DEPARTMENT OF HOME SCIENCE SYLLABUS OF M. SC HOME SCIENCE

(CLOTHING AND TEXTILES) Session w.e.f.: 2011-12 Semester – I

Theory

Paper No.	Title of the paper	Max. marks	Exam. Duration
I	Textile Chemistry	60(45+15*)	3 hrs
II	Apparel construction	70(55+15*)	3 hrs
III	Historic Textiles & costumes	90(70+20*)	3 hrs
IV	Computer Applications	50(40+10*)	3 hrs

Total 270

Practical

Paper No.	Title of the paper	Max. marks	Exam Duration
V	Textile Chemistry	40	4 hrs
VI	Apparel construction	75	4 hrs
VII	Fashion Illustrations	75	4 hrs
VIII	Computer Applications	40	4 hrs

Total 230 Grand Total 500

• Internal Assessment

Semester-I Paper-I Textile Chemistry

Max. Marks: 60 Theory Exam: 45 Int. Assessment: 15 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus and this question <u>carries 14 marks</u>
- The remaining eight questions will be set from units I & II, four questions from each unit and each question will be of 10 marks
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit -I

- 1. Introduction: Why study of textile chemistry is needed. Why this subject is related to textile and clothing.
- 2. Polymer Chemistry:
 - (a) Polymer, methods of polymerization, polymerization process.
 - (b) Definition of co-polymer, oligomer, graft-co-polymer.
 - (c) Degree of Polymerization, use of X-Ray diffraction method in investigating molecular structure of textile fibres.
 - (d) Orientation and crystillinity of polymers their influence on fibre properties.
- 3. Chemistry of Natural Fibres:
 - (a) Cellulosic fibres: Introduction to cotton, varieties, properties, longitudinal and cross sectional view. Molecular structure, action of acids and alkalis, hydrocellulose and oxycellulose, mercerisation.
 - (b) Regenerated Cellulosic fibres: Viscose-rayon, cuprammenium-rayon, cellulose acetate, Polynosic their manufacture properties and uses.
 - (c) Protein fibres: Wool & silk Chemical composition, molecular structure, physical & chemical properties action of acids & alkalis and other chemicals. Felting of wool, degumming and weighting of silk, shrink proofing of wool.
 - (d) Synthetic Fibres: Polyester (Terylene, Dacron) Polyamide (Nylon 6, Nylon 66) and acrylonitrile fibres, Chemistry of fibres: Raw material, manufacturing process from polymer to fibre stage. Physical & chemical properties their uses in textile & clothing. Comparison of wet, dry and melt spinning methods.

(e) Other natural and synthetic fibres their chemical composition, properties and uses namely: - Jute flax, polyethylene, polypropylene, polycarbonate, metallic glass fibre, and polyurethane fibres.

Unit - II

- 4. (a) Scientific basis of dyeing and printing of textile: Classification of dyes, theory of dyeing, chemical structures of various classes of dyes, application of dyes on various substrates including blends
- (b) Scientific basis of scouring and bleaching of textile fibres and fabrics. Role of soaps and detergents, scouring agents, bleaching agents, surface-active compounds, optical brightening agents, methods of application of bleaching agents to different fibres like cotton, wood, silk and rayon.
 - (c) Finishes: Importance & classification Mechanical finishes: Singeing, calendering, tentering, crabbing, decating, glazing, schreinerizing, embossing, moiring, cireing, beetling, raising, napping, sanding, crepe, shearing,weighting.
 Chemical finishes: Mercerization, parchmentisation, , wrinkle resistant finishes, chlorination, burnt-out effect.
 Resins, their application and chemistry,
 Special purpose finishes: Flame retardant, water repellant, antistatic, stain & soil release, moth proofing, mildew proofing, antimicrobial, absorbency finishes.
 - (d) New developments in Fibre manufacture Bi-component and Bi-constituent fibres special purpose fibres.

REFERENCES

Shenai, V.A. (1984): Technology of Textile Processing, Vol.-IX, Sevak Publication

Cook, J. Gordon, Hand Book of Textile Fibres, Man-Made Fibres, Merrow Publishing Co. Ltd. England.

Moncnef: RW Manmade Fibres, John Willey & Sons New York.

Trotman, E.R. (1975): Dyeing and Chemical Technology of Textile Fibres Charles Griffino Company Ltd., London.

Marsh; J.T. (1979): An Introduction to Textile Finishing, B.I., Publications. Mark H., wooding N.S. & Atlas, Smeeds, (1970): Chemical after Treatment of Textiles, John Willey & Sons Inc., NY.

Lewin, M. and Sello, Stephen B. (1983): Handbook of Fiber Science and Technology. Vol. II, Chemical Process of Fibers and Fabrics, Functional Finishes- Part A, Marcel Deker, Inc., NY and Basel.

Shenai, V.A. (1991): Introduction to the Chemistry of Dyestuffs, Sevak, Prakashan.

Gulrajani M.L. and Gupta, D (1992): Natural Dyes and their Application to Textiles, IIT Delhi.

Mohanty, Chandramouli, Naik, (1987): Natural dyeing process of India, Ahmedabad, Calico Museum of Textiles.

India Horti business on the,http://www.agroindia.org/1HOL

Semester-I Paper-II Apparel Construction

Max. Marks: 70 Theory Exam: 55 Int. Assessment: 15 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus and this question <u>carries 13 marks</u>
- The remaining eight questions will be set from units I & II, four questions from each unit and each question will be of 10 marks
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - I

- I Detailed study of industrial mechanism and equipments used for
- (a) Cutting
- (b) Sewing
- (c) Finishing
- (d) Embellishment
- II Study the interrelationship of needles, thread, stitches length & fabric
- III Buying Criteria for
- (a) Knits, silks, denim & other special fabrics
- (b) Readymade garments.

Unit - II

- IV Methods of pattern making
- (a) Drafting
- (b) Flat pattern
- (c) Draping
- V Developing paper patterns:
- (a) Understanding the commercial paper pattern.
- (b) Layout on different fabrics, widths & types.

REFERENCES

Armstrong, Pattern Making for/Fashion Design

Gioello and Berke : Figure Type And Size Ramnge, Fairchild Publications, New York.

Grate and Storm: Concepts in Clothing, McGraw Hill Book Co. New York.

Bina Abling, Fashion Sketch Book, Fairchild Publications, New York

Claire Shaeffers : Fabric Swing Guide, Chilton Book Company, Radnot, Pennsylvania.

Harold Carr and Barbara Lathan: The Technology of Clothing Manufacture, Oxford BSP Professional Book London.

Slampler, Sharp & Donnell : Evaluating Apparel, Quality - Fairchild Publications, New York.

Natalle Bray: Dress Fitting Published By Blackwell Science Ltd.

Margohs Design Your Own Dress Pattern Published By Double Day And Co. Inc., New York.

Semester-I Paper-III Historic Textiles & Costumes

Max. Marks: 90 Theory Exam: 70 Int. Assessment: 20 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - I

I Study of traditional textiles of India-patolas of gujrat, bandhani of rajasthan, shawls & carpets of kashmir, brocades of banaras, kalamkari of AP, mulmul, jamdani, amroo, himroo, mashroo, patchitra-orissa, madhubani-bihar, pichwai (painting of god)-bhilwada, sholapur,

II traditonal sarees-ikat sarees of orissa, chanderi,maheshwari,patola, baluchar, paithani,kanjivaram, kanchipuram, jamdani, sidipeth, narayanpeth, pochampalli, bandhni, banaras brocade sarees,gadwal, gharchola, vichitrapur, gari, tanchoi

III Development of Resist dyeing in Indonesia.

IVDevelopment of weaving in India and England

Unit - II

V Study of traditional costumes of different states of India in relation to fabrics, motifs and other related accessories.

ANCIENT INDIAN DRESSES:

Dress of Aryans.

Dress during 1100 AD to 1730 AD (Islamic Influence).

Dress during 1730 AD to 1947 AD (British Period).

III. Costume in ancient civilization, factors that influenced clothing design emphasis of fabric, garment features, garment structure, use of colour, decoration & accessories including head & footwear.

- A ASIA
 - (a) Babylonia (b) Persia (c) Assyria
- B Europe
 - (a) Greece (b) Rome (c) Byzantine (d) France
- C Africa
 - (a) Egypt (b) Coptic

REFERENCES

- 1. Bosomworth Dorothy (1995): The Encyclopedia Of Patterns and Motifs, Studio Editions, London.
- 2. Dhamija Jasleen (1979) : Living Traditions of Iron's Crafts, Vikas Publishing House, New Delhi.
- 3. Dupont Auberville, M. (1989): Classic Textiles, Bracken Books, London.
- 4. Gillow John (1992): Traditional Indonesian Textiles, Thames AND Hudson, London.
- 5. Gillow John and Sentence Bryan (1999): World Textiles, Thames and Hudeson, London.
- 6. Ginsburgh, M. (1977): Embroidery, Marshall Cavendish Editions, London.
- 7. Guy John (1998): Woven Cargos, Thames and Hudson.
- 8. Harris Jennifer (1993): Textiles 5000 years, Henry and Brans Inc., New York.
- 9. Harvey Janet (1966): Traditional Textiles of Central Asia, Thames and Hudson, London.
- 10. Jones Owen (1997): The Grammar of Omament, Bernard Quatrich, London.
- 11. Lewis Ethel: Romance of Textiles.
- 12. Paine Sheila (1990): Embroidered Textiles Traditions, Thames and Hudson, London.
- 13. Stone Miller Rebecca (1994): To weave for the Sun, Thames and Hudson, London.
- 14. Readers Digest (1973): History of Man- The Last Two Million Years.
- J Anderoon Black, Muidge Garland, A History of Fashion orbis Publishing Limited, London.
- 16. Boucher Francoius, A History of Costume in the West. Thames and Hudson.
- 17. R. Tumer Wilcox, The Dictionary of Costume B. T. Batsford Ltd.
- 18. Gerogina O'Hara : The encyclopedia of Fashion, Thames and Hudson.
- 19. Gini Stephenes Frings : Fashion from concept to Consumer, Prentice Hall, N. Jersey.

 Revolution in Fashion : The Kyoto Costume Institute, Abbeville Persi, New York.

Semester-I Paper-IV Computer Application

Max. Marks: 50 Theory Exam: 40 Int. Assessment: 10 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - I

General awareness of computers and its applications. Introductions to various input and output devices like Keyboard, Printer, CD-ROM, Mouse, floppy, Monitor etc. Introduction to DOS, MS DOS

Windows

MS - Word

Unit - II

MS - Power Point

MS-Excel

Internet - What is Internet?

E-mail

Browsers.

Any package related to Home Science

Semester – I Paper V Textile Chemistry (Practical)

Max. Marks: 40

Duration of Exam: 4 hrs

- 1. Identification of fibres: (Cotton, Polyester, Viscose, Polyamide, silk, Wool etc.) Use of burning test, Microscopic examination, chemical test & solubility.
- 2. Qualitative & Quantitative analysis of binary blends Polyester/ cotton, Polyester/viscose, polyester/wool, cotton/ wool.
- 3. Bleaching & Scouring of Cotton.
- 4. (a) Dyeing of cotton with direct, reactive and azoic dyes.
 - (b) Dyeing of wool & silk with acid dyes, basic dyes.
- 5. Effect of degumming on silk.

Semester – I Paper VI Apparel Construction (Practical)

Max. Marks: 75

Duration of Exam: 4 hrs

I Designing through flat pattern - Dart manipulation

II Development of variation in sleeves, sleeves and bodice combination.

III Development of variations in collars.

- (a) Roll over collar
- (b) Collar with bodices (shawl)

IV Necklines & Facings

- (a) Scooped necklines
- (b) Built up necklines
- (c) Cowl necklines

V Plackets

- (a) Centre button closing
- (b) Asymmetrical Closing
- (c) Double breasted

VI Development of paper pattern and construction of garments (using checks, stripes,

Unidirectional & novelty fabrics)

VII Observation of working of any boutique for five to seven days

Semester – I Paper VII Fashion Illustrations (Practical)

Max. Marks: 75
Duration of Exam: 4 hrs

- 1. Sketching of different action croqui (based on basic figure learnt earlier)
- 2. Garments and garment details: -
 - Necklines and collars
 - Sleeves details
 - Skirts & pants
 - Blouses, coats & jackets
 - Drawstring & fastenings
 - Pleats , gathers, darts and tucks
 - Frills, flounces, ruffles, fringes
 - -cowls & cascades
 - Macrames and patch work.
 - -Shirring, smoking, quilting
 - Yokes and ties .
- 3. Sketching of Accessories: -
 - Hats & headgears
 - Footwear
 - Bags & Purses
 - Jewellery
- 4. Basic Rendering Techniques:
 - Colour matching using different mediums.
 - Stripes
 - Checks, gingham and plaids
 - Patterns & textures
 - Shading
- 5. Theme Rendering: Developing a line of garments based on a theme (any one the following)

Beachwear
 Swimwear
 Casual wear
 Action/Sports wear
 Cocktail wear
 Eveningwear
 Ramp wear
 Executive wear

- Nightwear - Traditional Indian Costume

REFERENCES

- 1. Abling Bina, Fashion Sketchbook, Fairchild Publishers, New York.
- 2. Mckelvey Kathyarn, Illustrating Fashion Blackwell Science Munslow Janine.
- 3. Seaman Julian, Professional Fashion Illustration, B.T. Batsord Ltd. London.
- 4. Ireland, Patrick John, Fashion Illustration, B.T. Batsford Ltd. London.
- 5. Allen Anne Seaman Julian Fashion Drawing The Basic Principles B.T. Batsford Ltd. London.

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Semester – I Paper VIII Computer Applications (Practical)

Max. Marks: 40

Duration of Exam: 3 hrs

- 1 Determination of addition, Subtraction and average
- 2 MS- Word
- 3 MS-Power Point
- 4 MS- Excel
- 5 Internet.
- 6 E-mail
- 7 Project report

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DEPARTMENT OF HOME SCIENCE SYLLABUS OF M. SC HOME SCIENCE

(CLOTHING AND TEXTILES) Session w.e.f.: 2011-12 Semester – II

Theory

Paper No.	Title of the paper	Max. marks	Exam Duration
IX	Fabric Construction and Woven fabric Analysis	75(60+15*)	3 hrs
X	Research Methods and Statistics	100 (80+20*)	3 hrs
XI	Textile Industry in India	75(60+15*)	3 hrs
XII	Advanced Apparel Construction	70(55+15*)	3 hrs

Total 300

Practical

Paper No.	Title of the paper	Max. marks		Exam Duration
XIII	Advanced Apparel construction	80+20**		4 hrs
XIV	Draping and pattern making	80		4 hrs
	Seminar ***	20	1 hr per teacher	

Total 200 Grand Total 500

^{*}Internal Assessment

^{**} Viva-voce of training report

^{***} A committee of three teachers will evaluate the seminar of each student

and marks will be awarded based on subject matter, presentation and ability to answer questions.

Semester – II Paper IX Fabric Construction and Woven Fabric Analysis

Max. Marks: 75 Theory Exam: 60 Int. Assessment: 15 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus and this question <u>carries 15 marks</u>
- The remaining eight questions will be set from units I & II, four questions from each unit and each question will be of <u>13 marks</u>
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - 1

I Principles of Yarn Manufacture - Yarn processing: for natural fibres cotton, wool and worsted, jute, linen by conventional and nonconventional systems -

- a) OE Spinning Rotar, Vortex, Friction, Airjet electrostatic, Twisters (Bobbtex, Cover, Signaal, twilo)
- (b) Self -Twisting
- (c) Yarn from Fibres
- Yarn Nomenclature and Measurement yarn numbering systems.
- Geometry of yarns and its relationship to fabric properties.

Il Principles of spinning in production of man-made fibre: - Hot and cold drawing, spun yarn, bi-constituent and bi-component yarn. Blending: principles, types &technology.

III modern development in yarns and at their manufacture.

IV Fabric Faults - yarn and fabric defects and their remedies.

Unit - II

VI Principles of fabric manufacture basic principles, characteristics and significances of different process woven knitted, non woven, laces, braids etc.

- Fabric classification

(a) Weaving

- Parts and functions of handloom
- Sequence of operation in warp and weft preparations.
- -Various types of looms and their drive.
- advantages & disadvantages of shuttleless, projectile, rapier, airjet& waterjet looms.
- Basic & decorative weaves plain, Twill and satin derivatives. Dobby & Jacquard shedding & weaving terry, pile, leno, bird's eye, mockleno, spot, swivel and lappet, double weaving, etc.
- weave calculation, economy of production

(b) Knitting

- Knitting machines, Types of knitting
- Properties
- -Production of special knits and integral garments.
- (c) Felts & Non Wovens
 - Braiding & Lace making
- d) textile design centres and their functions

<u>REFERENCES</u>

- Spun Yarn Technology- Eric Oxtoby Butterworth Publication. American Cotton Handbook - Merrill
- 2. Subodh Kumar Aggarwal (1980): Textile Processing and Auxiliaries. Textiles Burker (1988) Abhishek Publication.
- 3. Essentials of Textiles M.Joseph, Holf Rinechants, Winston Publications. Irene Wallen Designing with Threads.
- 4. Edward Miller (1992) Textiles. Corbman, B. Fibre To Fabric. Book Textiles Year 1998 By A.F. Barker Chapter-7, Principles of Weaving Pg., 154-171
- 5. Book From Fibres to Fibrics, Gale, E., 1968, p.54 Colour and Weave Margaret & Thomas, Winderkuechd.
- Grociki, Z.J.: Textiles Design and Colour, London, Longmans Green and Co. Ltd.
- 7. William Watson: Advanced Textiles Design, London, Longmans Green and Co. Bombay.
- 8. Nisbet, H: Grammar of Textile Design, Tarapoprewale Sons and Co. Bomaby.
- 9. Aswani, K.T.: Weaving Calculations Taraporewale Sons and Co. Ltd., London.
- 10. Sengupta, R.: Weaving Calculations Taraporewale Sons and Co. Bombay.

- 11. Robinson and Makr : Woven cloth construction -Butter Worth and Co. Ltd. London.
- 12. Thorpe, Azaba : Elements of Weaving Doubleday and Co. Inc., New York.
- 13. Singh, R.B : Modern Weaving, Mahajan Book Distributors, Ahemdabad.
- 14. Kulkami, M.M : Weaving Technlogy ; Vininda Publication, Jalgaon.
- 15. Amalsar, D.M.: Yarn and Cloth Calculation.
- 16. Amalsar, D.M.: Handloom Weaving
- 17. Amalsar, D.M.: Fabric Structure and Cloth Analysis.
- 18. Ajgaonkar, D.B : Knitting technology, Universal Publishing Corp. Mumbai
- 19. Ingold, T.S. & Miller, K.S. : Geotextiles Hand book- Thomas Telford, London.
- 20. Book Textiles Year 1998 By A.F. Barker Chapter 7, Principles of WeavingPg-154 -171

Semester-II Paper-X Research Methods & Statistics

Max. Marks: 100 Theory Exam: 80 Int. Assessment: 20 Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit-I

Nature of research in Home Science, scientific approach. Types of Research: Experimental, Field studies, Case study, and Survey research. Designing research: Problem, hypothesis, concept and types of variables (dependent, independent, random, discrete, continuous, qualitative and quantitative).

Methods of data collection: Interview, observation, questionnaire, rating scales. Research Designs: randomized groups, matched groups, pre and post test and factorial.

Sampling: Meaning, importance and types; random (simple, stratified, cluster), Non random (incidental, purposive, quota)

Unit-II

Statistics: Meaning, primary data, array, frequency, frequency distribution and its types.

Measures of central tendency: Mean, Median, Mode; Measures of dispersion: range, mean deviation, standard deviation, root mean square deviation, variance, moments about origin and moments about mean, Binomial and Normal distribution, Skewness and Kurtosis.

Parameter & Statistic, sampling distribution and sampling error, standard error, Tests of significance: Null hypothesis, Alternative hypothesis, levels of significance- Type I and Type II errors, chi-square: goodness of fit.

T- test: single mean, independent mean, paired mean, Analyses Variance: Oneway & Two-way. Correlation -Pearson's correlation, scatter diagram, Spearman's correlation.

Significance of difference between correlations

Books Recommended:

- 1. S.C. Gupta & V.K. Kapoor: Fundamentals of Mathematical Statistics
- 2. S.C. Gupta: Fundamentals of statistics
- 3 G. Udny Yule, N.M.G. Kendall: An Introduction to the theory of Statistics
- 4 Croxton, F.C. and Cowden, D. J. Applied General Statistics, Prentics hall Inc. 1955
- 2 Garrett. H. Statistical in Psychology and Education. Oxford book Co. 1960.
- 3 R.P. Hooda: Introduction to statistics. The MacMillon Co.
- 5 Scotharman, W. A. Textbook of Statistics, (Revised edition) 1973.
- 6 Kerlinge, Foundations of Behavioral Research
- 7 Sneedecer G. W. Statistical Methods. Applied Pacific Private Ltd., 1961.

Semester-II Paper-XI Textile Industry in India

Max. Marks: 75
Theory Exam: 60
Int. Assessment: 15
Duration of Exam: 3 hrs

Note:

- Examiner will set nine questions in all
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus and this question <u>carries 15 marks</u>
- The remaining eight questions will be set from units I & II, four questions from each unit and each question will be of 13 marks
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - I

I Importance of textile and clothing industry in the Indian economy in terms of domestic consumption, employment and per- capita income, gross national product and international trade.

Il National textile policy 1986, and latest policy - changes in focus over the years in terms of objective, function ability, regulatory mechanism and futuristic trends.

IV Status of textile and clothing Industry over a decade - in relation to production and consumptions pattern, locale, employment potential, R & D, problems and prospects, research associations & institutes, cotton, wool, silk, jute, rayon and synthetic industry, Handloom industry, readymade garment industry, hosiery industry.

Unit - II

V) status of textile & apparel industry in global scenario Gatt/WTO ISO 9000-2000 series and ISO 14000 series SWOT analysis

Export and Import policies of textiles & apparels

- (a) Problems in export and import of textiles,
- (b) Trends in Indian Exports

c)export infrastructural facilities & incentives.

Semester-II Paper-XII Advanced Apparel Construction

Max. Marks: 70 Theory Exam: 55 Int. Assessment: 15 Duration of Exam: 3 hrs

Note:

Note:

- Examiner will set nine questions in all
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus and this question <u>carries 15 marks</u>
- The remaining eight questions will be set from units I & II, four questions from each unit and each question will be of <u>12 marks</u>
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

Unit - I

I Fitting – factors affecting good fit, common problems encountered and remedies for fitting defects (upper and lower garments)

II Clothing for people with special needs.

- Maternity and lactation period
- Old age
- Physically challenged.

Unit - II

III Overview of the Apparel Industry

- History of apparel industry
- Mass Production process
- Costing

IV Evaluating the quality of apparel: -

- Testing & Inspection

• - Quality specifications and standards in cutting, sewing, supplies, finishing and packing.

REFERENCES

- 1. Slamper, Sharp & Donnell: Evaluating Apparel, Quality- Fairchild Publications, New York.
- 2. Natalle Bray Dress Fitting Published By Blackwell Science Ltd.
- 3. Margolis Design your Own Dress Pattern Published By Double Day And Co. Inc. New York.

Semester – II Paper XIII Advanced Apparel Construction (Practical)

Max. Marks: 80+20** Practical Exam: 80

Training: 20

Duration of Exam: 4 hrs

- I. Fashion Sketching
- II. Development of slopers for skirt variation
 - Low & High Waist
 - A Line, Flared, Circular, Pleated, Yoked.
- III. Pockets
 - Slashed pockets-welt, bound flaps
 - Inseam pockets closed and open
- IV. Plackets

Fly front opening

Zipper inseam, without seam.

V. Designing, drafting and construction of skirt, jacket, top, lady's trousers and nighty

and gown designer lady's suit.

VI One month training in any garment construction Unit and Report submission

Semester – II Paper XIV Draping and Pattern Making (practical)

Max. Marks: 80

Duration of Exam: 4 hrs

- 1. Introductions to draping and silhouette of the individual dress form, Elements of fabric woven, knitted.
- 2. Development of the ladies block crotch line garments by drafting and draping (Shorts, Bermudas, trousers etc)
- 3. Development of pattern with variation in
 - One piece dresses
 - Two-piece dresses
 - Dart less dresses.

(Incorporating various, collars, sleeves, yokes, necklines, pockets and plackets etc.)

- 4. Draping of bodice block and skirt block and their variation.
 - Draping of asymmetrical designs and preparing patterns.
- 5. Pattern markings, pattern envelope and guide sheet.

REFERENCES

- 1. Crawform C.A., The art of Fashion draping, fair child publications New York.
- 2. Pamela C. Stinger, Pattern drafting for dressmaking.
- 3. Hillihouse, M.S. and Mansfield, E.A.: Dress Design Draping and Flat Pattern, London.
- Sheldon Maratha Gene Design through draping, USA Burgers Publishing Company.
- 5. Brackman, Helen, L- Theory of Fashion Design, New York, John Wiley and Sons.
- 6. Strickland, Gertuole-A Tailoring Manual -New York, Macmillan Company.
- 7. Pepin Harriet-Modern Pattern Design, New York.