

PUNJAB TECHNICAL UNIVERSITY KAPURTHALA

Scheme and Syllabus Of M. Sc Garment Manufacturing Technology (GMT)

Batch 2013 onwards

**By
Board of Studies Fashion Designing**

Course Code	Course Title	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
Msc.GMT/FMM/POM - 101	Principles and practices of management	3		-	40	60	100	3
Msc.GMT-102	Fundamentals of technology for apparel manufacturing	3			40	60	100	3
Msc.GMT-103	Textile science	3			40	60	100	3
Msc.GMT/FMM/STAT-104	Statistics for apparel manufacturing	3			40	60	100	3
Msc.GMT-105	Survey of apparel design	1			40	60	100	1
Msc.GMT -106	Apparel industry - an introduction	1			40	60	100	1
Msc.GMT-107	Garment production machinery and equipment.	3			40	60	100	3
Msc.GMT/FMM/AC - 108	Principles of accounting	3			40	60	100	3
Msc.GMT-109	Garment construction	-		4	40	60	100	2
Msc.GMT -110	Office automation & desktop publishing	-		3	40	60	100	2
Msc.GMT-111	Introduction to knitting	1			40	60	100	1
Msc.GMT -112	Basic pattern making	-		4	40	60	100	2
Total		21		11	480	720	1200	27

Second Semester

Contact Hrs.34

Course Code	course title	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
Msc.GMT-201	Operations research	3			40	60	100	3
Msc.GMT/FMM /FM -202	Financial management	3	-	-	40	60	100	3
Msc.GMT-203	Work study for apparel manufacturing	3			40	60	100	3
Msc.GMT-204	Apparel standard, specification and quality control	3			40	60	100	3
Msc.GMT-205	Fabric dyeing & printing	3	-		40	60	100	3
Msc.GMT -206	Pattern making & grading	-	-	4	40	60	100	2
Msc.GMT -207	Garment construction	-	-	4	40	60	100	2
Msc.GMT -208	Garment analysis	3	-	-	40	60	100	3
Msc.GMT-209	Graphic design & applications	-	-	3	40	60	100	2
Msc.GMT-210	Spreading and cutting of apparel products	3			40	60	100	3
Msc.GMT/FMM /PD-211	Personality development and communication skills	2	-		40	60	100	2
Total		23	-	11	440	660	1100	29

Third Semester

Contact Hours: 37Hrs.

Course Code	course title	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
Msc.GMT-301	Apparel production control and computer integrated manufacturing system	3			40	60	100	3
Msc.GMT-302	Managerial economics	3			40	60	100	3
Msc.GMT/FMM/CA -303	Introduction to cost accounting	3	-	-	40	60	100	3
Msc.GMT-304	Fabric & garment finishing	3			40	60	100	3
Msc.GMT-305	Apparel marketing & merchandising	3	-		40	60	100	3
Msc.GMT/FMM/HR -306	Human resource management	3	-		40	60	100	3
Msc.GMT -307	Costing of apparel products	3	-	-	40	60	100	3
Msc.GMT -308	Garment construction	-	-	3	40	60	100	2
Msc.GMT-309	Industrial pattern making & grading	-	-	3	40	60	100	2
Msc.GMT-310	Research methodology	3			40	60	100	3
Msc.GMT-311	Cad for pattern making & grading	-	-	3	40	60	100	2
Msc.GMT -312	Internship			4	40	60	100	2
Total		24		13	480	720	1200	32

Fourth Semester**Contact Hours: 25 Hrs.**

Course Code	Course Title	Load Allocation			Marks Distribution		Total Marks	Credits
		L	T	P	Internal	External		
Msc.GMT-401	Apparel product engineering & plant layout	3			100		100	3
Msc.GMT/FMM /EDIPR -402	Entrepreneur development programme & Intellectual Property Right	3	-	-	100		100	3
Msc.GMT-403	Project management	3			100		100	3
Msc.GMT -404	Trade documentation	3	-	-	100		100	3
Msc.GMT-405	International finance	3			100		100	3
Msc.GMT -406	Research project	-		10	100	100	200	5
Total		15		10	600	100	700	20

SUBJECT-1

PRINCIPLES AND PRACTICES OF MANAGEMENT (Theory)

(MSc. GMT/FMM/POM-101)

Objectives:

To acquaint the students with business organization and to familiarize them with basic management processes and concepts.

UNIT-1

Basics of Management: Definition, nature, purpose and scope, role of management, Ethics and social responsibility of management

Schools of Management: Scientific Management, Human Behaviour, Mathematical School, Systems Approach of Management

UNIT-2

Evolution of management thought, Contribution made by Taylor, Gantt, Gilbreth, Fayol, Weber, Elton Mayo, Likert and McGregor, Peter F. Drucker, M.E. Porter.

UNIT-3

Planning: Types of plans, process of planning, Management by Objectives, Nature and purpose of strategies.

Decision-Making: Importance and steps in Decision Making,

Organizing: Concept of organization, process of organizing, bases of departmentation, Authority & Power, Staffing-Directing-Delegation-authority, responsibility, accountability, Steps to make delegation effective Decentralization-purpose and types of decentralization.

UNIT-4

Control: planning-control relationship, process and techniques of control, Human response to control, Types of Control- Feed forward control concurrent Control (Real Time Information & Control), and Feedback Control.

Morale- introduction, factors affecting morale Communication- process.

Suggested Readings:

1. Harold Koontz & Heinz Weihrich: Essentials of Management, Tata McGraw Hill
2. Stoner, Freeman, Gilbert Jr.: Management Prentice Hall India.
3. Heinz Weihrich & Harold Koontz: Management (A Global Perspective), Tata McGraw Hill.

Note:

- Instructions for External Examiner: The question paper shall be divided in four units.
- Shall comprise 8 questions (2 questions from each unit). The students will be required
- To attempt five questions selecting one question from each unit.
- All questions will carry equal marks.

SUBJECT-2

FUNDAMENTALS OF TECHNOLOGY FOR APPAREL MANUFACTURING (MSc. GMT-102)

Course Outline:

OBJECTIVE:-

To familiarize the student who come from different educational backgrounds with basic technology inputs and engineering fundamentals. This will help student in understanding other vital subject of Garment Manufacturing Technology discipline which demand the knowledge of basic engineering principles.

Course Topics:-

UNIT-1

1. Basic Engineering Mechanisms:

Pulley, gear, linkage and cam mechanisms, Types of lever principles and their applications, basic knowledge on other relevant mechanisms such as ratchet mechanism, screw feeding mechanism etc. Demonstration of these mechanisms in different machinery of garment industry.

2. Basic Electrical and Electronic Engineering :

Fundamental of electricity, Ohm's law, A.C and D.C Current basic electrical circuits, identification of different types cables and their color codes, safety decreases- earth wire, fuse, MCB etc., 3 Phase current principle of electric motors, transformers, starters etc., energy consumption calculation for a typical garment industry, identification of basic electronic components such as resistor capacitor, I.C, LED, LCD, transistor etc., demonstration of the use of multimeter and electronic testes.

UNIT-3

- a. Engineering Drawing :

Basic knowledge of standard drawing practices of industry. Class room drawing practice on orthographic and isometric drawings of simple objects, drawing skill practice in group (4 to 6) with drafting tools.

UNIT-4

b. Engineering Material and Processes :

Metal – Ferrous and nonferrous metals Plastic – Thermo Plastic and thermo setting plastics other useful materials with their basic properties and applications. Engineering process – working principles of lathe drifting m/c, sheet forming, metal drawing, costing, Injection molding blow molding etc., Technical visit to engineering in institution as industry to familiarize students with these machines.

c. Basic Ergonomics and Industrial Engineering :

Introduction of Ergonomics (Science dealing with Man- Machine interaction and surrounding environment) and its applications in garment industry with an objective to improve the comfort, convenience and safety of working environment. Use of time and motion study to improve the efficiency of the industrial activities.

References:-

- 1) Theory of machines by Rattan,
- 2) Theory of Machines by Khurmi & Gupata
- 3) Material science and Engineering V.Ragavan
- 4) Engineering Drawing by N.D.Bhatt.
- 5) Work shop Technology S.K Hajra chaudhary
- 6) Kalpakjian, Serape and Schmid, Steven, R, “Manufacturing Engineering & Technology”, Addison Wesley Longman (Singapore) Pte.Ltd. Delhi
- 7) Farag. Mohmoud M., “Selection of Materials and Manufacturing Processes for Engineering Design”, Prentice Hall

Note:

- Instructions for External Examiner: The question paper shall be divided in four units.
- Shall comprise 8 questions (2 questions from each unit). The students will be required
- To attempt five questions selecting one question from each unit.
- All questions will carry equal marks.

SUBJECT-3

TEXTILE SCIENCE

(MSc. GMT-103)

Course Objectives: This course will expose to students to the fundamentals of the textile industry, with a focus on fibers, yarns and woven fabrics.

UNIT – 1

1. Overview of the Textile industry.
2. SWOT analysis of the Indian Textile industry.
3. Basic Fiber properties
4. Classification of fibers
5. Natural fibers- Sources, properties & end use , cotton, flax, jute, wool and silk
6. Manmade fibers- Rayon, Acetate, Nylon, Polyester, Acrylic, Spandex, Polyolefin.
7. Latest fibers

UNIT – II

1. Ring Spinning
2. Open end spinning- an overview
3. Yarn classification
4. Yarn numbering system
5. Sewing threads
6. Yarn defects

UNIT - III

1. Basics of weaving
2. Basic weaves
3. Calculation of gsm & loom production
4. Fabric defects

5. Introduction to Non Woven fabrics
6. Introduction to bonded and laminated fabrics
7. Common fabric names
8. Textile Testing
9. Care Labeling

Instructions to the teacher: Field trip to a spinning and weaving unit will be taken.

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

Reference books:

1. Fiber to Fabric by: Corbman
2. Textiles by: Sara J. Kadolph
3. Textile Science by: Gohl&Vilensky
4. Fabric Science by : Joseph Pizzuto

Note:

- Instructions for External Examiner: The question paper shall be divided in four units.
- Shall comprise 8 questions (2 questions from each unit). The students will be required
- To attempt five questions selecting one question from each unit.
- All questions will carry equal marks.

SUBJECT-4

STATISTICS FOR APPAREL MANUFACTURING

(MSc. GMT/FMM/STAT-104)

Objective: The objective of the course is to familiarize the participants with the basic tools of statistics. The main emphasis will be on the application of these tools in managerial decision making, especially with respect to the production and other related functions in garment manufacturing.

Course Contents:

UNIT-1

1. Presentation and analysis of statistical data – Bar & column graphs, pie Charts, histograms, Ogives, Lorenz Curve.
2. Measures of Central Tendency and dispersion: Mean, Median, Mode, range, Mean deviation.

UNIT-2

3. Standard deviations, coefficient of Variations.
4. Correlation & Regression.

UNIT-3

5. Probability Theory and Distributions, Theorem of Addition and Multiplication, Normal, Binomial and Poisson distribution.
6. Theory of Sampling and Sampling Distributions – Mean, Differences of Means, Differences of proportions.

UNIT-4

7. Test of Hypotheses: Z test, t test, chi (x) square test.

Suggested Readings:

1. Chou, Ya- lun: Statistical Analysis: Holt, Rinchart and Winston, New York 1976.
2. Gupta S.P and Gupta M.P.: Business Statistics, Sultan Chand and Sons, New Delhi, 1986.

3. Levin R.T.: Statistics and management Prentice Hall New Delhi, 1984.
4. Loomba N.P.: Management – A Quantitative Perspective, Macmillan Pub. Co., New Delhi 1978.
5. Markland R.E.: Topics in Management Science, John Wiley & Sons New York, 1983.
6. Stevenson W.J.: Business Statistics – Concepts and Applications, Harper and Row, New York, 1978

Note:

- Instructions for External Examiner: The question paper shall be divided in four units. Shall comprise 8 questions (2 questions from each unit). The students will be required To attempt five questions selecting one question from each unit. All questions will carry equal marks.

SUBJECT-5

SURVEY OF APPAREL DESIGN

(MSc. GMT-105)

Objective:

1. Understand the process of designing.
2. Knowledge of silhouettes, shapes and sizing of garments
3. Designing terminology.
4. Understand the relevance of forecasts and trend services.
5. Relationship of color and design with garment

UNIT - I

Fashion - Terminolo

- Cycle

- Influen

Design - Elements

- Principles

Fashion - American

Designers - European

- Others

- Profiles of Fashion Designers

UNIT - II Designing - Process
 Fashion Design - Collars
 Details - Pockets
 - Trims
 - Embroidery etc.
 - Silhouettes/Shapes/Sizes
 - Silhouettes through the Decades.

UNIT - III - Forecasting Trends and how to use the
 - Couture and ready to Wear
 - Analysis of Designer Labels at the Resource Center

UNIT – IV - Draping and Pattern making

EXAM FORMAT – SUBMISSION AND THEORY

Note:

- Instructions for External Examiner: The question paper shall be divided in four units.
- Shall comprise 8 questions (2 questions from each unit). The students will be required
- To attempt five questions selecting one question from each unit.
- All questions will carry equal marks.

SUBJECT-6

APPAREL INDUSTRY – AN INTRODUCTION

(MSc. GMT-106)

Course Objectives:

To provide a broad overview of structure and practices of the Apparel Industry in India and Abroad. To familiarize the students with Fashion industry terminology and enable identification of the various levels of the industry.

Course Outline:

UNIT I

The need for clothing and apparel, clothing culture and communication. Components of Apparel Industry.

UNIT II

APPAREL INDUSTRY - A HISTORICAL PERSPECTIVE

Growth of the Industry over the years dating back to the civilizations. Development of the Industry through the following stages:

- a. Industrial Revolution
- b. World War I
- c. Period between the wars
- d. Post war fashion development
- e. Into the 90's

UNIT III

CONSUMER DEMAND & ACCEPTANCE OF FASHION

Economic, Technological, Marketing and social influence on fashion and the apparel industry with special reference to India.

Fashion change and consumer acceptance.

UNIT IV

THE CONCEPTULISATION OF APPAREL

Design development, major fashion centers of the world and brief introduction to designers.

Introduction to sourcing

UNIT V

THE RETAILING INDUSTRY

Various types of retailers. Franchise Retailing private labels & others.

Department stores, specialty stores, chain retailers, Mail order houses, shopping malls.

Major domestic retailers/overseas retailers.

UNIT VI

Auxiliary Fashion Enterprises.

Fashion Information Service.

Advertising and Publicity agencies.

Other fashion agencies.

Project work-

THE APPAREL INDUSTRY IN INDIA

Domestic Industry: size of the Industry, nature of the Industry and its development in the last years.

Export Industry: size and nature of the Industry.

Apex organizations like AEPC, GEA, AHEA, CMAI etc. Their role in the promotion of garment exports.

RECOMMENDED READINGS

Inside the fashion business: Tarnow, Guerreiro & Judelle.

Fashion from concept to consumer: Stephens Frings. Understanding Fashion: Elizabeth Rouse. The World of Fashion: Leonard G Rubin.

SUBJECT-7

GARMENT PRODUCTION MACHINERY & EQUIPMENT

(MSc. GMT-107)

UNIT-1

- Introduction to spreading machines and cutting machines - types and functions
- History of sewing machines and development.
- Sewing machinery – types of sewing machines

UNIT-2

- Sewing Bed types
Horizontal Bed Types
Vertical Bed Types
- Needle
Functions of needle parts
Types of needles
Points of needles
Sizes of needles
Defects in needles
Needle Heat and Friction
- Stitching Mechanisms

Loppers

Blind

Eye

Hook

Bobbins

UNIT-3

- Feed Mechanisms

Variations in Feed Mechanisms

Machine Speed and Rate of Feed

Stitch Size Regulation

- Lubrication Systems

Types of lubrication

- Operator Training

Types of Training

Plotting Operator Training Performance

UNIT-4

- Stitch Type Analysis & Classification

Class 100 through 600
Applicable Mechanisms
Throat Plate

Chaining Plate

Chaining Tongue

Thread Fingers & Thread Hook

Loop Spreaders

- Threading Principles

Tension Devices

Take- up Devices

Thread Guides

Thread Packaging

- Work-aids and attachments

Functions of pullers

Guides and folders

Compensating presser foots- left, right, double; feller, hemmer etc.

References:

2. Jacob Solinger., "Apparel Manufacturing Handbook ", VanNostrand Reinhold Company (1980)
3. Peyton B .Hudson. "Guide to Apparel Manufacturing ", MEDIAppearl Inc (1989) ISBN: 0 - 945116-08-X.
4. Carr.H, Latham. B., "The Technology of Clothing Manufacture ", Blackwell Scientific Publications (1988).

Note:

- Instructions for External Examiner: The question paper shall be divided in four units.
- Shall comprise 8 questions (2 questions from each unit). The students will be required
- To attempt five questions selecting one question from each unit.
- All questions will carry equal marks.

SUBJECT-8

PRINCIPLES OF ACCOUNTING-I

(MSc. GMT/FMM/AC-108)

Course Objectives:

- To provide a fundamental knowledge of accounting
- At the end of this course the student will have a working knowledge of the double entry system of book keeping.

UNIT - I-

1. Introduction to Accounting

Nature and scope of accounting

Users of accounting information

Forms of business organization

Double entry bookkeeping.

UNIT - II

2. The Double Entry System

The Journal

The Ledger

The Cash Book

3. **Manufacturing Trading and Profit & Loss Account & Balance Sheet.**

The Profit & Loss A/C

The Balance Sheet – With Adjustment at the close of financial year.

Text books:

Elements of Book Keeping By Arora JS & Mohan Juneja C.

Financial Accounting by S.A. SIDDIQUI.

Double Entry Book Keeping By G.S Grewal, H.S. Grewal

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.

It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit. Adjustment in Final Accounts will be relating to closing stock, o/s expenses, prepaid expenses, provision for doubtful debts, depreciation (Straight line method or WDV method).

SUBJECT-9

GARMENT CONSTRUCTION

(MSc. GMT-109)

Course description:

- This course introduces students to the many processes involved in the construction of I sample. Basic standard of professional sewing are stressed enabling the students to make finished garments from design projects in pattern making course.
- Through lectures and demonstration the students gains an insight in the direct relationship between pattern making and the ultimate quality of the finished sample.
- Students learn application of construction technology by undertaking a variety of exercises and projects using industrial equipment's. Each project emphasizes a specific procedure or necessary procedures.

SEMESTER – I

Course Objectives:

1. This course should enable students to translate paper pattern into a completed garment. This includes. Analysis of component pattern pieces and trimming: Planning a logical garment construction sequence.
2. Planning a layout of pattern pieces to achieve the most economical use of fabric yardage while maintaining grain lines.
3. Making necessary fitting adjustments of sample garments on dress form.

4. Effective use of steam pressing equipment during the process of constructing the garments.
5. Using appropriate seam finished and hemming procedures for particular fabrics.
6. Use of variety of design detail suitable for garments.

UNIT-1

Introduction to Sewing Machine

Safety regulation.

- I) Power Machine
- II) Pressing equipment
- III) Hand tools

UNIT-2

Operating the power machine

Power and speed control.

Stitching technique.

INTRODUCTION

- I) Use of single needle lockstitch machine
- II) Introduction of needle and their sizes.
- III) Thread ticket number and their construction.
- IV) Relation between thread, needle and their needle plate.

UNIT-3

BASIC SEWING LINE PRACTICE

Stitch practice on paper sheet.

Stitch practice on fabric

Sewing problems and their remedies

Threading minor mechanical adjustments.

i) Straight line with guide line.

ii) Straight line without guide line.

iii) Squared line, French curve spiral.

TYPE OF SEAMS:

i) Plain seams / pinked seam

ii) Stitch and pinked

iii) Turn and stitch

iv) Flat and fell seam

v) French seam, bias bound

vi) Hongkongs

vii) Overcoat / Sergeing.

UNIT-4

TYPES OF PLACKETS: (FRONT)

- i) Regular.
- ii) Top stitched with edge stitch.
- iii) Top stitched with one leg of pressure foot distance.
- iv) Concealed placket.
- v) Kurta placket.

TYPES OF SLEEVE PLACKET

- i) Faced placket
- ii) Continuous
- iii) Continuous diamond placket
- iv) Diamond placket

2. Shaping devices

- i) Darts
- ii) Tucks
- iii) Gathers
- iv) Pleats
- v) shiring

References:

1. Mary Mathews, 'Practical clothing construction' Thomson &co., madras, 1974.
2. Cock V., 'Dress Making Simplified' Black science, 1987
3. Patric taylor J., Marti shoben M, 'grading for the fashion Industry' Stanley Thomas (publishers) Ltd.1990

4. Cartis Irving E., 'Fundamentals principles of pattern making for misses and women's garments' New York, FIT, 1987
5. Handrod Jack., 'Profesional pattern grading for women's, men's and children's apparel', redendo bench plycon press, 1980
6. Erwin M.D. and Kinchen, 'Clothing for moderns' McMillan company New york 1970
7. Dangaji and desh panda, 'Basic process and clothing construction orient' longnians, 1970
8. Lang R.M., and Webster J., 'stitches and seams', The textile institute 1998

Examination /Evaluation scheme

- **Practical Examination:** One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all

SUBJECT-10

OFFICE AUTOMATION & DESKTOP PUBLISHING

(MSc. GMT-110)

Course DESCRIPTION:

Develops introductory skills in the Microsoft Office Suite (Word, Excel and PowerPoint), Windows Explorer, Internet, and computer concepts through demonstrations and lab exercises.

Course objectives and content

Upon completion of this course students will be able to:

Students will set familiar with the fundamentals and some advance features of MS-WORD, MS-EXCEL AND MS-POERPOINT.

1. To offer a comprehensive presentation of Ms-Office-2007
2. To explore students to the practical example of the computer as a useful tool.
3. To develop an exercise oriented approach that allow knowing by doing.
4. Demonstrate the skills in the appropriate use of various features of the spread sheet package MS Excel and also to create useful spreadsheet applications like tabulated statements, balance sheets, statistical charts, business statements, etc.

Duration-6 months

One class per week of 3 hrs.

Examination /Evaluation scheme

- **Practical Examination:** One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all.

Unit-I

Introduction to MS Word, Menus, Working with Documents, Formatting page and Setting Margins, Converting files to different formats, Editing text documents, Formatting documents, Creating Tables, Table settings, Tools, Word Completion, Spell Checks, Drawing and printing documents, Importing and Exporting, Sending files to others, Editing text documents, Inserting and Deleting, Find, Search, Replace Commands

Unit-II

Introduction to Excel, Spreadsheet & its Applications, Menus, Toolbars, Working with Spreadsheets, Converting files to different formats, Computing data, Formatting spreadsheets, Working with sheets, Sorting, Filtering, Validation, Consolidation, Subtotal

Unit-III

Creating Charts, Selecting charts, Formatting charts, label, scaling etc., Using Tools, Error Checking, Spell Checks, Formula Auditing, Introduction to power point, Opening new Presentation, Selecting presentation layouts.

Unit-IV

Creating a presentation, Formatting a presentation, Adding style, Color, gradient fills, Arranging objects, Slide Background, Slide layout, Adding Graphics to the presentation, Inserting pictures, movies, tables, etc into the presentation, Drawing Pictures using Draw, Adding effects to the presentation, Setting Animation & transition effect, Adding audio and video.

SUBJECT-11

INTRODUCTION TO KNITTING

(MSc. GMT-111)

Course Objectives: To understand the basics of the knitting industry with special focus on weft knitting.

Unit I

1. Introduction to Knitting and the knitting industry
2. Difference between knitted and woven fabrics
3. Basic terms related to knitting
4. Types of knitting – warp and weft knitting
5. Overview of a knitting machine
6. Knitting needles- parts and knitting cycle

Unit II

1. Knitting cams
2. Knitting sinkers
3. Knitted loops
4. Basic weft knitted stitches
5. Basic weft knitted structures

Unit III

1. Weft Knitting machines
2. Classification of weft knitted garments
3. Basic Terms related to warp knitting
4. Warp knitting machines

5. Production Calculations
6. Calculation of gsm and tightness factor
7. Common fabric names
8. Knitted fabric defects

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

Books:

1. Knitting Technology by: David J. Spencer
2. Knitting Technology by: Ajgaonkar

SUBJECT-12

BASIC PATTERN MAKING

(MSc. GMT-112)

UNIT-1

1. Introduction to pattern Making.
2. Importance of Pattern making in the industry.

1. Measurement taking

UNIT-2

4. Understanding Size charts.
5. Developing Basic Blocks - (Semi Fit) Front and Back. Importance of basic blocks in the industry and its utilization.
6. Correcting basic blocks.

UNIT-3

7. Developing a prototype with the help of muslin and checking on dress form for proper fitting and fall.
8. Developing a basic block with darts. (Semi fit). (Converting dart less blocks into blocks with darts).
9. Developing a prototype with the help of muslin and checking on dress form for proper fitting and fall.

UNIT-4

10 .Dart manipulation : Single dart series Double dart series
Multiple dart series.

Darts in the form of gathers Darts away from bust point. Designer dart series.

11. Developing a prototype of all the above series (at least one sample each).

12. Checking on the dress form for any faults and correcting them.

REFERENCES:

- 1) “Pattern making for fashion design”, Helen Joseph Armstrong, Harper Collins, LA.
 - 2) “Metric Pattern Cutting for Menswear”; Winfred Aldrich, BSP Professional book Oxford.
 - 3) “Pattern making and making up-the professional approach”; Marten Shoben and Janet P.Ward, Butterworth Heinman,Oxford.
 - 4) “Modern sizing for womens and childrens”; P.Kunick , Philip Kunik Publication London.
 - 5) “Dress Fitting”; Natalie Bray, Black well science Ltd London.
 - 6) “Dress Patten Designing” Natalie Bray, Black well science Ltd London.
- Examination /Evaluation scheme

Practical Examination: One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all

SYLLABUS
SECOND SEMESTER

SUBJECT-1

OPERATIONS RESEARCH

(MSc. GMT-201)

UNIT-1

- Basics: Development of Operation Research, characteristics of operations research. Decision making scope of O.R. in Garment industry. Phases of Operation research
- Linear Programming: Introduction, requirements and assumptions, formulation Of problems. Example on applications of linear programming.

UNIT-2

- Graphical Method: To solve the formulated problems graphically, Limitation of graphical method
- Simplex Method: Solution of maximization and minimization problems by simplex method. Artificial variables and Big M method.

UNIT-3

- Transportation: Introduction, Method for obtaining initial basic feasible solution. Degeneracy. Vogel's approximation method and optimization.
- Assignment: Introduction, Comparison with transportation method. Assignment algorithm, restrictions on assignment.

UNIT-4

- PERT-CPM: Introduction to PERT-CPM. Role of PERT-CPM in project management

- Sequencing Problems

References:

1. J. Heizer, B.Render. "Production and Operations Management ", Prentice Hall (1993)
2. ISBN: 0-205-14048-3.
3. Hamdy A. Taha, "Operations Research an introduction ", Maxmillan Publishing Company,
4. New york, Third Edition, 1982.
5. Hamdy A. Taha, "An introduction to Operations Research ", Maxmillan Publishing Company,
6. New york, Fifth Edition, 1996.
7. Narayan Bhat U, "Elements of Applied Stochastic processes ", John Wiley and Sons, 1972.
8. Fredrick S. Hiller and Gerald J Liberman, "Introduction to Operations Research ", McGraw-Hill,

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-2

FINANCIAL MANAGEMENT

(MSc. GMT/FMM/FM-202)

Course Objective:

- To provide a fundamental knowledge of accounting
- At the end of this course the student will have a working knowledge of financial Management Analysis.

UNIT - I

Analysis of financial Statements-

- Financial Analysis: Meaning Significance & Purpose Limitations.
- Tools for financial Analysis Comparative statements, Common size Statements.

UNIT - II

- Accounting Ratios: Meaning and Objectives
- Liquidity Ratios: Current Ratio Liquid Ratio
- Solvency Ratio: debt to equity, Total Assets to debt proprietary Ratio.
- Activity Ratio: Inventory Turnover, Debtors Turnover, Working Capital Turnover.
- Profitability Ratio: Gross Profit Operating Ratio.

Text Books

Analysis of Financial statement by T.S. Grewal

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.

It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit

SUBJECT-3

WORK STUDY FOR APPAREL MANUFACTURING

(MSc. GMT-203)

UNIT-1

Productivity: Meaning, measurement and importance; productivity and standard of living; factors affecting productivity; improving productivity; determination of total time of a job; reducing ineffective time.

UNIT-2

Work Study: Meaning, importance and procedure; human factor in the application of work study. Working conditions and environment; pre-requisites for work study.

UNIT-3

Method Study: Selection of jobs, record, examination and development, movements of workers in the working area; evaluate, define, install and maintain; method study in the office.

UNIT-4

Work Measurement: Purpose, uses, procedure and techniques; work sampling; time study; equipment, selecting and timing the job; rating and standard time; pre-determined time standards and standard data; uses of standard data

REFERENCES

1. Khanna .O.P., "Industrial Engineering and Management", Dhanpat Rai & Sons, 1987.
2. Ralph M. Barnes, "Motion and Time study Design and Measurement of Work", 7th Edition, John Wiley& Sons, New York, 1980.
3. Introduction to Work Study - ILO, 1987.

Note: Instructions for External Examiner: The question paper shall be divided in four units. Shall comprise 8 questions (2 questions from each unit). The students will be required to attempt five questions selecting one question from each unit. All questions will carry equal marks.

SUBJECT-4

APPAREL STANDARDS, SPECIFICATIONS AND QUALITY CONTROL (MSc. GMT-204)

Course Objectives:

1. Development of quality specifications for manufacturing.
2. Identification of Critical Inspections Points for Quality Assurance.
3. Analysis of relationship between quality specification requirements, time of performance, quality assurance, supervisory responsibility and cost.
4. Develop measurements of conformance to specification so as to assure product quality.

Unit 1

1. Introduction-definition, importance of quality.
2. Inspection - raw materials –
 1. Fabric inspection systems-4 point, 10 point system, Graniteville 78.
 2. Sewing threads-construction and swability
 3. Trims inspection- zippers waist band, buttons, Interlining etc.

Unit 2

3. In process - spreading, cutting, sewing quality parameter and types of defects occurring, assembly defects.
4. Final inspection- finishing defects, no inspection, 100% inspection, spot checking, and arbitrary sampling.
5. Statistical sampling- AQL-single sampling and double sampling plan,
6. Terms-percent defective, sample, lot,
7. comparability checks

Unit 3

8. Quality Control: 1. Scope and functions of Quality Control.
9. 2. Standards and specifications

10. Cost of quality

11. 7 tools of Quality control

12. Care labeling-

References-

Managing Quality control in Apparel industry-P.V Mehta

Quality control handbook by Juran's

Instructions to the teacher: visit to export house to understand quality concepts and assignment based on any parameter of quality..

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

SUBJECT-5

FABRIC DYEING & PRINTING

(MSc. GMT-205)

Course Outline: This course aims at providing an insight into the dyeing and printing of textiles.

UNIT - I

1. Grey Fabric Inspection
2. Characteristic of impurities.
3. Classification of impurities.
4. Preparatory Process for cotton - Stitching, Singeing, Desizing , Scouring, Bleaching and Mercerization
5. Preparatory Process for wool and silk
6. Preparation of blends
7. Definition of color, dyes, pigment.
8. Classification of dyes.

UNIT – II

1. Method of Application of dyes on textiles.
2. Properties of dyed textiles
3. Stages of dyeing
4. Dyeing machinery
5. Dyeing of blends
6. Dyeing defects

UNIT – III

1. Methods of printing
2. Styles of Printing
3. Special prints
4. Printing defects
5. Basics of processing of knits
6. Basics of denim washes

7. Fastness properties of fabrics
8. Cost reduction techniques in dyeing and printing

Instructions to the teacher: Field trip to a dyeing and printing unit will be taken.

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

REFERENES:

- a. Fabric Science by Joseph J. Puzzuto.
- b. Technology of Dyeing, Printing and Bleaching by Dr. V.A. Shenai.

SUBJECT-6

PATTERN MAKING AND GRADING

(MSc. GMT-206)

- In the Second Semester students are expected to have thorough understanding of: the patterns ie. Construction of permanent patterns and working patterns of the upper torso. Semi Fit and Loose Garments.
- Sleeves: Set -In Sleeves.
- Basic Sleeve Block Development. Sleeve variations:
- Puff Sleeve,
- Leg-o- mutton sleeves, Lantern Sleeve
- Juliet Sleeve
- Shirt Sleeve.
- Students are required to fix sleeves in the garment they have constructed and see for proper hang and fitting.
- Collars: Set – in collars. Band collar and variations. Peter Pan collar and variations Sailors collar and variations Shirt Collar.
- From the dart less block and block with darts students are expected to make gents shirt and gent's shirt for ladies respectively.
- They are required to make, Yoke, Button Placket, cuffs and sleeves
- Students are required to test fit the shirt for proper fall and fit
- By the end of the semester students should have a thorough understanding of upper torso garments ie. Dartless garments and garments with darts and also understand attaching sleeves and collars
- They are also required to have understanding of permanent and working patterns.

REFERENCE BOOKS

- 1) "Pattern making for fashion design", Helen Joseph Armstrong, Harper Collins, LA.
- 2) "Metric Pattern Cutting for Menswear"; Winfred Aldrich, BSP Professional book Oxford.
- 3) "Pattern making and making up-the professional approach"; Marten Shoben and Janet P.Ward, Butterworth Heinman,Oxford.

- 4) "Modern sizing for womens and childrens"; P.Kunick , Philip Kunik Publication London.
- 5) "Dress Fitting"; Natalie Bray, Black well science Ltd London.
- 6) "Dress Patten Designing" Natalie Bray, Black well science Ltd London.

SUBJECT-7

GARMENT CONSTRUCTION

(MSc. GMT-207)

Objective:

- This course further imparts advanced technical skills required for garment construction with special emphasis of comparative study of methods in terms of their impact on operator skill level, type of sewing machine and work aid to be used, operation cycle time and quality level.

-

Course Contents:

UNIT-1

1. Different methods of zipper applications and closures.

- i) Centered
- ii) Lapped
- iii) Invisible
- iv) Open ended
- v) Fly- front

MOUNTING OF SLEEVE

- i) Direct attachment
- ii) Round attachment

UNIT-2

TYPES OF CUFF

- i) Square shape ii) Round shape

TYPES OF COLLAR

- i) Mandarin
- ii) Convertible
- iii) Tie collar
- iv) Shawl collar
- v) Roll collar
- vi) Revere collar and Notch collar (Term garment Shirt)

- i) Lapel construction
- ii) Yoke Attachment
 - a) Patch
 - b) Concealed

UNIT-3

- 3. Waist band applications.
 - i) One piece waist band.
 - ii) Waist band with facing.
 - iii) Contour waist band.
 - iv) Elastic insertion and application

- 1. Shirt(term garment)

References:

1. Mary Mathews, 'Practical clothing construction' Thomson &co., madras, 1974.
2. Cock V., 'Dress Making Simplified' Black science, 1987
3. Patrick taylor J., Marti shoben M, 'grading for the fashion Industry' Stanley Thomas (publishers) Ltd.1990
4. Cartis Irving E., 'Fundamentals principles of pattern making for misses and women's garments' New York, FIT, 1987
5. Handrod Jack ., 'Profesional pattern grading for women's, men's and children's apparel', redendo bench plycon press, 1980
6. Erwin M.D. and Kinchen, ' Clothing for moderns' McMillan company New york 1970
7. Dangaji and desh panda ., 'Basic process and clothing construction orient' longnians, 1970
8. Lang R.M., and Webster J., 'stitches and seams', The textile institute 1998

SUBJECT-8

GARMENT ANALYSIS (MSc. GMT-208)

UNIT-1

1. Intrinsic & Extrinsic Parameters of Garment
2. Apparel professional.
3. Role of garment analysis
4. Methods of garment analysis
5. Process of garment analysis

UNIT-2

6. Analysis of seams.
7. Study of work aids.
8. Thread requirement calculations.

UNIT-3

Operation Breakdown of Garment to be studied

1. Men's formal shirt
2. Casual shirt
3. Jeans
4. Trousers
5. Kids wear
6. Ladies top dress
7. T- shirt
8. Jacket (uppers)

References

- 1) Binren juki publication
- 2) Introduction to apparel manufacturing

Note:

Instructions for External Examiner: The question paper shall be divided in Three units. Shall comprise 6 questions (2 questions from each unit). The students will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

SUBJECT-9

GRAPHIC DESIGN AND APPLICATIONS

(MSc. GMT-209)

Course Description:

This course is aimed at students and design professionals who are interested in learning how to design, print using Photoshop. To create, capture and enhance the images in accordance with the final objective. It is a bitmap based graphic designing program that designers use to create professional artwork or advertisements. In this course, students will explore the advanced features available with Photoshop including advanced text, color, layout and layers styles.

Objectives:

- Learn how to manipulate, edit, and adjust images by using, the different tools in Photoshop. Students will learn how to apply layer effects and filters to create special effects, including lighting and texture effects.
- To show advanced skills in using painting tools and blending modes to create special effects and quality artworks.
- Perform good skill in color correction and restoration of photographs and images.
- To learn how to optimize images for use on the Web, and the advantages of using image slicing techniques.
- Demonstrate basic skills in developing a time-based production

Duration-6 months

One class per week of 3 hrs.

Examination /Evaluation scheme

- **Practical Examination:** One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all.

Unit-I

Introduction To Adobe Photoshop, Opening new files, Opening existing files, exploring the Toolbox, Exploring Panels & Menus, Creating & Viewing a New Document, About Photoshop, Navigating Photoshop, Working with Images and Basic Selections, Working with Multiple Images, Rulers, Guides & Grids, Adjusting Color with the New Adjustments Panel, Getting Started With Layers And Painting Commands, Understanding the Background Layer, Creating, Selecting, Linking & Deleting Layers, Introduction to Blending Modes

Unit-II

Photo Draping In Adobe Photoshop, Photo Draping Basics, Using a Wrap tool to Photo, Photo Draping a garment/dress with Blending modes, Photo Draping a Bed, Painting In Photoshop Using the Brush Tool, Working with Colors & Swatches, Creating & Using Gradients, Creating & Working with Brushes, Photo Retouching And Color Correction, Using Quick Mask Mode And The Pen Tool, Working With Colors And Color Settings, Working with the Color palette, Using the Color palette, Editing Foreground color and Background color, Using the Color ramp, Setting

the CMYK Color gamut, Creating Special Effects , Getting Started with Photoshop Filters, Smart Filters ,Creating Text Effects, Applying Gradients to Text.

Unit-III

Introduction to Corel draw, Exploring the CorelDraw Screen, Inserting and Deleting Pages, Changing Page, Customizing Options, Using Multiple Workspaces, Creation and manipulation, Drawing and Shaping Tools, Using the Freehand Tool, Drawing Lines and Polylines, Working With Special Effects And Texts, Drawing With the Artistic Media Tool, Shaping an Object with an Envelope, Extruding an Object, Blending Two Objects, Using the Lens Effect, Adding Perspectives, Using Power Clips

Unit-IV

Working With Paragraph, Importing and Sizing Paragraph Text, Flowing Text Between Frames, Formatting Paragraph Frames, Wrapping Paragraph Text Around Objects, Applying Drop Caps, Typing Text Into Objects, Special Text Effects, Fitting Text to a Path

Working With Colors, Fills, & Outlines, Color Palettes, Fills & Outlines, Eyedropper Tool

Smart Fill.

Suggested Books

1. Microsoft office 2010 for Dummies, “Wallace Wang”, Wiley India Pvt. Limited, 2010.
2. Coreldraw X5 In Simple Steps ,”Kogent Learning Solutions Inc”, Wiley India Pvt. Limited, 2011.
3. Photoshop Cs2 (savvy), By Romaniello

SUBJECT-10

SPREADING AND CUTTING OF APPAREL PRODUCTS

(MSc. GMT-210)

Objective:

1. To be able to construct different markers.
2. To be able to evaluate various spreading modes and cutting modes.
3. To be able to evaluate auxiliary cutting room equipment.
4. To be able to understand flow process of manufacturing operation from design to finished products.
5. Organization chart for cutting room.
6. Cutting Room Reports.

Unit-1

2. Initiation of preproduction operations
3. Marker making-
 - A. Planning, drawing and reproduction of marker
 - B. Efficiency of marker plan
 - C. Methods of marker planning and marker use-manual and computerized
 - D. Requirements of marker planning

Unit 2

4. Spreading-
 - A. Spreading of fabric to form a lay
 - B. Requirements of spreading process
 - C. Methods of spreading—manual and automated
 - D. Nature of fabric packages

E. 4types of spread
Unit 3

5. Cutting-

- A. Cutting of fabrics
- B. Objectives of cutting
- C. Methods of cutting
- D. Cutting equipment's -portable and stationery ,specialized cutting machines
- E. Automated controlled cutting systems

References-

Technology of clothing manufacture-Carr and Latham

Apparel manufacturing handbook: analysis, principles and practice ,Jacob Solinger

Instructions to the teacher: trip to a garment manufacturing unit will be taken.

Assignment based on samples of types of spreads and marker making

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

SUBJECT-11

PERSONALITY DEVELOPMENT AND COMMUNICATION SKILLS

(MSc. GMT/FMM/PD-211)

Marks -100

UNIT-1

1. Introduction to Personality Development

- a. What is personality?
- b. Why does it matter?
- c. We are all unique.

II. The Developing Personality

- a. How do personalities develop?

UNIT-2

III. Stages of Development

- a. Freudian stages of development

IV. 'Need' a little personality?

- a. How needs impact personality

b. Maslow's hierarchy of needs

UNIT-3

V. Basic Personality Traits

a. Values

b. Beliefs

c. Interactions

d. Experiences

e. Environmental influences

f. The big five dimensions

VI. Personality type

UNIT-4

VIII. Personality and Career Choice

a. Matching your career and personality

b. Why it matters

c. Self-efficacy

IX. Changing Your Personality

- a. Can personalities change?
- b. Being yourself, being adaptable
- c. Positive attitude
- d. Individuality
- e. Controlling emotions

Developing communication skills- interview, body language

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SYLLABUS
THIRD SEMESTER

SUBJECT-1

APPAREL PRODUCTION CONTROL AND COMPUTER INTEGRATED MANUFACTURING SYSTEM

(MSc. GMT-301)

Course Objectives:

1. To present the scope, functions and responsibilities of production control as it relates to the apparel industry.
2. To describe the techniques and procedures used to achieve production control objectives.
3. To develop skills in utilizing and applying techniques of production control.
4. Given specific apparel problems, the students should be able to apply the skills to develop the problem solutions.
5. The student should be able to design and implement a complete production control system for production of sewn products.

UNIT-1

1. Production Planning and control general introduction & Computer based

Production management

1. Stages of Product Development
2. Function of production control
3. Production analysis quality specifications
4. Production analysis quantitative production
5. Scope of manufacturing activity
6. Coordinating departmental activities.
7. Types of control forms
8. Basic production system
9. principles of choosing a production system
10. Evaluating production system

UNIT-2

2. Group Technology and Cellular Manufacturing

- ii) Parts classification and part coding – approaches and systems
- iii) Benefits of group technology
- iv) Cellular manufacturing-basics, layout considerations
- v) Cell formation approaches and evaluation of cell designs
- vi) Planning and control in cellular manufacturing

3. Materials Handling and Storage

- Automated Material handling systems-AGVs, -types design features, guidance and control systems.
- Automated storage and retrieval system (ASRS)-components, design features and applications.

UNIT-3

2. Flexible Manufacturing Systems

- FMS and its Components
- Layout considerations in FMS
- Benefits of FMS

5. Operation Time Analysis

1. Use of Time Study Data.
2. Use of Standard Data.
3. Use of Pre-Determined Time System (SPD)

UNIT-4

6. Bundle Tickets

1. Guidelines for Bundle Ticket Design.
2. Functions of Bundle Ticket.
3. Bundle Ticket Control.

7. Scheduling

1. Principles of Scheduling.
2. Scheduling Charts.

8. Sales Forecasting in the Apparel Industry

1. Types of Forecasts.
2. Uses of Forecasts.
3. Statistical Inputs for Forecasting.
4. Forecasting Techniques.

References:-

1. A.J. Chuter., "Introduction to Clothing Production Management ", Blackwell Scientific Publications
2. Carr.H, Latham. B., "The Technology of Clothing Manufacture ", Blackwell Scientific Publications
3. Jacob Solinger., "Apparel Manufacturing Handbook ", VanNostrand Reinhold Company (1980).
4. Gerry cooklin, "Introduction to Clothing Manufacture", Blackwell Scientific Publications
5. Singh, Nanua, "Systems Approach to Computer Aided Design and Manufacturing", John
6. Wiley and Sons
7. Introduction to Work Study - ILO, 1987.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-2

MANAGERIAL ECONOMICS

(MSc. GMT-302

The purpose of this course is to apply Micro-economic concepts tools and techniques in evaluating business decisions taken by a firm. Short case studies will be used to ensure problem solving ability of corporate managers.

UNIT-1

I Introduction to Managerial Economics:

1. Nature and Scope of Managerial Economics
2. Relationship of Managerial Economics with:
3. Economic Theory
4. Decision Sciences
5. Statistics
6. Optimization technique & Operations research
7. Characteristics of Managerial Economics
8. Managerial Economics role and responsibilities.

II) Basics of Demand and Supply:

1. Demand Function: Determinations of demand for a product; Law of Demand, Demand Elasticity (concepts, methods of measurement, factors affecting and importance), Market demand for a product.
2. An introductory analysis of Surveys and Statistical methods of demand forecasting.
3. Supply Function: Determinants of Supply of a commodity; concepts of Market Period, Short and Long period Supply Curve, Elasticity of Supply.
4. Equilibrium Price Determination. Govt. intervention in terms of fixation of Ceiling and Floor prices; Emergence of black market and necessity of physical quota fixation/Rationing; Effects of imposition of an excise duty/sales tax/grant of subsidy to sellers on the product's price.

UNIT-2

III Consumer Demand Theory:

1. Consumer preference ordering (Weak & Strong) and consumer Equilibrium
2. Analysis of Substitution and Income Effects and derivation of Consumer demand Curve

IV Production and Cost Analysis:

1. Concept of a production function; Short run production analysis and law of variable proportions; concepts of Average and Marginal Physical
2. Productivities and their interrelationships.
3. Long run production analysis and law of Returns to Scale. Concept of isoquants and producer's equilibrium in the factor market.
4. Cost of Production: Concepts; short & long run cost analysis
5. Empirical estimation of Production and Cost functions.

Break-even Analysis.

UNIT-3

V Objectives of the Firm:

1. Profit maximization and its critique.
2. Sales Maximization model of the firm; Comparison of Price, Output, Profits and Advertisement determination under profit and sales maximization models of the firm.

VI Pricing and Output Decisions under Alternative Market Structures:

- 1) Determinants of a Market Structure and classification of market structures based on them.
- 2) Pricing in a Competitive industry and Equilibrium of a Firm in Short & Long Run.
- 3) Monopoly: Price-Output determination in Short & Long Run. Price Discrimination.
- 4) Monopolistic Competition: Price-Output and Selling cost Determination in the short and long run by a firm

- 5) Oligipolistic interdependence; Cournot's Model, Price Rigidity; Kinked Demand Curve model
- 6) Pricing in practice: Cost plus pricing, multiple product pricing, Pricing in life cycle of a product.

UNIT-4

VII Capital Budgeting:

- 1) Meaning and significance of Capital Budgeting;
- 2) Classification of investment projects. Public and Private investment decisions
- 3) Investment Criteria; Payback, Internal rate of return and Net present value Methods of Investment Evaluation.
- 4) Social Cost Benefit Analysis.

Suggested Text Book

1. Baumol, W.J. Economic Theory and Operations
Analysis (1980), Prentice Hall on India. N. Delhi
2. Adhikary, M. Managerial Economics (200), Excel Books,
N. Delhi
3. Koutsoyiannis,A. Modern Microeconomics, (Second Edit.) 1979, ELBS/Macmillan
4. Mukherjee,S. Business & Managerial Economics (1996), New Central Book Agency (P) Ltd., Calcutta
5. Davis, J.R. & Principles of Managerial Economics (1996),
Chang, Simon. Prentice Hall International, N.Delhi.
6. Ahuja, H.L. Business Economics, (1999), S. Chand &

Co.N.Delhi.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-3

INTRODUCTION TO COST ACCOUNTING

(MSc. GMT/FMM/CA-303)

UNIT - I.

Nature & Scope of Cost Accounting

- Introduction
- Meaning of Cost Accounting
- Limitations of Financial Accounting
- Scope of Cost Accounting

Cost – Analysis, concept & classification

- Cost Sheet along with the treatment of stock
- Cost concepts – Cost Centre, Profit Centre

UNIT - II.

Material Control

- Techniques of Material Control
 1. Level Setting
 2. Just In time Inventory
 3. VED analysis
 4. EOQ
 5. ABC analysis
 6. Perpetual Inventory Control
 7. FNSD Analysis

UNIT-III

Materials Costing

- Methods of Valuing Material Issues (FIFO, LIFO, Average Cost)
- Material Losses – Theory of Waste, Scrap, Defectives & Spoilage

Text Book

Practical Problems in cost Accounting by S.P. Jain & K.L. Narang

Instructions to the examiner: There will be three questions of 10 marks each in each unit. Question Paper will have the total of nine questions.

It will be compulsory to attempt two questions from each unit and the rest two questions can be attempted from any unit.

SUBJECT-4

FABRIC & GARMENT FINISHING (MSc. GMT-304)

Course Objectives:

The object of the course is to impart adequate input of the finishing of fabric and garment to the students. Since finishing is one of the most important areas of the final product, good understanding of the various finishes and their application techniques is becoming increasingly important especially to compete in the international market.

Unit – 1

1. Objective of Finishing
2. Classification of finishes
3. Various terms used in finishing of fabric & garment.
4. Detailed description of various mechanical finishing operations
5. Resin finishing

Unit – 2

1. Finishing of wool.
2. Finishing of silk
3. Functional Finishes
4. Finishing of garments

Unit – 3

1. Spotting & Washing Of Garments
 - a) Identification of stains, characteristics & history.
 - b) Factors for spotting.
 - c) Methods of spotting

2. Pressing
 - a) Reasons for pressing.
 - b) Pressing equipment's, conditions.
 - c) Types of pressing.

3. Packaging & Folding
 - a) Criteria for packaging.
 - b) Specification & standards for packaging.
 - c) Material & equipment used for packaging.
 - d) Considerations for packaging & folding.

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

References:

1. Hall , A.J., " Textile Finishing ", Elsevier Publishing Co. Ltd., 1986.
2. Marsh, J.T., " An Introduction to Textile Finishing ", Chapman and Hall Ltd., London, 1979.
3. Shenai, V.A., " Technology of Textile Finishing " , Sevak Publications, Bombay, 1995.
4. Garment wet processing technical manual AATCC/SDC 1994

SUBJECT-5

APPAREL MARKETING AND MERCHANDISING

(MSc. GMT-305)

(Theory & practical)

Course Objectives-

To acquaint students with marketing process so that they can correlate theory with practical aspect of marketing.

Unit 1

1. Introduction, Meaning, nature, functions, importance, marketing environment
 - Definitions of Marketing, Concept of Marketing
 - Marketing Mix
 - Segmentation
 - Targeting
 - Positioning
2. Analysis of consumer markets and buyer behavior
3. Criteria consumers use in fashion selection.
4. Consumer identification with fashion life cycle.
5. Merchandising the fashion life cycle.
6. Understanding consumer behavior- buyer black box
7. Role of the Digital marketing (internet): technological development, development of ecommerce, different commercial models, and diverse roles of websites.

Unit 2

8. Product Mix, Product Life Cycle, New Product Development
9. Residents buying offices- definition, types
10. Merchandising- definition, role and responsibilities of a merchandiser
11. 6 months merchandising plan-buying calendar

12. Merchandising policies

Unit 3

13. Retail fashion promotion – sales promotion, advertising, branding, public relation, special events

14. Retailing- types of retail operations.

UNIT-4

1. Concepts and Principles -Introduction to packaging and packaging principles.

2. Materials used for packaging in Apparel industry-

Suggested Books:

1. Chaffey, Mayer, Johnston, Ellis-Chadwick (2000) Internet Marketing, Prentice Hall.
2. Hagel, J and Singer M. (1999) Net Worth, McKinsey.
3. Hanson, W. (1999) Principles of Internet Marketing, International Thomson Publishing
4. Reedy, Schullo, Zimmerman, K. (2000) Electronic Marketing, Dryden.
5. Apparel manufacturing handbook-Jacob Solinger
6. Essentials of Marketing – Jerome E. McCarthy & William D. Perrault
 - 7. Principals of Marketing – Philip Kotler 11th edition
 - 8. Essentials of Marketing – Stanton&Futrell
 - 9. Fashion Innovation & Marketing – Catherine Moore

Instructions to the teacher: Field trip to famous malls and assignment based on consumer survey.

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

SUBJECT-6

HUMAN RESOURCE MANAGEMENT (theory)

(MSc. GMT/FMM/HR-306)

Course Objective:

- To help students understand, appreciate and analyze work force at the managerial and non-managerial levels.
- The course also facilitates learning of various concepts, new trends and skills required for Planning, managing and development of human resources for organizational effectiveness.

Course Content

UNIT-1

1. Introduction of HRM:

Definition , Concepts , History of HRM, Importance of HRM , Role of HR Executives- HRM Functions , Challenges of Human Resource management , New Challenges of HR Executives-Structure and Organizational Chart of HR Department.

UNIT-2

2. Job Analysis and Design:

Concept of Job Analysis and Design-Methods of Job Analysis-Job Description-Job Specification-Modern Management Techniques: Job rotation-job enlargement-Job enrichment .Managing the desorbed world, Competency mapping.

3. Human Resource Planning (HRP):

Need and Importance of HRP-Process of HRP-Levels and Types of HRP-Forecasting Demand for employees-Forecasting supply for employees-Balancing supply and demand consideration-HRP Model.

UNIT-3

4. Recruitment and Selection Process:

Definition and concept of Recruitment-Factors Affecting Recruitment- Sources of recruitment-Information technology and HR recruiting on the net-methods and Techniques of recruitment.

5. Recruitment Policies.

Selection Process-Person Job Fit-Person Organization Fit-Elements of Selection Process-Steps in the Selection Procedure-Various types of Test-Selection Interview: Methods, and Process (including reference check and medical examination)-Placement and induction-Competency testing systems.

UNIT-4

6. Performance and Potential Appraisal:

Concept-Objectives of Performance Appraisal-The Appraisal Process- Traditional Methods and Modern Methods of Appraisal (including MBO, 360 degree, Assessment Centre, Balanced Scorecard, etc.)-Appraisers: Manager/supervisor, Self, Subordinate, Peer, Team and Customer-Pitfalls in Performance Appraisal-Potential appraisal-need importance & methods.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-7

COSTING OF APPAREL PRODUCTS

(MSc. GMT-307)

Objective- to make students understand costing concepts and competitive edge in the market scenario by means of cost control.

Unit 1

1. Costing- definition, advantages ,importance
2. Cost terminologies- bonded warehouse, CIF, FOB, counter sample, duty, overseas shipping, storage cost, air freight, air express etc.

Unit 2

3. Merchandising mathematics- mark ups and mark downs-
4. Costing factor- rent ,labor, operating cost, utilities , capital depreciation
5. Various departments of costing- administration, sales, production etc.

Unit 3

6. - Elements of cost- direct and indirect.
7. Costing of a garment- shirt and trouser.

References-

Fa\$tion for Profit: From Design Concept to Apparel Manufacturing .- By Frances Harder
Apparel Manufacturing: Sewn Product Analysis, 4/E By Glock Ruth E., Glock
Costing for the Fashion Industry By Michael Jeffrey, Nathalie Evans
Instructions to the teacher: Field trip to a dyeing and printing unit will be taken.

Instructions to the examiner:

1. There will be one compulsory objective question (multiple choice questions or fill in the blanks or True/False questions) covering all units, carrying 20 marks.
2. There will be six questions of 10 marks each , out of which four questions are compulsory. The questions will be two from each unit.
3. It will be compulsory to attempt one question from each unit and the fourth question can be attempted from any unit.

SUBJECT-8

GARMENT CONSTRUCTION

(MSc. GMT-308)

Objective:

To develop skills and methods in the area of apparel construction. Develop efficient and quality construction techniques in the sewing room. To develop several types of seam finishes using attachments.

A. GARMENT CONSTRUCTION

UNIT-1

1) Skirt Construction

i) Waist band application

ii) Concealed zipper application

iii) Inseam pocket

iv) Roll hem

2. Trouser

I) Front and side pockets

II) Fly front

III) Back and hip pocket

IV) Waist band

V) Belt loops

UNIT-2

3. Waist coat
 - i) welt pocket
 - ii) Slit/vent formation
 - iii) Shoulder pad construction.
 - iv) French lining/full lining application.
4. Transfer patterns on to fabric.

UNIT-3

5. Construction reports.
6. Choose appropriate machines / equipment for production.
7. Presentation of Reports.

References:

1. Mary Mathews, 'Practical clothing construction' Thomson & co., madras, 1974.
2. Cock V., 'Dress Making Simplified' Black science, 1987
3. Patric taylor J., Marti shoben M, 'grading for the fashion Industry' Stanley Thomas (publishers) Ltd.1990
4. Cartis Irving E., 'Fundamentals principles of pattern making for misses and women's garments' New York, FIT, 1987
5. Handrod Jack., 'Profesional pattern grading for women's, men's and children's apparel', redendo bench plycon press, 1980
6. Erwin M.D. and Kinchen, ' Clothing for moderns' McMillan company New york 1970
7. Dangaji and desh panda. 'Basic process and clothing construction orient' longnians, 1970
8. Lang R.M., and Webster J., 'stitches and seams', The textile institute 1998

Practical Examination: One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all.

SUBJECT-9

INDUSTRIAL PATTERN MAKING AND GRADING

(MSc. GMT-309)

In the third semester students will be given a thorough understanding of lower body garments

UNIT-1

- Developing production patterns.
- They will also be taught the principles of grading- Three dimensional grading
- Track grading. Grown on collars Grown on sleeves.

UNIT-2

- The principles of joining upper and lower body garments to form a dress.
- Developing a prototype of the dress and check for fall and fit on the dress form.
- Skirts: Fitted skirt

UNIT-3

- Flared skirt 1 skirt with yoke (basque) Peg skirt and
- Bell skirt (with Gores 1 Godets)
- Developing a prototype of at least one category each.

UNIT-4

- Bifurcated Garments
- Trousers
- Production pattern of trouser complete with all components
- Waist coat

REFERENCES:

- “Pattern making for fashion design”, Helen Joseph Armstrong, Harper Collins, LA.
- “Metric Pattern Cutting for Menswear”; Winfred Aldrich, BSP Professional book Oxford.
- “Pattern making and making up-the professional approach”; Marten Shoben and Janet P.Ward, Butterworth Heinman,Oxford.
- “Modern sizing for womens and childrens”; P.Kunick , Philip Kunik Publication London.
- “Dress Fitting”; Natalie Bray, Black well science Ltd London.

“Dress Patten Designing” Natalie Bray, Black well science Ltd London.

Practical Examination: One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all.

SUBJECT-10

RESEARCH METHODOLOGY

(MSc. GMT-310)

Objective

The Objective of the course is to expose the students to the business research procedures and apprise them with the basic tools of research methodology. The greater stress should be laid on business problems pertaining to marketing, finance, production and personal areas.

UNIT-1

Introduction; meaning and nature of research; significance of research in business decision making, identification and formulation of research problem, setting objectives and formulation of hypotheses.

UNIT-2

Research design and data collection; research designs – exploratory, descriptive, diagnostic and experimental data collection; universe, survey population, sampling and sampling designs. Data collection tools- schedule, questionnaire, interview and observation, use of SPSS.

UNIT-3

Scaling techniques; need for scaling, problems of scaling, reliability and validity of scales, scale construction techniques arbitrary approach, consensus scale approach (Thurston), item analysis approach (Likert) and cumulative scales (Gut man's Scalogram)

UNIT-4

Interpretation and report writing; introduction, meaning of interpretation, techniques and precautions in interpretation and generalization report writing- purpose, steps and format of research report and final presentation of the research report.

Details of References

Abbreviation	Full Form
Boyd et al	Boyd, Harper W., Ralph Westfall, Stanly F. Starch (1990). Marketing Research Text and Cases Delhi; Richard D. Irwin In., AITBS
Cooper & Schindler (Text)	Cooper, Donald R, Pamela S. Scndler (1998) Business Research Methods (6 th Ed.) New Delhi: Tata McGrew Hill Publishing Co.
Goode & Hatt	Goode, William and Paul, K. Hatt (1952) Methods in Social Research Tokyo: McGraw Hill.
Gopal	Gopal, M.H. (1970) An Introduction to Research Procedure in Social Sciences Bombay: Asia Publishing House.
Johari	Johari, J.C. (1988) Introduction to the Methods of Social Sciences. New Delhi: Sterling Publishers.
Kothari	Kothari, C.R. (1990) Research Methodology – Methods and Techniques 2 nd Ed. New Delhi: Viswa Prakashan
Majumdar	Majumdar, Ramanuj (1991) Marketing Research Text, Applications and Case Studies. New Delhi: Wiley Eastern Edition.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-11

CAD (PATTERN MAKING & GRADING)

(MSc. GMT-311)

Contents

UNIT-1

1. Introduction
2. Design System Tools

UNIT-2

3. Principles of X and Y Vectors
4. Points and Lines: Measuring and changing line lengths, moving lines, Cutting and drafting lines, rotating lines, Mirroring lines, Moving internal lines.

UNIT-3

5. Darts; Add darts, Manipulate darts, designer darts.
6. Facings: Fold out facings.
7. Drills, notches and seams

UNIT-4

8. Grading
9. Marker Making: Marking system tools

REFERENCES:

- 1) “Pattern making for fashion design”, Helen Joseph Armstrong, Harper Collins, LA.
- 2) “Metric Pattern Cutting for Menswear”; Winfred Aldrich, BSP Professional book Oxford.
- 3) “Pattern making and making up-the professional approach”; Marten Shoben and Janet P.Ward, Butterworth Heinman,Oxford.
- 4) “Modern sizing for womens and childrens”; P.Kunick , Philip Kunik Publication London.
- 5) “Dress Fitting”; Natalie Bray, Black well science Ltd London.
- 6) “Dress Patten Designing” Natalie Bray, Black well science Ltd London.

Practical Examination: One Practical examination of 3 hours duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

Note: All topics are covered in extreme detail with practical examples for all.

SYLLABUS
SEMESTER IV

SUBJECT-1

APPAREL PRODUCT ENGINEERING & PLANT LAYOUT

(MSc. GMT-401)

Objective:

1. To analysis the basic principles of effective plant location layout and design as they apply to the needle trades industry.
2. To draw upon specialized knowledge from a number of disciplines including engineering architecture business management and economics, as they relate to plant engineering and factory layout.
3. To utilize these principles and disciplines to develop and design a multi project apparel plant layout.

TEXTS:

Reference: “Plant layout and materials handling “, 3rd Edition by James M. Apple, John Wiley and Sons, 1977.

Optional Additional Reference.

“Mechanical and Electrical Equipment for Buildings:” 5th Edition by McGuiness & Stein, John Wiley and Sons, 1971.

TOPIC

UNIT-1

Introduction

- A. The purpose and importance of facility design
- B. Type of layout problems.
- C. Stable vs. changing products and styles.
- D. Plant locations.

Preliminary Analysis

- A. Step in planning a plant layout
- B. Product Analysis
 1. Parts list
 2. Assembly chart

3. Grid

C. Production Systems.

1. Whole garment

2. Section

3. Progressive bundle

Machinery Manpower and Space Requirements

A. Factors for selection machinery and space requirement.

B. Calculation of number of machines required.

C. Calculation of number of operators required.

D. Calculation of building space requirements

E. Balancing production lines.

UNIT-2

Materials Flow

B. General plant patters

1. Process

2. Product

3. Group

4. Basic flow patterns

5. Methods of data collection

Relationship of Activities to Physical Plant Services

A. Types of activity

1. Stores

2. Health

3. Safety
4. Feeding
5. Convenience related services

B. The activity relationship chart

Operation and Work Area Planning

- A. Work area planning
- B. Templates
- C. Aisle Development

Introduction to Materials Handling

- A. Objective of materials handling.
- B. Methods of classifying materials and handling equipment.
- C. Descriptions and characteristics of material handling equipment.

UNIT-3

Materials Handling II

- A. Specialized materials handling equipment related to the apparel industry.
- B. Drafting techniques.
- C. Plant measurement methods.

Electricity

- A. Circuits

B. Materials

C. Insulation

D. Wiring methods

Light and Lighting

A. Computation

B. Cost

C. Quality

Building Structures

A. Walls

B. Floors

C. Paints

UNIT-4

Presenting the Layout

A. Layout preparation and reproduction

B. Presenting the layout to management

C. Installing the layout

D. Follow-up

Environmental Comfort

A. Plumbing

B. Heating

C. Steam System

D. Sewage disposal

Plant Machinery and Equipment

A. Cutting Equipment

B. Sewing Machinery

C. Finishing Equipment

D. Air Compressors and Vacuum Devices

E. Maintenance

Note:

Instructions for Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-2

ENTREPRENEUR DEVELOPMENT PROGRAMME & INTELLECTUAL PROPERTY RIGHTS ***(MSc. GMT/FMM/EDPIPR-402)***

Objectives:

The main aim of the subject is on developing entrepreneurship skills in participants by Preparing them for the competencies required and to have basic knowledge of intellectual property rights.

The course also aims at giving insights into the Management of Small Family Business.

UNIT-1

- Entrepreneurship: Concept and Definitions, Entrepreneurship and Economic Development, Classification and Types of Entrepreneurs, Entrepreneurial Competencies, Factor Affecting Entrepreneurial Growth -EDP Programmes, Entrepreneurial Training, Traits/Qualities of an
- Entrepreneurs,.

UNIT-2

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

UNIT-3

Ownership and Enforcement of Intellectual Property Rights

- 1) Patents-Objectives, Rights, Assignments, Defenses in case of infringement 2. Copyright-Objectives, Rights, Transfer of Copyright, work of employment Infringement, Defenses for infringement
- 2) Trademarks-Objectives, Rights, Protection of goodwill, Infringement, Passing off, Defenses.

UNIT-4

- 3) Designs-Objectives, Rights, Assignments, Infringements, Defenses of Design Infringement
- 4) Enforcement of Intellectual Property Rights - Civil Remedies, Criminal Remedies, Border Security Measures.
- 5) Practical Aspects of Licensing -Benefits, Determinative factors, important clauses, licensing clauses.

Suggested Readings:

1. D.F. Kuratko and R.M. Hodgetts: Entrepreneurship - Theory, Process and Practice, Thomson

Press.

2. J.S. Saini: Entrepreneurship and Small Business in India, Himalaya Publishing House.
3. P. Charantimath: Entrepreneurship Development: Small Business Enterprises, Pearson Education.
4. Vasant Desai: Small-Scale Industries and Entrepreneurship, Himalaya Publishing House.
5. Otes David: A Guide to Entrepreneurship, Jaico Books Publishing House.
6. D.H. Holt: Entrepreneurship – New Venture Creation, Prentice Hall India.
7. A. Kaulgud: Entrepreneurship Management, Vikas Publishing House.
8. B. Theduri: Entrepreneurship Development – An Analytical Study, Akansha

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-3

PROJECT MANAGEMENT

(MSc. GMT-403)

UNIT-1

PLANNING – Overview, Generation and Screening of Project Ideas, Source of Finance.

UNIT-2

ANALYSIS – Market and Demand Analysis, Technical Analysis, Detailed--- Report (DFR), Social Cost Benefit Analysis

UNIT-3

APPRAISAL CRITERIA – Payback Period, Accounting Rate of Return, Net Present Value, Benefit – cost Ration, Internal Rate of Return.

UNIT-4

IMPEMENTATION – Project Management – Forms of Project Organization, Project Planning, Project Control, Pre-requisites for Successful Project Implementation.

CASE STUDIES

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-4

TRADE DOCUMENTATION

(MSc. GMT-404)

UNIT-1

1. GATT – What it is and what it does.
2. Multi fiber Agreement and bilateral Textile Agreements signed by India with importing quota countries.
3. Govt. of India's export entitlement policy on garment exports.

UNIT-2

4. AEPC role in the administration of export entitlement policy.
5. Export promotional activities of A.E.P.C.
6. Facilities available for garment exporters.
 - I) Cash Compensatory Support.
 - ii) Duty draws back.
 - iii) Export finance through banks.
 - iv) Export credit Guarantee Corporation.
 - v) Export – Import Bank.

vi) Market Development Assistance.

vii) 100% Export Oriented scheme of the Govt. of India.

Viii) Free Trade Zones.

UNIT-3

7. How to start a Garment Exporting Company?

8. Export contracts.

UNIT-4

9. Documents connected with exports.

10 Exchange control regulations relating to exports.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT-5

INTERNATIONAL FINANCE

(MSc. GMT-405)

UNIT-1

1. **Financial Statement Analysis:** With particular reference to balance sheet- common size statements, comparative statement and trend ratios.
2. **Ratio Analysis:** The computation and interpretation of significant financial ratio, liquidity, profitability, solvency and activity ratios, Importance and limitations of ratio analysis.

UNIT-2

3. **Project Appraisal:** The process of discounting, calculations of cash flows from a project. Alternative techniques of capital budgeting, Payback period, Accounting Rate of Return, Net Present Value, Profitability index and Internal Rate of Return.
4. **Trade:** Basis for international trade, Theories of international trade, obsolete and comparative advantage. Gains from international trade and their distributions

UNIT-3

5. **Exchange Rate:** Types of foreign exchange contracts, spot, forward, Future, Swaps and options, causes and effects of foreign exchange rate movements.
6. **Hedging:** Importance of hedging, alternative methods for protection against exchange rate fluctuations, internal action techniques and External action techniques, Traditional Techniques and modern techniques.

UNIT-4

7. Tax and capital Budgeting considerations in an international setting -----Challenges in international capital budgeting-----Adjusted Present value method of international capital budgeting.

Note:

Instructions for External Examiner: The question paper shall be divided in four units.

Shall comprise 8 questions (2 questions from each unit). The students will be required

To attempt five questions selecting one question from each unit.

All questions will carry equal marks.

SUBJECT – 6

RESEARCH PROJECT

(MSc. GMT-406)

At the end of the examination of 3rd Semester the students are required to carry out a research project for a period of 3-4 months in the final semester and every student is required to submit the Report and presentation at the end during final evaluation.