricing derivation of cost of apparel products-woven/knits.

References

1. *S.P.Jain and KL. Narang*, "Cost Accounting", Kalyani Publishers,New Delhi.Edn.2005
2. *R.S.N. Pillai and V. Bagavathi*, "Cost Accounting",S. Chand and Company Ltd., New Delhi.Edn.2004.
3. Apparel Costing, A functional Approach – *Krishnakumar, M*, Abishek Publications, Chandigarh, 2012

Semester – IV Core Paper XIV - Practical IV - Textile Testing

1. Determination of count of yarn using wrap reel & weighing scale.
2. Determination of lea strength & CSP using lea strength tester.
3. Determination of yarn count from fabric swatch using beesley balance.
4. Determination of twist of single yarn using electronic twist tester.
5. Analysis of given fabric sample for determining weight, CPI, WPI, SL, CL & yarn count.
6. Identification of Fibre using microscope and by chemical test.
7. Determination of CRA of fabric using crease recover tester.
8. Determination of color fastness of given sample to washing by using launderometer.
9. Determination of color fastness of given sample to rubbing by using crockmeter
10. Determination of color fastness of given sample to perspiration by using perspirometer.
11. Determination of dimensional stability% of a given fabric/garment to washing.
12. Determination of fabric drapeability using drape meter.

Semester – IV Allied Paper IV -Human Resource Planning

Unit I - Introduction: definition and concept of HRP, benefits, process, HRP components. HR

Unit II - HR planning and corporate strategies:

HR planning as a strategic process-employees as resources-goal attainment, linking HR process to strategy, involvement in strategic planning process, strategic HR Planning model, staffing system.

Unit III - Job analysis

Meaning and definition, job analysis process, techniques of job analysis, methods and practice of job analysis, competency based approach.

Unit IV - HR Forecasting

Forecasting Manpower Needs, the Forecasting Process, Inventorying available talent, Projecting Future Talent Supply, forecasting Staffing Requirements. Index analysis-expert forecasts-delphi technique-nominal group technique-HR budget and staffing table, scenario forecasting and regression analysis

Unit V - Career planning and succession management

Definitions, concepts, stages of career development process and organizational HR Policies, carrier Anchors – Stages of growth and career, career processes Succession management process and Management development programmes, objectives of MDP's, Job rotation, Auditing MDP's management development methods, challenges of succession management, Replacement analysis

References:

1. D J Bell : Planning Corporate Manpower
2. J W Walker : Human Resource Planning, MGH
3. B.O. Pettman & G Tavemeir : Manpower Planning Workbook, Gower
4. M. Bennison & J Casson : The Manpower Planning Handbook, McGraw Hill.

Semester III Skill Based Subject II - Stitches & Seams Practical

List of Experiments

1. Practice on Single Needle Lock Stitch machine for given paper / fabric exercise – Straight lines, curves, squares, rectangles, triangles and any other irregular shapes.
2. Prepare atleast five different stitch and seam samples by using different sewing machines and furnish the machine threading diagram along with stitch density and thread consumption details.
3. Developing seams of various types - superimposed, bound, lapped, flat felt and piping.

Draft The Pattern, Cut & Construct The Following Components For The Given Measurement:

- Different Neck Lines (At Least 3Types)
- Different Collars (At Least 3 Types)
- Different Sleeves (At Least 3 Types)
- Different Plackets (At Least 3 Types)
- Different Pockets (At Least 3Types)
- Slits

Semester – V Core Paper XV - Apparel Merchandising

Unit I

Merchandising: Introduction, Meaning- Apparel Merchandising – Concepts of 'Six Rights' – Organisation structure of an apparel industry – Classification of Exporters - Rating or Grading of export houses – Classification of buyers – Export merchandising and retail merchandising – Company profile and its contents. Types of merchandiser - Functions of a merchandiser – Essential requisites of a good

merchandiser – Vendor sourcing, evaluation and development – Global sourcing – Vendor nomination by buyers – Reasons for vendor nomination.

Unit II

Process flow in apparel industry – Buyer sourcing & communication – Enquiry – Order confirmation – order review and its importance – Planning & programming: Master planning, Scheduling or route card – Factors for route card - programming for yarn, knitting, dyeing, stitching, sampling, accessories – Samples: Meaning & importance – Types of samples – expedition of samples

Unit III

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

Unit IV

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

Unit V

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

References

- 1., Building Buyer Relationships, *Daragho' Reilly, Jullian J. Gibbs*
- 2 Inside the Fashion Business, Mc Millan Publishing Co.,
3. Fashion Merchandising, *Elian Stone,*
4. Apparel Merchandising, An integrated Approach, Krishnakumar, M, 2010, Abishek Publications
5. Apparel Merchandising, *Robin Mathew,* Book Enclave Publishers, Jaipur
6. Apparel Merchandising, *Jerry A & Rosenau,* Fairchild Publications, London

Semester – V Core Paper XVI – Garment Construction Practical

Develop and construct the following.

- | | | |
|------------------------|-----------------------------|----------------------|
| 1.Men’s Vest RNS | 2.Men’s round neck t-shirt. | 3.Men’s Polo t-shirt |
| 4.Men’s Hooded t-shirt | 5.Men’s Trouser | 6.Men’s Boxer shorts |
| 7. Romber | 8.Baba Suit | 9.A Line Frock |
| 10.Ladies Basic Bodice | 11.Nighties | 12. Ladies Skirt |

Semester – V Core Paper XVII – Statistics for management

Unit I - SOURCES OF STATISTICAL DATA & PRESENTATION

Meaning, Definition & Scope of Statistics -Primary data: meaning - methods of collection Secondary data: meaning - sources Questionnaire: designing a questionnaire - specimen - sampling methods - Assessment of secondary sources. **PRESENTATION:** Classification of data -Frequency distribution - formation of discrete series - formation of continuous series - diagrams and graphs - type of diagrams - type of graphs

Unit II - MEASURES OF CENTRAL TENDENCY AND MEASURES OF VARIATION

Measures of central tendency -Arithmetic Mean - Median - Mode- Geometric Mean - Harmonic Mean. - Measures of variation - Standard deviation un grouped data & grouped data. Co Efficient of Variation.

Unit III - CORRELATION & REGRESSION ANALYSIS

CORRELATION ANALYSIS - Types of Correlation – Scatter diagram method - Karl’s Pearson method. Rank Correlation. Estimation of regression line.

Unit IV - TESTING OF HYPOTHESIS

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations. ANOVA one and two way – Design of experiments

Unit V - TIME SERIES AND INDEX NUMBERS

Time series analysis: Components of time series - Semi and moving average method - trend analysis, cyclical variations, seasonal variations and irregular variations. Index Numbers – Simple Aggregative - Simple Average of Price Relatives -Weighted Aggregative - Weighted Average of Price Relatives - Consumer price Indices. Index numbers -Meaning and uses -Methods of configuring Index Numbers

Semester V Core Paper XVIII – TQM in Apparel Industry

Unit I

Introduction: Definition of Quality – Dimensions of Quality – Quality Planning – Quality costs — Basic concepts of Total Quality Management –Quality Statements – Strategic Planning, Deming Philosophy – Juran Trilogy – Crosby philosophy, PDSA Cycle, 5S, Kaizen. Quality Circles

Unit II - TQM Principles

Principles of TQM, Leadership – Concepts – Quality Trilogy – Four pillars of TQM – PDCA cycle & PDSA cycle. Role of Senior Management – Quality Council, customer satisfaction – Customer Perception of Quality, Customer Complaints, Employee Involvement – Motivation, Empowerment, Teams, Recognition and Reward, Performance Appraisal, Benefits, Continuous Process Improvement

Unit III Control charts

Concepts and uses – Control limits – Control charts for Variables and Attributes: X Charts – R chart – P chart – NP chart – C chart – Acceptance sampling – Types of sampling plans: Single, Double and Multiple Sampling plans – OC curves – AQL and LTPD – Sampling errors and sampling risks – Producer’s risk and Consumer’s risk

Unit IV - TQM Tools

Benchmarking – Reasons to Benchmark – Benchmarking Process, Quality Function Deployment (QFD) – House of Quality, QFD Process, and Benefits – Taguchi Quality Loss Function – Total Productive Maintenance (TPM) – Concept, Improvement Needs, and FMEA – Stages of FMEA.

Unit V - Standards

Elements of ISO – Benefits of ISO 9000 System. ISO 9001:2008: Guidelines and Standard Clauses – Implementation Procedures and requirements– Quality Manual and its contents. Accreditation and Certification agencies. Quality audit :Types of quality audit – Audit procedure. Environmental Management System (EMS): Elements of EMS – Benefits– Environmental Policies. Study on SA8000, OHSAS 18000, WRAP.

References

1. *Dr. S.P.Gupta*, “Statistical Methods”
2. *J.M. Juran*, “Quality Control Handbook”
3. *V.K.Kapoor*, “Statistics”
4. Total Quality Management – *Bhaskar, S* - Anuradha Publications, Kumbakonam.
5. Total Quality Management – *Shridhara Bhat, K* -, Himalaya Publishing Corporation New Delhi
Handbook of Total Quality Management - *Armstrong* , Jaico Publications, New delhi.

Semester VI Core Paper XIX - Entrepreneurship and Small Business Development

Unit I

Entrepreneurship: Concept and Definitions; Entrepreneurship and Economic Development; Classification and Types of Entrepreneurs; Entrepreneurial Competencies; Factor Affecting Entrepreneurial Growth – Economic, Non-Economic Factors; EDP Programmes; Entrepreneurial Training; Traits/Qualities of an Entrepreneurs; Entrepreneur; Manager Vs. Entrepreneur.

Unit II

Opportunity / Identification and Product Selection: Entrepreneurial Opportunity Search and Identification; Criteria to Select a Product; Conducting Feasibility Studies; Project Finalization; Sources of Information.

Unit III

Small Enterprises and Enterprise Launching Formalities : Definition of Small Scale; Rationale; Objective; Scope; Role of SSI in Economic Development of India; SSI; Registration; NOC from Pollution Board;

Machinery and Equipment Selection; Project Report Preparation; Specimen of Project Report; Project Planning and Scheduling using Networking Techniques of PERT / CPM; Methods of Project Appraisal.

Unit IV

Role of Support Institutions and Management of Small Business : Director of Industries; DIC; SIDO; SIDBI; Small Industries Development Corporation (SIDC); SISI; NSIC; NISBUD; State Financial Corporation SIC; Marketing Management; Production Management; Finance Management; Human Resource Management; Export Marketing; Case Studies.

Unit V

Incentives and subsidies – Subsidied services – subsidy for market. Transport – seed capital assistance – Taxation benefit to SSI role of entrepreneur in export promotion and import substitution.

References

1. *Desai, Vasant* (2003). Small-Scale Industries and Entrepreneurship. Himalaya Publishing House, Delhi.
2. *Kaulgud, Aruna* (2003). Entrepreneurship Management. Vikas Publishing House, Delhi.
3. *Cynthia, L. Greene* (2004). Entrepreneurship Ideas in Action. Thomson Asia Pvt. Ltd.,Singapore.
4. *Chandra, Ravi* (2003). Entrepreneurial Success: A Psychological Study. Sterling Publication Pvt. Ltd., New Delhi.
5. *Balaraju, Theduri* (2004). Entrepreneurship Development: An Analytical Study. Akansh aPublishing House, Uttam Nagar, New Delhi.
6. *David, Otes* (2004). A Guide to Entrepreneurship. Jaico Books Publishing House, Delhi.
7. *Taneja* (2004). Entrepreneurship. Galgotia Publishers.

Semester VI Core Paper XX - Supply Chain Management

UNIT I: INTRODUCTION

Supply chain- definition, importance, types of supply chain flow, decision process in supply chain - a strategy design, chain planning and operation; organization of supply chain, process view – push/pull and cycle view; achieving strategic fit.

UNIT II: NETWORK

Designing and distribution – roles, factors influencing and design options-its advantages and disadvantages; value of distributors - factors influencing design frame work and networks in practice

UNIT III: DEMAND AND SUPPLY

Forecasting – definition, role, importance, characteristics of forecasting, basic approaches in demand forecasting and forecasting methods; managing demand and managing supply in supply chain, roles of aggregate planning in supply chain. Quick response strategy in apparel industry

UNIT IV: INVENTORY AND SOURCING

Inventory – definition, roles, characteristics and Inventory Functionalities; determining optimum level of availability, order point, EOQ, role of safety inventory and accommodating uncertainties. Sourcing – role, supplier assessment, selection criteria, design collaborations and plan analysis for sourcing, JIT Technology of inventory management in apparel industry

UNIT V: TRANSPORTATION, PRICING AND TECHNOLOGY

Transportation – modes, factors influencing the selection, routing and scheduling, transport network; Role of revenue management in supply chain – customer and seasonal demand, role of bulk and spot contract in revenues; the role of IT in supply chain – CRM, ISCM, SRM, TMF and E-Business. Effect of lack of coordination in supply chain and international issues in supply chain

REFERENCES

1. Kulkarni Sarika and Sharma Ashok “**Supply Chain Management**”, Tata McGraw Hill, New Delhi, 2007
2. Francis Harrison, “**Supply Chain Management**”, Butterworth Publications, New Delhi, 2002
3. Chopra Sunil and Meindl Peter, “**Supply Chain Management: Strategy, Planning and Operation**”, Pearson Education, 2002
4. Burt David N., Dobler Donald W. and Starling Stephen L., “**World Class Supply Management: A Key to Supply Chain Management**”, Tata McGraw Hill, 2007
5. Mohanty R. P. and Deshmukh S. K., “**Essentials of Supply Chain Management**”, Jaico Publications, 2004

Semester VI Core Paper XXI ERP in Apparel Industry

Unit 1

Introduction: ERP: An Overview, enterprise – an overview, types of Enterprises, need for ERP, benefits of ERP, ERP and related technologies, Business Process Reengineering (BPR), Benefits of BPR

Unit II

Implementation of ERP: ERP implementation lifecycle, implementation methodology, hidden costs, organizing the implementation, vendors, consultants and users, contracts with vendors, consultants and employees, project management and monitoring

Unit III

The Business Modules: Business modules in an ERP package - finance, manufacturing, human resources, plant maintenance, materials management, quality management, sales and distribution. Significance and advantages of each of the modules

Unit IV

ERP in apparel industry:Production resource planning – principles and management of and demand chain analysis– quick response strategy - material management for ‘Quick Response’ – ‘Just in Time (JIT) Technology’; Production planning, costing and merchandising software

Unit V

Computer Applications:Management Information System in garment industry – EDI in garment technology; Use of Computers in Designing, Pattern making, computerized production systems, communicating with vendors and buyers; Telephone, fax, video conferencing, intranet, internet, etc; Export documentation, retailing; Methods of communicating with consumers

References

1. Alexis Leon, “ERP Demystified”, Tata McGraw Hill, New Delhi, 2000
2. Glock Ruth E. and Kunz Grace I., "Apparel Manufacturing - Sewn Product Analysis", Blackwell Scientific Publications, 1996
3. Joseph A. Brady, Ellen F. Monk, Bret Wagner, “Concepts in Enterprise Resource Planning”, Thompson Course Technology, USA, 2001
4. Garg Vinod Kumar and Venkitakrishnan N. K., “Enterprise Resource Planning – Concepts and Practice”, PHI, New Delhi, 2003
5. Enterprise Resource Planning, Theory & Practice – Rahul Altekar , V.,Printice Hall of India, New Delhi, 2005
6. Enterprise Resource Planning– Leon , V., Diamond Publications, New Delhi.
7. Enterprise Resource Planning – Mary Sumner, Diamond Publications, New Delhi, 2001

Semester VI Skill Based Subject IV – Project Work & Viva Voce

Students have to undertake project in the areas of Knitting / Weaving/ Processing /Garment Manufacturing industry. A Team consisting of Internal & External Experts will evaluate the Project Report. The Viva-Voce will be conducted.

Semester V Elective I – A - Fashion Marketing

UNIT I

Meaning and classification of marketing, fashion marketing, fashion market size and structure, marketing environment –micro marketing environment, macro marketing environment. Trends in marketing management.

UNIT II

Marketing function – definition and classification product planning and development importance of fashion products, nature of fashion products. The fashion industry and new product development product mix and range planning. Product line policies. Fashion and related life cycles.

UNIT III

Fashion advertising and preparation of advertising for apparel market. Advertising media used in apparel marketing. Advertising department, advertising agencies. A survey on analysis of customers fashion preference & international advertising. Fashion sales promotional programme for apparel marketing, communication and promotion, personal selling, point of purchase, sales promotion objectives, consumer sales promotion.

UNIT IV

Marketing research –definition scope and importance of market research in new product development. Pricing policies and strategies for apparel products. Importance of price policies. Functions of pricing. Factor influencing price decisions. Methods of setting prices. International pricing policy, export pricing.

UNIT V

Global market and its participants in international marketing – Importance, growth and benefits – international market place- goods and services multinational corporations banks and insures trading companies – implications for marketing management- GATT. Present export and import details.

REFERENCE

1. Marketing, R.S.N. Pillai and Bagavathi, S. Chand & Co ltd Newdelhi –1987.
2. Marketing Principle and methods by Philip C.F and Duneon D.T, Irwin publications.
3. Principles of Marketing by Backman T.N. Maynard H.H and Davidson W.R, Ronald Press Company New York 1970.
4. Fashion Marketing by John Fayer Weather.
5. International Marketing by V.K.Kirpalani.

Semester V Elective I – B: Industrial Engineering

UNIT I

Introduction – Concept of Industrial Engineering, definition, history & development, various techniques of Industrial Engineering, Scope in Textiles

UNIT II

Production Planning & Control (PPC): Production – Definition, Types of production, characteristics of each type production. Productivity – Definition, ways to increase productivity, measurement of productivity – Total productivity Index & factor productivity indices. Definition of PPC, Functions of PPC Sales forecasting, various techniques of sales forecasting, problems. Gantt chart, types, use.

UNIT III

Plant layout Objectives of good plant layout, types of layout. Work Study – Definition, techniques, objectives. Method Study – Definition, steps in method study, charts used for recording, outline chart,

flow process chart & its types, two handed process chart, multiple activity chart, principles of motion economy. Micromotion Study – Contribution of Gilbreth, Therbligs, Prodedure, SIMO Chart. Work Measurement – Definition, Techniques, concept of total time, standard time, allowances, problems

UNIT IV

Operation Research – Definition, various techniques of OR. Basics of linear programming – Formulation of LP, Graphical solution, simplex method, problems. Network Analysis – PERT, CPM, and comparison.

UNIT V

Value Engineering – Value, concept of value analysis, concept of value engineering, Reasons of unnecessary cost, value analysis procedure. Job Evaluation: Definition, objectives, procedure of job evaluation, methods of job evaluation. Merit Rating: Introduction, objectives, methods of merit rating Inventory Control – Concept, Types, ABC Analysis, EOQ, EBQ

Reference Books

1. Work Study – ILO
2. Work Study in Textiles – ILO
3. Elements of Production Planning & Control – Samuel Eilon.
4. Industrial Engineering & Management – Banga Sharma.
5. Industrial Engineering & Management – O. P. Khanna.
6. Industrial Engineering Manual of Textile Industry – Nobert Liloyd Enrick.
7. Industrial & production engineering – Sanjay S. Patil, & Nandkumar Hukeri

Semester V Elective I – C: Industrial Economics

UNIT-I : FRAMEWORK OF INDUSTRIAL ECONOMICS

Concept and organization of a firm - Ownership control and objectives of a firm - Passive and active behavior of firm - Size, Growth, Profitability, Productivity, Efficiency and Capacity Utilization - Concept and measurement - Role of Industrialization in Economic Development - Factors for and against industrial development.

UNIT-II : INDUSTRIAL LOCATION AND REGIONAL DEVELOPMENT

Determinants of Industrial Location - Technical, economic, infrastructural and other factors - Theories of industrial location - Weber, August Losch, Sargant Florence - Development of Backward Regions - Government Policy and approach for the development of backward regions - Recent Programs for Development of Backward Regions.

UNIT-III : INDUSTRIAL STRUCTURE AND INDUSTRIAL PRODUCTIVITY

Alternative Patterns of Industrialization - Hoffman's hypothesis of capitalistic economies - Simon Kuznet's interpretation - Industrialization and planned economies - Cheney's Patterns of industrial changes - Industrial Productivity in India - Labor Productivity - Factors influencing the labor productivity - Productivity Trends in India.

UNIT-IV : INDUSTRIAL PROJECT APPRAISAL

Classification of Industries - Industrial Policies and Industrial Legislations in India - Role of Public and Private Sectors - Recent Trends in MNC and LPG, FDI, and Joint ventures - Issues in Industrial Proliferation and Environmental Preservation - Pollution Control Policies - Project Appraisals - CBA - CB - NPV, IRR - Industrial Sickness.

UNIT-V : INDUSTRIAL FINANCE

Owned, external and components of funds -Role, nature, volumes, types of institutional finance -IDBI, IFCI, ICICI, SFCs, NIDC, SIDCS, UTI, LIC, General Insurance Corporations and Commercial Banks - Financial Statement Analysis.

Reference Books

1. Ahluwalia, I.J: Industrial Growth in India (Oxford University Press, New Delhi, 1985)
2. Barthwal, R.R: Industrial Economics (Wiley Eastern Ltd, New Delhi, 1985)
3. Cherunilam F: Industrial Economics: Indian Perspective (3rd Edition) (Himalaya Publishing House, Mumbai, 1994)
4. Desai B: Industrial Economy in India (3rd Edition) (Himalaya Publishing House, Mumbai, 1999)
5. Divine P.J & R.M Jones et. Al: An Introduction to Industrial Economics (George Allen and Unwin Ltd, London, 1976)
6. Hay D and D J Morris: Industrial Economics: Theory and Evidence (Oxford University Press, New Delhi, 1979)
7. Kuchhal S.C.: Industrial Economy of India (5th Edition) (Chaitanya Publishing House, Allahabad, 1980)
8. Singh. A and A.N Sadhu: Industrial Economics (Himalaya Publishing House, Bombay, 1988)

Semester VI Elective II – A Visual Merchandising

Unit I

Introduction :Visual merchandising-introduction, concepts and role, importance in store planning andutilizing basic visual merchandising techniques; Role of atmosphere in garment retailing – immediate effects and simulation types, visual merchandisers in garment retailing

Unit II

Store Exterior And Interior: Store exterior – marquee, facade, exterior display, surrounding stores and displays; Store interior – store atmospheric, aesthetic, execution of store lay out - selection of display locations, lifts, staircase, elevators, utilization of store space; Display composition: Elements and principles of design, tools and materials

Unit III

Store layout: Factors considered in organizing effective display – balance, rhythm, proportion, texture, harmony and emphasis. Store layout planning- grid, race track, freeform – direction of flow and planogram; Design elements to create mood and impression – colour, angle, motion, simplicity, and repetition

Unit IV

Display: Seasonal and trend decision for point of emphasis – creativity in display; Planning of assortment, theme, ensemble, racks, shelves, bins, etc. and balance of display in a show room. Wall as retail selling tool – types of materials used merchandise display and effective wall planning. Application of colour schemes, colour psychology, creating mood by colour

Unit V

Fashion Retailing: Lightings - Lights types, selection, advantages and disadvantages, music.Using effective Graphics and sinages for theme, campaign and promotional aspects - safety and security; Theme, interior and exterior displays used in garment retail outlet, boutique and haute couture, accessories show rooms, mannequins, fabric and paper displays.

References

1. *Swapna Pradhan*, “Retailing Management”, 2nd Edition, Tata McGraw Hill Publishing Company Ltd, 2007
2. *Vedhamani and Gibson. G.*, “Retail Management:Functional Principles and Practices” Jaico Publishing House, 2007
3. *Bajaj Chetan, Tuli Rajesh, and Srivastava Nidhi V.*, “Retailing Management” Oxford University Press, New Delhi, 2007
4. *Lamba.A.J.*, “The Art of Retailing” Tata McGraw-Hill Companies, Inc, 2003
5. *Berman Barry and Evans Joel R.* “Retail Management: A Strategic Approach”
6. Prentice-Hill of India, 2002
7. *Uma Sekaran* , “ Organisational Behaviour
8. Industrial Psychology
9. *Aswethappa. K.* “Principles of Business Law”
10. *Bulchandani. K.R.* “Business Law”

Semester VI Elective II - B – International Trade & Documentation

Unit – I

Firm establishment: introduction – export promotion councils and their role – registration formalities - rcmc –IE code – RBI code – garment classification and categories for various countries – quota – quota distribution methods – quota transfer

Unit – II

Foreign trade documents: need, rationale and types of documents relating to goods – invoice – packing note and list – certificate of origin – certificate relating to shipments – mate receipt – shipping bill – caret ticket – certificate of measurement – bill of lading – air way bill – documents relating to payment – letter of credit – types of l/c - bill of exchange – letter of hypothecation – bank certificate for payment – document relating to inspection – certificate of inspection – gp and other forms.

Unit – III

Import procedure : import license – procedure for import license – import trade control regulation procedure – special schemes – replenishment license – advance license – split up license – spares for after sales service license – code number – bill of entry.

Unit – IV

Shipment and customs: preshipment inspection and quality control – foreign exchange formalities – preshipment documents - documentation terms - excise and customs clearance of export cargo – shipment of goods and port procedures – customs clearance of import cargo. Post – shipment formalities and procedures – claiming duty drawback and other benefits.

Unit – V

Payment and deliveries: terms of delivery – INCO terms – EXW – FCA – FOB – CFR – CIF – CPT – DAF – DDP – DDU. Terms of payment – open account – cheque – cash payment against documents – bank payment against documents (LC) – security and cost of various payment terms – assessing the risk in payment – role of ECGC and standard policy.

References:

1. Govt. Of India : Hand Book Of Import And Export Procedures.
2. Bose. A. : Streamline Your Export Paper Work., International Trade Form, Oct – Dec 1965.
3. How To Start Export.
4. CBI Booklets – Netherland
5. ECG C Services And Guidelines
6. AEPC Booklets

Semester VI Elective II – C – Industrial Psychology

UNIT I - INTRODUCTION

Definition-development-scope-objectives-importance of individual behavior-causes-Role of learning in shaping behavior- the influence of thinking and perception.

UNIT II - GROUP BEHAVIOR

Group Behavior-Groups- Contributing factors- Group Norms, Communication- Process-Barriers to communication-Effective communication, leadership-formal and informal characteristics-Managerial grid-Leadership styles-group Decision making- Leadership Role in Group Decision, Group Conflicts-Types-Causes-Conflict Resolution- ntergroup relations and conflicts –Organization centralization and decentralization-formal and informal-organizational structures- organizational change and development- change process-resistance to change-culture and ethics

UNIT III – MOTIVATION

Motivation and motivators-The hierarchy of needs theory-the motivation-hygiene approach to motivation- Expectancy-equity-reinforcement-McClelland’s needs theory of motivation-special motivational techniques-job enrichment- a systems and contingency approach to motivation.

UNIT IV - TRAINING AND DEVELOPMENT

Training & Development: Training – Need and Importance – Steps in Training Programme – Evaluation of Training Programmes – Concept of Management Development Programme – Techniques of Training and Development – Group Discussion- Conferences and Seminar – Case Studies – Role Playing – Business Games – Sensitivity Training – Stages of Career Development.

UNIT V - INDUSTRIAL FATIGUE

Definition-concept-Nature-Effects-causes-Elimination- Safety management practices- Effect of environment-Hazard control Technology-Working conditions-environmental conditions

REFERENCES:

1. Herald Knottz and Heinz Weihrich, ‘Essentials of management’; Mcgraw Hill Publishing Company, Singapore International Edition, 1980.
2. Ties, AF stoner, and R.Edward Freeman, ‘Management’, PHI Pvt ltd, New Delhi, 1992.
3. Joseph J, Massie, ‘Essentials of Management’, PHI, Ltd, 1985.
4. Nicky Hayes, Foundations of Psychology and Introductory Text, Routledge, UK, 1994.

Semester VI Elective III - A – Apparel Brand Management

Unit I

Introduction :Brand – introduction, functions, brand significance; branding – types and strategies international apparel brands - identification of perspectives and challenges to build brand- Indian garment brands and prospects of Indian brands

Unit II

Brand Appraisal:Brand appraisal – Definition and methods - exploration, market, customer, competition analysis, reasoning of brands importance and methods involved - laddering, emotional and rational, Brand mapping – circle, prism and triangle

Unit III

Positioning: Positioning – definition, types – benefit, usage, features, users, price, value technology, tradition, perceptual map – product class and customer segment; positioning strategies – non functional values, brand loyalty and pyramid; positioning strategies of international garment retailers

Unit IV

Identity And Extension: Brand identity and articulation – name, colour, design, logo and symbols, brand service advertising and cross cultural influence; brand extension – need and types; labelling and licensing of apparel products – types, license agreement, and international property rights; need for developing brand names and labels for apparel manufactured and exported from India

Unit V

Brand Measurement: Brand measurement- definition, need and methods – audit, track, brand overtime – managing brand image - need, concepts of management, forces affecting brand and maintenance of brand, Study on brands and brand management of Indian Garment

References

1. *Parameswaran M. G.*, “Building Brand Value”, Tata McGraw Hill Publishing Company Ltd, 2006
2. *Moorthy Y. L. R.*, “Brand Management –The Indian Context” Vikas Publication Pvt Ltd, 2007
3. *Verma Harsh V.*, “Brand Management Text and Cases” Excel books, 2006
4. *Mathur U. C.*, “Brand Management Text and Cases”, Macmillan India Ltd 2006.
5. Branding – *Vanauken*, Jaico Books, Delhi
6. Branding – *Geoffrey Randall*, Wood Head Publishing, England
7. Personal Branding – *Montoya*, Jaico Books, Chennai

Semester VI Elective III - B - LEAN SIX SIGMA

UNIT I - EVOLUTION OF LEAN SIX SIGMA

Introduction to Lean Principles and Six Sigma Concepts-Similarities and differences – Synergy-Evolution of Lean Six Sigma

UNIT II - LEAN SIX SIGMA APPROACH

Lean Six Sigma Methodology- Phases of Lean Six Sigma Method, Managing Lean Six sigma Project ,Six sigma Methodologies (DMAIC, DMADV , DFSS)

UNIT III - SIX SIGMA TOOLS AND TECHNIQUES

Advanced Statistical Tools - Statistical Process Control-Process Capability Analysis Sigma computation - Hypothesis Testing-ANOVA-Design of Experiments- chi-square test, Regression analysis –Case studies

UNIT IV - LEAN TOOLS

Value Stream Mapping – Poka Yoke-5S-Cycle Time Analysis-Push-Pull Systems- Waste Elimination- Total Productive Maintenance- Failure Mode Effect Analysis- Standard Work Practices-Control Plans, SMED , Kanban , Visual control , Kaizen – Case studies

UNIT V - LEAN SIX SIGMA IMPLEMENTATION

Identifying Lean Six Sigma Projects, Define Scope, Planning for Implementation, Selection of tools and techniques for each phase, Measuring the Benefits

REFERENCES:

1. Michael L. George, David Rowlands, Bill Kastle ,What is Lean Six Sigma,McGraw-Hill, 2003
2. Thomas Pyzdek,The Six Sigma Handbook ,McGraw-Hill, 2000
3. James P. Womack , Daniel T. Jones ,Lean Thinking, Free press business,2003.
- 4 Forrest W. Breyfogle III ,Implementing Six Sigma: Smarter Solutions UsingStatistical Methods ,1999.
5. Liker, Jeffrey; Meier, David ,Toyota Talent , Tata Mcgraw Hills

Semester VI Elective III - C Human Values and Professional Ethics

UNIT I

MANAGEMENT: Meaning, Definition, Significance, Functions – Planning, Organizing, Staffing, Directing and Controlling, Principles of Management.**SOCIAL RESPONSIBILITY AND ETHICS:** Concept of Social Responsibility, Views of Social Responsibility – Economic Objectives Vs Social Objectives – Business Ethics.

UNIT II

PROBLEM SOLVING METHODS: SWOT Analysis of a Traditional Engineer – Kaizen Strategy and Values – Kaizen Approach for Problem Solving.– Process Oriented Management Vs Result Oriented

Management. **HUMAN VALUES:** Value Crisis in Contemporary Indian Society, Aesthetic Values, Moral and Ethical Values, Spiritual Values, Values in the Work Place.

UNIT III

INTERPERSONAL RELATIONSHIPS: Managing Emotions, Emotional Intelligence, Building Better Interpersonal Relations, Managing the Boss, Dealing with Subordinates – Case Study. **CREATIVITY:** Creativity and Problem Solving – Creativity Process – Creative Individuals and their Characteristics – Techniques for Creative Problem Solving.

UNIT IV

HUMAN RESOURCE MANAGEMENT: Importance, Objectives, Functions, Job Analysis and Recruitment, Selection and Placement. **HUMAN RESOURCE DEVELOPMENT:** Training and Learning, Determining Training Needs and Priorities, Formal Employee Training Methods, Management Development, Methods for Developing Managers, Evaluating Training Effectiveness – Case Study.

UNIT V

LEADERSHIP: Definition, Characteristics of Leadership, Leadership styles, Theories of Leadership – Tannenbaum – Schmidt Leadership Continuum – Managerial Grid Theory. **MOTIVATION:** Meaning and Definition – Mechanism of Motivation – Maslow’s Need Hierarchy Theory, Mc Gregor’s Theory X and Y- Herzberg’s Two Factor Theory.

REFERENCES:

1. Jayshree Suresh and Raghavan B S, “Professional Ethics” S. Chand & Company Ltd., New Delhi, 2005.
2. Harold Koontz, Heinz Weihrich and Ramachandra Aryasri, “Principles of Management”, Tata McGraw Hill, New Delhi, 2004.
3. Bishop, Sue, “Assertiveness Skills Training – A Source Book of Activities” , Viva Books Pvt. Ltd., New Delhi, 2002.