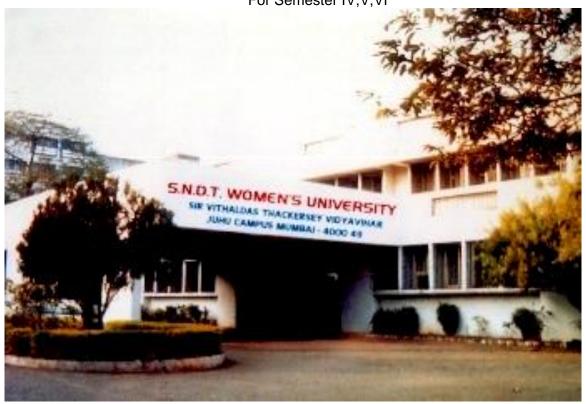
# SNDT Women's University

(sndt.ac.in)

# Syllabus for Degree of Bachelor of Science (Under Faculty of Home Science)

Textile Science & Apparel Design, Apparel Design, Fashion Apparel Design For Semester IV,V,VI



With effect from Academic Year 2013-14

Shreemati Nathibai Damodar Thackersey Women's University 1, Nathibai Thackersey Road, Mumbai – 400 020.

# Framework

# **SEMESTER I**

Code No.	Course		Th C	Pr C	Int M	Ext M	Total
9101 9101 (A)	English I (H.L.) (d) English I (L.L.)	4	3	1	25	75	100
9102	Applied Science (c)	4	2	2	25	75	100
9103	Design & Aesthetics (b)	4	2	2	25	75	100
9104	Life Span Development (b)	4	4	-	25	75	100
9105	Environment Studies (c)	4	4	-	25	75	100
	TOTAL	20	15	5	125	375	500

# **SEMESTER II**

Code No.	Course		TC	Th C	Pr C	Int M	Ext M	Total
9201 9201 (A)	English II (H.L.) (English II (L.L.)	(d)	4	3	1	25	75	100
9202	Human Physiology (	(d)	4	3	1	25	75	100
9203	Textile Sc. & Apparel Design (	(b)	4	2	2	25	75	100
9204	Fundamentals of Food Science a Nutrition	and (b)	4	2	2	25	75	100
9205	Extension & Communication	(b)	4	3	1	25	75	100
	TOTAL		20	13	7	125	375	500

# **SEMESTER III**

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9301	Nutrition for Life Span (b)	4	-	4	100	-	100
9302	Consumer Studies (d)	4	4	-	25	75	100
9303	Family Dynamics (b)	4	3	1	25	75	100
9304	Media Skill Development (b)	4	3	1	25	75	100
9305	Fabric Ornamentation and Accessory Design (b)		-	4	100	-	100
	TOTAL	20	10	10	275	225	500

# Promotion to Various Semesters (SNDT Women's University rules from time to time are applicable)

# Grading System:

Grade	Grade Points	Percentage Equivalent
'0' = Outstanding	6.00	80-100
'A+' = Very Good	5.00 - 5.99	70-79
'A' = Good	4.00 - 4.99	60-69
'B' = Average	3.00 -3.99	50-59
'C' = Below Average	2.00 - 2.99	45-49
'D' = Poor	1.00 - 1.99	40-44
'F' = Fail	0 - 0.99	<=39

### **Structure of Home Science Curricula:**

**Total Credits for Semester I-VI** 

Type of Component	Weight age	No. of Credits	No. of Courses (Subject Paper)
a. Core Courses	48%	58	14.5
b. Applied Courses	27%	32	8.0
c. Foundation Courses	5%	6	1.5
d. Inter & Intra Discipline Courses	20%	24	6.0
	100%	120	30

<sup>\*\*\*</sup> Note: Women Studies Course of 2 credits as Foundation Course is introduced in Sem V with Seminar (Seminar (b) 2 credits + Women Studies (c) 2 Credits)

### **Detailed distribution of Credits (Component wise & Semester wise)**

Component	Sem I	Sem II	Sem II	Sem IV	SemV	Sem VI	Total
a	1	-	-	20	18	20	58
b	8	12	12	-	-	-	32
С	4	-	-	-	2	1	06
d	8	8	8	-	-	ı	24
	20	20	20	20	20	20	120

a – Core Courses

b - Applied Courses

c – Foundation Courses

d – Inter & Intra disciplinary Courses. The above course structure of Semesters I to III is common for all programmes under B.Sc. Home Science except FSQC & FAD (Voc).

### **Semester I**

### English I (H.L.)

### **OBJECTIVES**:

- 1. To enable the student to read with fluency while simultaneously comprehending passages in English
- 2. To equip the student with skills to participate independently in conversations and discussions conducted in English
- 3. To develop written communication skills for everyday and professional communication
- 4. To develop the student's creatively so that she may express her ideas descriptively and creatively.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9101	English I (Higher Level)	4	3	1	25	75	100

Module No.	Objective	Content	Evaluation
1	The learners will be able  To understand the structure of different types of letter patterns  To write social and business letters effectively	<ol> <li>Written communication skills</li> <li>Types of layout</li> <li>Social correspondence:         Request/apology/ thank you</li> <li>Letters of enquiry/ complaints         (both personal and social)</li> <li>Letters to the editor / Appeals         (social/ civic issues)</li> <li>Assignment:         <ol> <li>Writing a letter to the editor on a relevant social issue</li> </ol> </li> <li>Invitation letter (formal)</li> <li>Consumer complaint letter</li> <li>Request letter (formal)</li> </ol>	(5 marks per letter)  25 marks

Module No.	Objective	Content	Evaluation
2	The learner will be able to -  • identify different types of reports  • understand sequencing in a project report  • use the correct tense while writing a report  • effectively present a report verbally	Report Writing  Kinds of reports  1. Sequencing 2. Use of correct tense 3. Reporting an event 4. Structure of a project report Assignments:  1. Preparing a simple project report based on class assignment 2. Presenting the same as group of 3-4 students	Assign.1:(structure/outline) - 5 marks (delivery) - 5 marks = 10 marks Assign.2:(15 marks)

Module No.	Objective	Content	Evaluation
3	The learner will be able to -  • read the narrative with understanding and enjoyment  • enhance their vocabulary  • express their personal responses descriptively  • express ideas lucidly	Enhancing Comprehension skills  Exercises based on Selections from prescribed text Insight: A course in English Literature and Language. By K. Elango. (Orient Black Swan).  Unit IV (life stories) and  Unit VII (Mass media)  1. Comprehending narratives 2. Articulating ideas /critical analysis using descriptive language 3. Expressing personal responses creatively 4. Vocabulary enhancement  Assignments: 1. Comprehension 2. Articulating ideas/critical analysis 3. Expressing personal response to the select narratives	Assign.1:( 5 marks) Assign.2:(10 marks) Assign.3:(10 marks)

Module No.	Objective	Content	Evaluation
4	The learner will be able to -  Participate independently in conversations and discussions conducted in English familiarize them with formal and non-formal modes of conversation develop questioning skills	Interpersonal communication skills:  Conventions of Social Interaction  1. Greetings 2. Starting a conversation 3. Introducing self and others 4. Asking questions 5. Requesting 6. Apologizing 7. Thanking 8. Inviting 9. Accepting 10. Ending a conversation Conventions of public speaking:  Hints on effective delivery (verbal and nonverbal)  Assignments:  1. Pair work for dialogue writing 2. Oral presentation on an everyday situation 3. Descriptive question on conventions of public speaking	<ol> <li>(written dialogue 10 + delivery of dialogue 5)</li> <li>= 15 marks</li> <li>5 marks</li> <li>5 marks</li> </ol>

- 1. Continuous Evaluation of all four Modules = Internal 25 marks
- 2. External 75 marks
- 3. Total : Internal -25 + External 75 = 100 marks

# English I (L.L.)

#### **OBJECTIVES**:

- 1. To enable the student to read with fluency while simultaneously comprehending passages in English
- 2. To equip the student with skills to participate independently in conversations and discussions conducted in English
- 3. To develop written communication skills for everyday and professional communication

4. To develop the student's creatively so that she may express her ideas descriptively and creatively

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9101A	English I (Lower Level)	4	3	1	25	75	100

Module No.	Objective	Content	Evaluation
1	<ul> <li>employ techniques of skimming and scanning while reading a passage</li> <li>identify key points while summarizing</li> <li>make notes effectively so as to improve study skills</li> </ul>	<ol> <li>Skimming and Scanning</li> <li>Note taking</li> <li>Note Making</li> <li>Summary</li> <li>Assignments:</li> <li>Passages for note taking</li> <li>Exercises on note making</li> <li>Passage for summarization</li> <li>Passage for skimming and scanning</li> </ol>	<ol> <li>5 marks</li> <li>10 marks</li> <li>5 marks</li> <li>5 marks</li> </ol>

Module No.	Objective	Content	Evaluation
	The learner will be able to -	Written Communication Skills	
2	<ul> <li>familiarize themselves with basic letter patterns</li> <li>prepare a report of an event with correct usage of grammar and tense</li> </ul>	Basic Letter patterns  (i) Invitation/request/ apology / thank you  (ii) Letters of enquiry/complaints/ Report writing	Assign.1:  (Written -10 marks + oral delivery - 5 marks) = 15 marks
	understand the importance of linking words required when reporting an event	<ol> <li>Types of reports</li> <li>Reporting an event</li> <li>Linking devices</li> <li>Assignments:</li> </ol> Letter writing. Any 3 of the following:	Assign.2:
		1 Invitation <b>or</b> Request <b>or</b> Apology	

or Thank you or enquiry or	5 marks per letter
Complaint	2x 5= 10 marks
2. Reporting an event in college	

Module No.	Objective	Content	Evaluation
3	The learner will be able to -  • develop effective reading skills • express their ideas coherently • write with proper sentence construction and paragraph development • enhance their vocabulary	Developing Reading and Writing Skills  1st + 2nd story from the Prescribed Text Yuva Katha 7  1. Sentence construction for grammatically correct English 2. Paragraph development 3. Vocabulary building 4. Expressing ideas 5. Reading with fluency Assignments:  1. Comprehension of story 2. Vocabulary based exercises 3. Personal responses to the narrative	1.10 marks 2. 5 " 3. 10 "

Module No.	Objective	Content	Evaluation
	The learners will be able  to -  • familiarize themselves	Conventions of Social Interaction  Conventions of Social Interaction  1. Starting a conversation	
4	with formal and informal modes of social interaction  confidently converse in English  confidently make short presentations in English	<ol> <li>Greetings</li> <li>Introducing self and others</li> <li>Asking questions</li> <li>Requesting</li> <li>Apologizing</li> <li>Thanking</li> <li>Inviting</li> <li>Accepting</li> <li>Ending a conversation</li> <li>Conventions of public speaking: Hints on effective delivery (verbal and nonverbal)</li> </ol> Assignments:	Assign 1: Written script =10 marks + Oralpresen-tation = 5 marks  Assign 2: Written outline = 5 marks + Delivery =5 marks

	1. 2.	Pair work-dialogue writing Oral presentation on an everyday situation	
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**Prescribed Texts**: (Lower Level)

KeertiRamachandran. 1996 (rpt 2010). YuvakathaVol 7. Katha Books. New Delhi.

(Higher Level English)

K. Elango. (2009). *Insight. A course in English Literature and Language* .Orient Black Swan. Hyderabad, ()

#### **REFERENCE BOOKS:**

- 1. Asoka Rani, T. (1989). *English for career development: A course in functional English*. Hyderabad: Orient Longman Ltd.
- 2. Baker, Joanna (2003). Essential speaking skills. A handbook for English language teachers. Westrup, Heaths: London Continuum.
- 3. David, A. (2005). *Teaching English as a second language*. New Delhi: Commonwealth Publishers.
- 4. Das, Susmita (2004). *English language and grammar a resource book of ideas and activities for teachers.* Jaipur: Mangal Deep Publications.
- 5. Gibson, Miiko Tan (2003). *Creative English a comprehensive approach:* 6. Singapore: Singapore Federal Publications.
- 6. McArthur, Tom (1983). *A Foundation course for language teachers*. Cambridge: Cambridge University Press.
- 7. Nagaraj, Geetha (1996). *English language teaching: Approaches, methods, techniques.* Hyderabad: Orient Longman Ltd.
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- 9. Reutten, Mary K. (2004). Focus on writing: 1: developing composition skills through instruction and practice. Singapore: Singapore Learners Publishing.
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# Semester I

# **Applied Science**

### **OBJECTIVES:**

- 1. To know the importance of science in daily life
- 2. To develop analytical attitude.
- 3. To develop scientific way of thinking.
- 4. To impart knowledge to apply.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9102	Applied Science	4	2	2	25	75	100

# Theory

Module No.	Objectives	Content	Evaluation
Module No.	This will enable students to:  1) Inculcate scientific temper in the students and develop scientific, analytical attitude.  2) Develop to understand the importance of knowledge of chemistry with respect to food, textiles, medicine, harmful chemicals & industries.  3) Understand the use and importance of chemistry in day to day life.	Applied Chemistry  1) Review of Basic Chemistry  Important definitions Difference between Organic & Inorganic compounds Functional groups Bohr's model of atom Atomic number & electronic configuration Saponification reaction Cold and hot process of soap making Difference between soaps and detergents Cleansing action Drugs and Pharmaceuticals Properties of good drug Meaning of important terms with e.g. Analgesic, Antipyretic, Antacid, Antibiotic, Diuretic, anti-inflammatory, Laxatives, Sulfa drugs Common drugs- use and side effects of Aspirin, Paracetamol, Sulphanilamide Dyes  Definition, important terms like chromophore, Auxochrome, chromogen Classification based on application	Assignment / Quiz (1) Multiple Choice Questions (MCQs) 2) Objective 3) Descriptive = 10 marks
		<ul> <li>Classification based on application</li> <li>e.g. and uses of different dyes in food, textile, medicine, laboratory, etc. &amp; their hazards</li> <li>5)Polymers</li> </ul>	

		<ul> <li>Introduction</li> <li>Define-monomer, polymer, polymerization</li> <li>Some important polymers and their structure &amp; uses polyethylene, polyester, polyvinyl chloride</li> </ul>	
Module No.	Objective	Content	Evaluation
2	This will enable the students to -  1) Acquire the basic knowledge of the fundamentals of biological sciences.  2) Apply the knowledge of the biological processes to everyday life.	<ul> <li>Cell</li> <li>As the basic unit of life</li> <li>Types of cells</li> <li>Salient features of animal cell</li> <li>Introduction to Micro-organism</li> <li>Bacteria-Structure, Classification based on response to O<sub>2</sub>, nutrition, Importance of bacteria</li> <li>Fungi- Morphology of molds and yeasts, classification, beneficial and harmful aspects</li> <li>Virus- Morphology, Classification based on nucleic acid content and hosts</li> <li>Genetics and Heredity</li> <li>Origin of the term gene</li> <li>Chemical basis of heredity- organization of human genome, sex determination, monogenic and polygenic traits, patterns of inheritance-autosomal, recessive and sex-linked inheritance</li> <li>Mutation and its type, abnormalities in chromosome number</li> <li>Genetic Engineering and Biotechnology</li> <li>Definition of the terms</li> <li>Methodology of gene cloning-in brief</li> </ul>	Assignment / Quiz  1 Multiple Choice Questions (MCQs)  2Objective  3 Descriptive
		<ol> <li>Application of genetic engineering in plants- insects &amp; virus resistant plants, plants with improved characters.</li> <li>Application in human medicine-pharmaceuticals, thallessemia oncogenes, interferon, production of growth hormone, human insulin ELISA.</li> </ol>	

- 1) Internal (Practical) 25 marks Internal (Theory) 25 marks. Total Internal =50/2 = 252) External Practical 25 marks + Theory 50 marks = 75 marks
- 3) Internal-25 + External 75 marks = 100 marks

### **REFERENCES:**

George A. (1984): Shreeve's Chemical Process Industries

Glazer A. Na Ni Baido H (1995) Microbial Biotechnology W.H. Freemen Company.

K. Venkatraman (1952): The Chemistry of Synthetic Dyes, Vol. I, Academic Press, New York.

Kent S.A. (1974): Riegel's Handbook of Industrial Chemistry.

Loewy A. and Sckevilz (1995) Cell Structure and Functions, Hold, New-York

Nicholl D.S.T. (1994) An Introduction to Genetic Engineering-Cambridge University, Press.

Pelczar N.S, Chan F.C.S. Krieg N.R.(1998) Microbiology, Tata Mc Grow Hill.

Person D. (1983): The Chemical Analysis of Food, Churchill Livings Tone, Edunburgh, London, New York.

Porter K.R., Bonnevile M.A. (1964) Fine Structure of Cells and Tissues, Lea & Blanchard, Philadelphia.

Prof. V. A. Shenal (1991): Introduction to the Chemistry of Dyestuffs, sevsk Publications.

Rao C.V. (1994) Foundation to Mol. Biol, R. Chenda. Co. Publisher

Thomsen E.G. (1985): Modern Cosmetics Universal publishing corp

Zhdanov L.S. (1980): Physics for the Technician, MIR Publications. Moscow.

# **Applied Science Practical**

Module No	Objective	Content	Evaluation
3	This will enable student to:  1) Develop in students the ability to work systematically in laboratory.  2) Develop in them the skill for simple chemical procedures	Applied Chemistry  1) Introduction to chemistry lab & apparatus.  2) Neutralization of strong acid with strong base (HCl&NaOH)  3) Neutralization of weak base with strong acid (Na <sub>2</sub> CO <sub>3</sub> & H <sub>2</sub> SO <sub>4</sub> )  4) Neutralization of weak acid with strong base (Oxalic acid &NaOH)  5) Oxidation- reduction reaction (Oxalic acid & KMnO <sub>4</sub> )  6) pH determination of various solutions: acid, base and neutral (two household example for each)  7) Preparation of soap bar  8) Viscosity measurement: water, oil, shampoo by	Daily work  Journal  Performing experiment  8 marks
		Oswald's viscometer	

Module No.	Objective	Content	Evaluation
	This will enable	Applied Biology	Daily work
4	student to:  1) Acquire   knowledge of   various micro-   organisms and   the required   skills to study   them.  2) Apply this   knowledge in   day to day life	<ol> <li>Study and care of microscope</li> <li>Observation of motility of bacteria by Hanging drop method (<i>E.coli/ Proteus</i>)</li> <li>Observation of bacteria by the simple: monochrome staining method (Hay infusion culture or milk)</li> <li>Gram staining of bacteria in buttermilk</li> <li>To observe common pathogenic bacteria (any 6 – permanent slides)</li> <li>Observation of fungi on different food materials</li> <li>To observe common pathogenic protozoa (permanent slides of <i>Entamoebahistolytica</i> and <i>Plasmodium vivax</i>)</li> <li>Study of medicinally important plants (projects)</li> </ol>	Journal Performing experiment 7 marks

# **REFERENCES:**

George A. (1984): Shreeve's Chemical Process Industries

Glazer A. Na Ni Baido H (1995) Microbial Biotechnology W.H. Freemen Company.

K. Venkatraman (1952): The Chemistry of Synthetic Dyes, Vol. I, Academic Press, New York.

Kent S.A. (1974): Riegel's Handbook of Industrial Chemistry.

Loewy A. and Sckevilz (1995) Cell Structure and Functions, Hold, New-York

Nicholl D.S.T. (1994) An Introduction to Genetic Engineering-Cambridge University, Press.

Pelczar N.S, Chan F.C.S. Krieg N.R.(1998) Microbiology, Tata Mc Grow Hill.

Person D. (1983): The Chemical Analysis of Food, Churchill Livings Tone, Edunburgh, London, New York.

Porter K.R., Bonnevile M.A. (1964) Fine Structure of Cells and Tissues, **Lea & Blanchard**, **Philadelphia**.

Prof. V. A. Shenal (1991): Introduction to the Chemistry of Dyestuffs, sevsk Publications.

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Thomsen E.G. (1985): Modern Cosmetics Universal publishing corp

Zhdanov L.S. (1980): Physics for the Technician, MIR Publications. Moscow.

### Semester I

# **Design & Aesthetics**

### **OBJECTIVES:**

- 1. To enable the students to understand the elements and principles of design.
- 2. To enable the students to develop the skills to appreciate the aesthetics of art and design.
- 3. To develop in the students an understanding of the application of art principles in various areas of Home Science.
- 4. To promote group learning in the study of arts and crafts.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9103	Design & Aesthetics	4	2	2	25	75	100

Module No.	Objective	Content	Evaluation
1	To enable the students to understand the various elements of art for creating designs.  To develop a understanding in color perception and various textures  To enhance the ability of students to visualize space and lighting	ELEMENTS OF DESIGN  1.1. BASIC ELEMENTS Introduction, types, importance, application and psychological effects of each element. a. Point b. Line c. Shape d. Form e. Texture f. Light g. Space 1.2. INTRODUCTION TO COLOUR a. Color wheel (Primary, Secondary and Intermediate colors) b. Introduction to Various Color Schemes (Color Harmonies) c. Dimensions of color d. Classification of colors (warm & Cool color and Advancing and Receding Colours) 1.3. PRINCIPLES OF DESIGN Introduction, types and application a. Harmony b. Balance	Collect pictures of all the basic elements from nature as well manmade objects 5 Marks  Journal work for the entire color chapter 10 Marks  One journal assignment comprising of all the principles 10 Marks

	c.	Rhythm	
	d.	Scale and Proportion	
	e.	Emphasis	

Module No.	Objective	Content	Evaluation
	To halp students to	2.1 CONCEPT OF DESIGNING	Group Procentation
	To help students to		Group Presentation
	understand good	a. Meaning of structural design and	(Charts, pictures)
	and better design	decorative design	related to all
	concepts	b. Requirements of structural design	specializations
		and decorative design	10 Marks
	- develop the skills	2.2 AESTHETICS OF ART AND	Optical Illusions (3
	to appreciate the	DESIGN	Pictures to be
2	aesthetics of art and	a. Understanding of aesthetics and art	collected and
	design.	b. Optical illusion	Submitted)
_		2.3 APPLICATION OF ART	5 Marks
	-have an	ELEMENTS AND PRINCIPLES	To conduct group
	understanding of	OF DESIGN	activity (article
	the application of	Related to Interior Design/	making)
	art principles in	Hospitality, Textile Design, Food	10 Marks
	various areas of	Decoration, Visual Communication,	
	Home Science	Curriculum planning	

Module No.	Objective	Content	Evaluation
3	To develop students with various drawing skills. To help students learn different colour combination and its visual effects To promote group learning in the study of arts and crafts To develop skill in making different crafts	3.1 USE OF VARIOUS MEDIUM TO CREATE DESIGNS  a) Pencil b) Pen & ink c) Color 3.2 CREATING TEXTURES Fabric, Paper, Sticks, Saw dust, Pearls etc. 3.3 COLOR SCHEMES Color harmony, Monochromatic, Achromatic, Chromatic color schemes. 3.4 ACCESSORY DESIGN Paintings / pot painting / 3D Murals/ Stain Glass Painting (Innovative Work)	Journal Work for the first 3 blocks (5 marks each) = (15 Marks)  Accessory Design (10 Marks)  Concept (2 Marks) Creativity (3 Marks) Workmanship (3 Marks) Overall presentation (2 Marks)

Module No.	Objective		Content	Evaluation
	To enable the	4.1	SCALE DRAWING	
	students to -	a)	Understanding Scales	Scale drawing
	- create concept	b)	Enlargement	and Geometric
4	designing with	c)	Reduction	work
4	themes	4.2	GEOMETRICAL DESIGN	3 D form
	- understand	P	ATTERN	object
	basic principle	4.2.1	Symmetry and asymmetrical designs	•
	of geometry and	4.2.2	Abstract pattern	est out of
	shapes; and the	4.3	APPLICATION OF ART IN	waste
	concept of form	I	DESIGN	
	follows function	4.3.1	Flower Arrangement	
	with the help of	4.3.2	Fabric design/Embroidery	
	3D modeling.	4.3.3	Salad carving/Food presentation	
		4.3.4	Flash cards/puppets	
		4.4	BEST OUT WASTE	
		4.4.1	Paperbags / Paper collage etc.	

2) On Four Modules of 25 m
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3) External examination of 75 marks

4) Total: Internal - 25 + External - 75 = 100 marks

#### **REFERENCES:**

- 1 Agan T. (1970): The Houses, its plan and use, Oxford and IBM, New Delhi.
- Ahmed K. (1995): Interior Design- An introduction to art, craft, science, techniques and profession, Ingra Publications Pvt.Ltd, Mumbai.
- Bevlin M.E. (1985): Design through discovery, Rinchart And Winston, New York.
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- 5 Bhatt P. &Shamita G.(1990): Foundation of Art and Design, Lakhani Book Depot, Mumbai.
- 6 Collingwood R.G. (1958): The principles if Art, Oxford University Press, London.
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- 8 Dandekar H.D. and Krishnamurti C.E. (1960): Anchine drawing, Oxford University Press, London.
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- 10 Dorothy S.: Introduction to Home Furnishing, The McMillan Company, New York.
- Faulker R. &Faulker S.: Inside today's home, Holt, Rinchat and Winston, NewYork.

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- 13 Frances O.: Art and Design in home living, McMillan Company, NewYork.
- GarrestonFrouz.: Theory and practice of colour, Studio Vista Publishers, London.
- 15 Goldstein and Goldstein (1953): Art in everyday life, McMillan Company, NewYork.
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- 17 Lewis D.S., Jean O.B and Ester F.S. (1969): Housing and Home Management, The McMillan Company, New York.
- 18 Morris W. (1989): Design and patterns Bracker Books, London
- 19 Morton R.: The home and its furnishing, Mcgraw Hill Book Company, Inc., New York.
- Morton G. M. (1964): The arts of costume and personal appearance, John Wiley and Sons, New York.
- Mueller C. G., Mae Rudolfetal (1967): Light and vision Life Science and Library, Time life International, Netherlands.
- 22 Rowland K. (1965): The shapes we need vol. 2/3, Grinnd Co., London.
- 23 Rutt A. H.: Home Furnishing, Wiley Eastern Pvt. Ltd., New Delhi.
- Shah M. G., Kale G. M. & Patki S. Y. (1993): Building drawing with an integrated approach to built environment, Tat Mcgraw Hill Publishing Company Ltd., New Delhi.

# **Semester I**

# Life Span Development

### **OBJECTIVES:**

- 1. To become acquainted with the development stage from birth to old age.
- 2. To develop awareness of important aspects of development during the whole life span.
- 3. To understand the problems and hazards faced by an individual throughout the life span.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9104	Life Span Development	4	4	-	25	75	100

Module No.	Objective	Content	Evaluation
	This will enable students	Introduction to Life Span Development 0-2	Practical
	to:-	years	Component:
			Project on
	1. To know and	1. Meaning and definition of life span	Child rearing
	comprehend the	development and various stages in life span	practices
	meaning of life	development.	5 marks
1	span development.	2. Conception and development during pre	
1	2. To develop	natal stage.	
	awareness of	3. Neonatal stage	
	advancements in	a) Physical appearance	
	the stage of pre	b) Reflexes	
	natal and infancy	c) Perceptual Skills	
		4. Infancy	
		a) Physical & Motor Development	
		b) Developmental Task	

Module No.	Objective	Content	Evaluation
	This will enable students to-  1. Acquaint student with the developmental changes	Childhood  1. Early & Late childhood – Definition & Developmental tasks	Practical Component: Visit to a preschool &
2	during early & middle childhood.  2. Develop understanding about significance of preschool and school in the process of development.	2. Physical, Social & Emotional development	Group presentation in class 10 marks

Module No	Objective	Content	Evaluation
3	<ol> <li>This will enable students to:</li> <li>To gain deeper knowledge of various domains of adolescent development.</li> <li>Develop awareness about career planning/sex education during adolescence.</li> </ol>	Adolescence  1. Definition and characteristics of adolescence.  2. Physical, Social & Emotional development.	Practical Component: Guest Lecture on career choice/sex education, report on it 5 marks

Module No	Objective	Content	Evaluation
Module No  4	This will enable students to:  1. Develop awareness about characteristics of early, middle & late adulthood.  2. Create awareness about problems &	Content  Adulthood  1. Definition of young, middle & late adulthood & development tasks of each stage.  2. Physical, Social & Emotional Development	Practical Component: Visit & write a report on old age home 5 marks
	issues of middle & late adulthood.		

- 1. On Four Modules of 25 marks
- 2. External examination 75 marks
- 3. Total: Internal 25 + External 75 = 100 marks

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# **Semester I**

### **Environment Studies**

### **OBJECTIVES:**

- 1.To make students aware about the importance, current situation of natural resources and the need to conserve them.
- 2.To give information about concept, types of various ecosystems.3.To make aware about biodiversity, and need of conservation.
- 4. To create awareness about social issues and the solutions to solve them.

	Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
-	9105	<b>Environment Studies</b>	4	4	-	25	75	100

Module No.	Objective	Content	Evaluation
1	This will enable students to:  1. Get acquainted with physical environment and its components  2. Know various natural resources, their importance, over use  3. Develop the concept of sustainable development	<ul> <li>The Multidisciplinary Nature of Environmental Studies</li> <li>Definition, Scope and Importance, Need for public awareness</li> <li>Natural Resources</li> <li>Natural Resources and Associated Problem</li> <li>Forest Resources: Use and Over exploration, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.</li> <li>Water Resources: Use and over utilization of surface and ground water, floods, drought, conflicts over water, damsbenefits and problems.</li> <li>Mineral Resources:</li> <li>Use and exploitation, environmental effects of extracting and using mineral resources, case studies.</li> <li>Food Resources:</li> <li>World food problems, changes cause by agriculture and over grazing, effects of modern agriculture, fertilizers, pesticide problems, water logging, salinity, case studies.</li> </ul>	ShortQuest ions/Multip le Choice Questions     Assignment or display on ecosystems     10 marks

Energy Resources:	
Growing energy needs, renewable and non-renewable energy sources and use of alternate energy sources, case studies.  Land Resources:	
<ul> <li>Land as a resources, land degradation, man induced landslides, soil erosion and desertification</li> <li>Role of individual in conservation of natural resources</li> <li>Equitable use of resources for sustainable lifestyles</li> <li>Ecosystems</li> <li>Concept of ecosystem</li> <li>Structure and function of ecosystem</li> <li>Producers, consumers and decomposers</li> <li>Energy flow in the ecosystem</li> </ul>	

Module No.	Objective	Content	Evaluation
2	1. Develop the concept of ecology and its components 2. Study the impact of human activities and ecology and need to conserve the resources	<ul> <li>Biodiversity and its Conservation</li> <li>Introduction-Definition: Genetic, Species and Ecosystem Diversity</li> <li>Bio-geographical classification of India</li> <li>Value of biodiversity, consumptive use, productive use, social, ethical, aesthetic and option values</li> <li>India as a mega-diversity nation</li> <li>Hot-spots of biodiversity</li> <li>Threats to biodiversity: habitat, loss, poaching of wild life, man wildlife conflicts</li> <li>Endangered and endemic species of India</li> <li>Conservation of bio-diversity: <i>In-situ</i> and <i>Ex-situ</i> conservation of biodiversity.</li> </ul>	Display/ Assignment 5 marks

Module No.	Objective	Content	Evaluation
	<ol> <li>Make the students aware of various types of pollutions and solutions to the problem.</li> <li>Make the</li> </ol>	<ul> <li>Environmental Pollution:</li> <li>Definition, causes, effects and control measures of - Air, water, soil, marine, noise and thermal pollutions; Nuclear hazards</li> <li>Solid Waste Management: causes, effects and control measures of urban and industrial waste</li> </ul>	Assignment on local problems 5 marks

	students aware of social problems.	<ul> <li>Role of individual in prevention of pollution</li> <li>Pollution case studies</li> <li>Disaster Management: Floods, earthquake, cyclone and landslides</li> <li>Social Issues and the Environment:</li> </ul>	
3		<ul> <li>From unsustainable to sustainable development</li> <li>Urban problems related to energy</li> <li>Water conservation, rain water harvesting, water shed management</li> <li>Resettlement and rehabilitation of people, its problem and concerns. case studies</li> <li>Environmental ethics: Issues and possible solutions</li> <li>Climate changes, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. case studies</li> <li>Waste land reclamation</li> <li>Consumerism and waste products</li> <li>Environment Protection Act</li> <li>Air, Water (Prevention and control of pollution) Act</li> <li>Wildlife Protection Act</li> <li>Forest Conservation Act</li> <li>Issues involved in enforcement of environmental legislation</li> <li>Public awareness</li> </ul>	

Module No.	Objective	Content	Evaluation
4	1. Make the students aware of population problems. 2.Develop the love and interest about nature by being in nature itself.  3.Create awareness	<ul> <li>Human Population and the Environment</li> <li>Population growth, variation among nation</li> <li>Population explosion-family welfare programme</li> <li>Environment and Human Health</li> <li>Human Rights</li> <li>Value Education</li> <li>HIV/AIDS</li> <li>Women and child welfare</li> <li>Role of Information Technology in Environment and Human health</li> <li>Case studies</li> </ul>	Report on the local visit 5 marks
	about Biodiversity pollution and social issues.	Visitto local area to document environmental assets  a) Rivers/forest/grassland/ hill/ mountain b) Local Pollution Site-Urban/Rural/Industrial/ Agricultural	

etc.		<ul><li>c) Study of common plants/ insects/ birds</li><li>d) Study of simple ecosystems-ponds, rivers, hill, slopes</li></ul>
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- 1) On Four Modules, 1 or 2 assignments = 25 marks
- 2) External 75 marks
- 3) Total: Internal 25 + External 75 = 100 marks

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- 1) Agarwal, K.C. (2001) Environmental Biology, Nidi Publication Ltd. Bikaner.
- 2) BharuchaErach, The Biodiversity of India, MapinPublising Pvt. Ltd., Ahamadabad-380013, India, Email: mapin@icenet.net(R)
- 3) Brunner R. C. (1989), Hazardous Waste Incineration, McGraw Hill Inc. 480p
- 4) Clark R. S. Marine Pollution, Clanderson Press Oxford (TP)
- 5) Cunnigham W. P. Cooper, T. H. Gorhani, E & Hepworth, M. T. (2001), Environmental Encyclopedia, Jaico Publ. House Mumbai, 1196p
- 6) De A. K., Environmental Chemistry, WileelyEastem Ltd.
- 7) Down to Earth, Center for Science and Environment(R)
- 8) Gleick, H. P. (1993), Water in Crisis, Pacifics Institute for Studies in dev., Environment & Security, Stockholm Env. Institute, Oxford University, Press. 473p

### **SEMESTER II**

# English II (H.L.)

### **OBJECTIVES**:

The student should be able to -

- 1. Prepare and deliver an effective presentation
- 2. Write an effective resume
- Appear for an interview process with confidence
   Develop skills of reading literary narratives with understanding and appreciation

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9201	English II (Higher Level)	4	3	1	25	75	100

Module No.	Objective	Content	Evaluation
1	<ul> <li>The learners will be able to-</li> <li>understand the different techniques of presentations</li> <li>understand the concept of sequencing of presentations</li> <li>be equipped with the required vocabulary and correct use of grammar</li> <li>be competent enough to give an effective presentation</li> </ul>	Presentation Skills:  1. Structure of a presentation 2. Sequencing 3. Commonly used verbs 4. Use of signaling, signposting and listing techniques 5. Use of visual and electronic aids (OHP/PPT etc.)  Assignments:  1. Structure of a presentation – (descriptive question) 2. Small group presentation on a given topic	Assign.1:Written script - 5 marks + orals -10 marks Assign.2 Group presentation - 10 = 20 marks

Module No.	Objective	Content	Evaluation
2	The learners will -	Job Applications	

<ul> <li>familiarize themselves with basic norms of business correspondence</li> <li>produce effective resumes in accordance with various contexts</li> </ul>	<ol> <li>How to write applications for jobs in response to advertisements</li> <li>Types of resume</li> <li>Electronic formats for resumes</li> <li>Assignments:</li> </ol>	
Contexts	<ol> <li>Job Application Letters in response to advertisement</li> <li>Writing a student's resume</li> </ol>	<b>Assign.1:</b> 2 x 5 = 10 marks <b>Assign.2</b> 15 marks

Module No.	Objective	Content	Evaluation
	The learners will -	Literary Appreciation	
3	<ul> <li>develop skills of literary appreciation</li> <li>enhance their descriptive writing skills</li> <li>enrich their vocabulary</li> </ul>	The following stories from the prescribed Text 'Let's Go Home and Other Stories'. Ed. By Meenakshi Mukherjee.  "The Shadow"  "Meeting Pool"  "Death of a Hero"  "White Dove'  "Zamindar of Palipuram'	
		Assignments:	Assign.
		<ol> <li>2 Questions on expressing personal responses</li> <li>2 Character sketches</li> <li>Vocabulary enhancement exercises</li> </ol>	1:(2 x 5) = 10 marks 2. (2 x 5) =10 3. 5 marks

Module No.	Objective	Content	Evaluation
	The learners will -	Soft skills enhancement through effective	
4		communication in English	
4	• be competent		
	enough to	Content-point (only of that module):	
	appear for an	2	

interview process  • confidently participate in a group discussion	<ol> <li>Types of Interviews</li> <li>How to prepare for an interview</li> <li>Language and Etiquette</li> <li>Role play/mock interviews</li> <li>Methods and Procedures of Group Discussions</li> <li>Practice sessions in Group Discussions</li> <li>Assignments:</li> <li>Descriptive question on how to prepare for an interview</li> <li>Mock Interview</li> <li>Mock Group Discussion</li> </ol>	Assign. 1. 5 marks
		2. 10 marks 3. 10 marks

- 4. Internal= Continuous Evaluation of all four Modules to be taken = 25 marks
- 5. External = 75 marks
- 6. Total : Internal = 25 + External = 75 = 100 marks

# English II (L.L.)

### **OBJECTIVES**:

The student should be able to -

- 1. Prepare and deliver an effective presentation
- 2. Write an effective resume
- 3. Appear for an interview process with confidence
- 4. Develop skills of reading literary narratives with understanding and appreciation

Code No.	Subject	TC	Th C	Pr C	Int M	Ext M	Total
9201A	English II (Lower Level)	4	3	1	25	75	100

Module No.	Objective	Content	Evaluation
1	The learners will be able to -  • use appropriate technical words, tense and linking devices  • adopt different techniques of presentations  • be competent enough to give an effective presentation in English	Presentation Skills  Structure of a presentation  1. How to prepare the outline of a presentation  2. Commonly used verbs and connectors  3. Use of signaling, signposting and listing techniques  4. Use of visual and electronic aids (OHP/PPT etc.)  Assignments:  1. Exercise based on use of signposting and listing techniques  2. Preparing outline of presentation  3. Presentation on given topic (oral)	Assign. 1. 5 marks 2. 10 marks 3. 10 marks

Module No.	Objective	Content	Evaluation
2	<ul> <li>be familiar with the requirements of a job application letter</li> <li>be able to write an effective resume</li> </ul>	1. How to respond to an advertisement and write job applications 2. How to write an effective resume 3. Electronic formats for resumes  Assignments:  1. Job Application Letters in response to an advertisement 2. Writing a student's resume:	<b>Assign. 1.</b> (2 x 5)= 10 marks <b>2.</b> 15 marks

Module No.	Objective	Content	Evaluation
3	The learner will learn how to -  • read with emphasis on fluency, tone and voice modulation  • enhance their vocabulary  • express themselves creatively  • be able to connect the narrative to the larger society and their lives	Reading and comprehension skills:  3 <sup>rd</sup> and 4th stories from Prescribed Text 'YuvaKatha 7'  1. Comprehension Skills 2. Reading a passage with fluency, tone, modulation, fluency 3. Personal responses to the prescribed stories 4. Vocabulary building 5. Expressing ideas creatively Assignment:  1. Comprehension Skills 2. Reading a passage with - fluency, tone, modulation 3. Personal responses to the prescribed stories	Assign. 1. 10 marks 2. 5 marks 3.10 marks

Module No.	Objective	Content	Evaluation
4	<ul> <li>The learner will be able to-</li> <li>verbally describe objects, images and pictures</li> <li>use appropriate words and sentence structures to seek information, give replies, instructions etc.</li> <li>confidently appear for an interview</li> </ul>	Verbal communication skills for interpersonal communication  1. Asking for information and replying 2. Giving instructions and replying 3. Visual to verbal communication: interpreting pictures 4. Describing objects 5. Verbal skills required during an interview Assignments:  1. Visual to verbal interpretation 2. Writing instructions/asking for information 3. Describing objects 4. Mock Interview References ( for all module):	Assign. 1. 5 marks 2. 5 marks 3. 5 marks 4.10 marks

#### **Prescribed Texts: (Lower Level)**

1. Yuvakatha 7

(Higher Level)

1. Mukherjee, Meenakshi (ed.), Let's Go Home and Other Stories.

#### **REFERENCE BOOKS:**

Asoka Rani, T. English for career development A course in functional English, Hyderabad Orient Longman Ltd. 1989 104p.:ill.

Baker, Joanna Westrup, Heaths. London Essential speaking skills a handbook for English language teachers, Continuum 2003 vi, 170p.

Brown, Gillian Yule, George Cambridge Teaching the spoken language An approach based on the analysis of conversational English, Cambridge University Press 1983 xi,162p.

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David, A. Teaching English as a second language New Delhi Commonwealth Publishers 2005 287p.

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Hardfield, Charles Hardfield, Jill Walton-on-Thames, Writing games, Thomson Nelson and Sons Ltd. 1990 viii,22+80p.:ill.

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Ur, Penny Wright, Andre (Jt. auth) Five-minute activities Cambridge University Press 1996 xii, 105p

# **Semester II**

# **Human Physiology**

### **OBJECTIVES:**

- 1. The students will understand the basic structure and functions of the human body
- 2. Student will be acquainted with common diseases/disorders of each system

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9202	Human Physiology	4	3	1	25	75	100

# **Human Physiology Theory**

Module No.	Objective	Content	Evaluation
1	This will enable students to:  1. Introduce students to basic terminologies 2. Understand the basic structure of human body 3. Understand the functioning of cardio vascular, respiratory, gastro intestinal 4. Brief knowledge about common diseases affecting each system. 5. To create awareness about	<ul> <li>INTRODUCTION</li> <li>General terms- anatomy, physiology, symmetrical arrangement, anatomical position. Median plane / lateral plane, internal/ external, superficial /deep, superior/ inferior, anterior/posterior.</li> <li>Basic human tissues.</li> <li>Introduction to human skeleton.</li> <li>Structure of bone and cartilage.</li> <li>Classification of various types of muscle.</li> <li>BLOOD AND LYMPHATIC SYSTEM</li> <li>Physical characteristics of blood</li> <li>Blood volume, composition of plasma and functions of plasma protein</li> <li>RBC formation and functions</li> <li>Information about anaemia and thalessemia.</li> <li>Blood groups, their importance, Rhincompatibility.</li> <li>WBC- types, functions, importance of CBC</li> </ul>	<ul> <li>Multiple choice questions</li> <li>Short notes</li> <li>Display</li> <li>Quiz</li> <li>5 marks</li> </ul>

interdependence and coordination between different systems of the body for normal functioning.

- Platelets and mechanism of coagulation
- Lymph and lymphatic system, spleen and its functions.

### **HEART**

- Its structure and circulation of blood.
- Cardiac cycle
- Information about hypertension & ischemic heart disease

### RESPIRATORY SYSTEM

Respiratory organs-nose, sinuses, larynx, trachea, bronchi lung brief structure and functions. Mechanism of respiration, factors affecting efficacy of respiration. Various lung volumes and capacities.

Common diseases- TB, asthma, bronchitis, cough, pneumonia sinusitis.

### **GASTRO - INTESTINAL SYSTEM**

Oral cavity, tonsils, pharynx, oesophagus, stomach small and large intestine - brief structure and functions.

Liver, gall bladder, pancreas structure and functions.

Common disorders- Dental caries, vomiting. diarrhoea, constipation. Hyperacidity, diabetes.

Module No.	Objective	Content	Evaluation
2	This will enable students to:  1. understand the functioning of excretory system and brief knowledge about common diseases affecting this system.  2. know more about the nervous system	<ul> <li>Structure and function of organs of urinary system (in brief).</li> <li>Mechanism of urine formation</li> <li>Common diseases- urinary tract infection and renal stones.</li> <li>Structure and function of skin</li> <li>Regulation of body temperature</li> <li>Common disorders - acne dandruff and burns.</li> <li>NERVOUS SYSTEM</li> <li>Classification of nervous system</li> <li>Structure and functions of different parts of brain, spinal cord and reflex action.</li> <li>Eye - structure and mechanism of vision</li> <li>Common problems - conjunctivitis, cataract.</li> <li>Ear - structure and mechanism of hearing</li> <li>Common problems - deafness, vertigo, motion sickness</li> </ul>	<ul> <li>Multiple choice questions.</li> <li>Short notes.</li> <li>Display.</li> <li>Quiz.</li> <li>PPT presentation</li> <li>5 marks</li> </ul>

Module No.	Objective	Content	Evaluation
3	This will enable students to:  1. know more about the endocrine system  2. Have knowledge of reproductive system and importance of reproductive health	<ul> <li>ENDOCRINE SYSTEM</li> <li>Listing of endocrine glands and their location</li> <li>Functions of pituitary, thyroid, parathyroid and adrenal.</li> <li>REPRODUCTIVE SYSTEM</li> <li>FEMALE REPRODUCTIVE SYSTEM</li> <li>Structure</li> <li>Menstrual cycle</li> <li>Fertilization</li> <li>Breast- Structure, function, importance of breast hygiene and breast feeding</li> <li>Physiological changes in pregnancy</li> <li>Importance of ante-natal care.</li> </ul>	<ul> <li>Multiple choice questions.</li> <li>Short notes.</li> <li>Display.</li> <li>Quiz.</li> <li>PPT presentation</li> <li>marks</li> </ul>

MALE REPRODUCTIVE SYSTEM	
• Structure	
• Sex education	
• Contraception and infertility	
• Sexually transmitted diseases-syphilis,	
gonorrhoea, AIDS	

- 1) Internal Theory 15 marks + Practical 10 marks = 25 marks
- 2) External: Theory 50 marks + Practical 25 marks = 75 marks
- 3) Total: Internal -25 + External 75 = 100 marks

#### **REFERENCES**:

- 1) Guyton, A.C., Hall J.E.- Textbook of Medical Physiology Prism Books Pvt Ltd., Bangalore.
- 2) Concise Medical Physiology Chaudhari.
- 3) API Text Book of Medicine.
- 4) Textbook of Gynaecology Datta.
- 5) Winwood Sear's Anatomy and Physiology for Nurses London, Edward Arnold .
- 6) Wilson -Anatomy and Physiology in Health and Illness, Edinburgh, Churchill Livingstone.
- 7 )ChatterjeeChandiCharan -Textbook of Medical Physiology London. W.B. Saunder's company.

# **Human Physiology Practical**

Module No. Objective		Content	Evaluation
4	This will enable students to:  1- Introduce the students to human skeleton and enable them to identify various bones in the body  2- perform simple clinical tests like estimation of haemoglobin and blood group and blood pressure  3- Utilize the knowledge learnt to administer first aid for common emergency situations.  4- Acquaint the students with the basic principles of home nursing.	<ol> <li>Study of human skeleton and identification of bones.</li> <li>Estimation of haemoglobin</li> <li>Estimation of blood groups,</li> <li>Demonstration of peripheral blood smear. Importance of complete blood count.</li> <li>Measurement of pulse rate and blood pressure.</li> <li>Discussion of normal components of urine. Test for abnormal components like sugar, albumin and acetone and discussion on diseases in which they are found.</li> <li>FIRST AID         <ul> <li>Definition, aims, qualities of first aider, contents of first aid box.</li> <li>Different types of bandages and bandaging techniques.</li> </ul> </li> <li>WOUNDS         <ul> <li>Classification, dressing and management of haemorrhage- basic principles and discussion about bleeding from various parts of body.</li> </ul> </li> <li>FRACTURE         <ul> <li>Types, symptoms, management.</li> </ul> </li> <li>Sprain and dislocation</li> <li>First Aid for - foreign bodies in eye, ear, nose, skin.</li> <li>First Aid for - common poisoning, dog bite, snake bite, bee-sting and scorpion bite.</li> <li>BASIC PRINCIPLES OF HOME NURSING-  Measuring body temperature, steam inhalation, body sponging, taking care of bed ridden patient and enema.</li> <li>8)Cardio pulmonary resuscitation</li> </ol>	10 marks

External: Practical exam - 25 marks + Theory - 50 marks = 75 marks

S. No.	Title of the Book	Author
1.	Book of Clinical Medicine	Hutchinson's
2.	First Aid	St .John's Ambulance Association

#### **Semester II**

# **Textile Science and Apparel Design**

Code No.	Subject	TC	Th C	Pr C	Int M	Ext M	Total
9203	Textile Science and Apparel Design	4	2	2	25	75	100

#### **OBJECTIVES**: (THEORY)

- 1. Students gain knowledge of nomenclature and classification of Fibers, yarns, and fabrics in pure and blended form.
- 2. Students learn about general principles of clothing construction, selection, use and scope.
- 3. Makes the students wise and responsible consumer with good values.
- 4. Students to get knowledge and information related to legislation, labeling, and standards to enhance the consumer's understanding of textiles and clothing.

Module No.	Objective	Content	Evaluation
	The learner will -	<u>Understanding basics of textiles</u>	
1	<ol> <li>Become wise and a responsible consumer with good values.</li> <li>Understand the essentials of textile terms and concepts</li> </ol>	<ul> <li>Introduction to textiles:</li> <li>Scope &amp; importance of textiles &amp; Clothing, general properties and classification of textile fibers by Textile Fiber Product Identification Act. Concept of green fibers &amp; Eco friendly textiles. (Definition- Importance Any three symbols)</li> <li>Care labels, Silk mark, Wool mark, and Handloom mark Yarn Construction:</li> <li>Types of yarns-single, ply, cable and cord &amp; texturized yarns</li> </ul>	Individual Assign-ment  - 10 marks

Module No.	Objective	Content	Evaluation
	The learner will:	<u>Textiles: Construction, clothing and selection</u>	
2	1.Get acquainted with general principles of clothing construction, their selection	<ul> <li>Fabric construction</li> <li>Introduction to fabric construction &amp; basic weaves. (Concept of weaving, knitting and non woven to be explained.)</li> <li>Definitions, uses, advantages and disadvantages of unions &amp; blends.</li> </ul>	Group Assignment – 15 marks

use and care.	Selection of clothing.	
2. Understand different factors affecting selection of clothing.	<ul> <li>Buying points for readymade garments – size, suitability, durability, aesthetic appeal, fiber content, labels (basic information &amp; care labels), brand, purchasing power, socio economic – conditions, location etc.</li> <li>Selection of clothing based on silhouette &amp; occasional wear (casual, party, sports, travel, corporate)</li> </ul>	

- 1. Internal: Theory Modules 1 & 2 = 25 marks + Practical 50 marks = 75/3 = 25 marks
- 2. External Theory examination on all 4 modules = 75 marks
- 3. Total: Internal 25 + External 75 = 100 marks

#### **OBJECTIVES:** PRACTICAL

- 1. Make students aware of the use and care of sewing machine.
- 2. Learn the drafting, placement and cutting of basic garments.
- 3. Develop skill in stitching the garments with good finishing in stipulated time.
- 4. Generate awareness regarding different fabrics available in the market.

Module No.	Objective	Content	Evaluation
3	The learner will  1.learn the use and care of sewing.  2.Generate awareness regarding different fabrics available in the market.	<ul> <li>Basics of clothing construction</li> <li>Basics of clothing- Basic seams -Plain, French, Flat &amp; fell, Lap- plain &amp; with gathers), Bias strip cutting-joining, Neckline finishing (round, square, V neck)</li> <li>Definition, terms and uses of 25 fabrics namely –</li> <li>For Personal Clothing-Lawn, poplin, cambric, 2 x 2, organdy, voile, denim, drill, seer sucker, jute, khadi&amp; other handloom fabrics.</li> <li>Home Textiles-Casement, terrycloth, jacquard, cut pile, knitted, bonded, laminated, embossed, linen</li> <li>Fashion Fabrics- Satin, tissue, crape, georgette, chiffon, knitted, knotted, braided, narrow fabrics, wrinkled, brasso, and suede.</li> </ul>	10 Marks

Module No.	Objective	Content	Evaluation
4	The learner will-  1. Learn the method of taking Body measurements for garment stitching.  2.Develop skill in stitching the garments with good finishing	<ul> <li>Stitching of the following garment</li> <li>Skirt (As per trend)</li> <li>Without yoke -Simple pattern</li> <li>Simple Top (As per trend).</li> <li>Simple pattern, without darts,</li> <li>Simple sleeves</li> <li>Without placket</li> <li>Side slits – as per choice</li> <li>No collar</li> </ul>	Skirt -10 Marks Top-15 Marks

Practical: Evaluation of Module 1 + Module 2 (25 marks each) = 50/2 = 25 marks

<u>Unit Test</u> (Practical): Stitching of one neckline (10 marks) and 2 seams (10 marks)

S. No.	Title of the Book	Author
1	Creative clothing Construction	Dana A.
	New York: McGraw hill Book Co., 1956	Bane A:
2	Ready to Wear Apparel Analysis, 2nd edition	Duaren Diag
	Prentices Hall, 1998	Brown Rice
3	How you look to dress	
	St.Louis. McGraw Hill, 1969.	Carson
4	Basic Processes & Clothing Construction.	Doongaji S. &Deshpande R

5	Textiles: properties &behaviour in clothing use	Edward Miller
	London: B.T. Bradsford, 1992	Edward Miller
6	Fashion from Concept to Consumer 7th Ed	Cin Stinhans Enings
	New Jersey Prentice Hall Inc 2002	Gin StiphensFrings
7	Textile Science	Cohl E.D. and Volonsky I. D.
	Melbourne: Longman Cheshire Pvt.Ltd.,1983	Gohl E.P. and Velensky L.D
8	Handbooks of American Association of Home Economics.	
9	Textiles, 16th Edition	Hollan, Norma & Saddler
	New York, Macmillan publishing Co, 1998	Hollan, Norma & Saddler
10	Essentials of Textiles	Joseph M.
	Holt, Rinehart & Winston, New York, 1976.	Joseph W.
11	Introductory Textile Science. – 6th Ed.	Joseph M. –
	Fort WorthHarcourt Brace Jovanovich College Publishers. 1993	Joseph IVI.
12	Khadi, The fabric of freedom, AmrVastraKosh Trust Publication 2002.	
13	Individuality in clothing Selection & Personal Appearance – a guide for the consumer,:Specht& Mac Million publication, Upper Saddle River, Prentice Hall Inc., 2000.	Kefgan& Phyllis T
14	Performance of Textile for Testing	Lula Darathu
	New York: John Wiley & Sons,1977.	Lyle Dorothy
15	Clothing for Moderns, 3rd edition	Mabel D.E. & A.K.
	New York: Mac Million publication	Water D.E. & A.K.
16	Clothing – A study in Human Behavior	Mary R.S.:
17	Art in clothing selection	Mc. Jimsey
	New York: Harper & Row, 1963	ivic. Jinisey
18	Textile – Fiber to Fabric, 6th edition	Potter &Corbman
	New York: McGraw hill Book Co., 1983.	Totto (Cotolian
19	Introduction to Textiles	Stout E

	New York: John Wiley & Sons,1970	
20	Family Clothing	Take 0 Clines
	New York: John Wiley, 1961	Tate &Glisson
21	Textile Fabrics and their selection (8th Ed.)	W ID MILLE
	Engle wood cliffe	Wingate I.B., Mohler J.F
22	Fairchild's Dictionary, 6th edition	W I II D
	New Delhi: Universal Pub. Corporation, 1988.	Wingate Isable B.:
23	Understanding Textiles – Upper Saddle River, Merill Publishing – 5th Edition. Prentice Hall Inc, 1985	Tortora, Phyllis G.
24	Textiles – motivates series	<b>Y</b> Y A
	London, Macmillan Education Ltd. 1997	Wynne A
25	Sewing Fabrics	A I - 11
	London: Mitchell Beazley International, Ltd., 1978	Ann Ladbury
26	Designing Patterns	
	A. E. Press Melberne, 1985.	Campbell H. & Davies M.
27	Clothing for Moderns III and V Editions	Ervin M.D. Knichen L.A. and
	New York, McMillan.	Peters K:
28	Singer sewing Book	W. M. V.
	London: Hamlyn, 1972	Hultin J.C.
29	Performance of textile for testing	
	New York: John Wiley & Sons 1977	Lyle D.

New York: John Wiley & Sons, 1977.

#### **Semester II**

#### **Fundamentals of Food Science and Nutrition**

#### **Objectives**:

The course will enable the students to:

- 1. Understand the inter-relationship between food, nutrition and health
- 2. Know the methods and principles involved in cooking.
- 3. Understand the knowledge of food science and the changes occurring during food preparation
- 4. Know the methods and principles involved in cooking.
- 5. Learn to relate foods with their nutrient content

Code No.	Course	T C	Pr C	Th C	Int M	Ext M	Total
9204	Fundamentals of Food Science and Nutrition	4	2	2	25	75	100

# **Fundamentals of Food Science and Nutrition Theory**

Module No.	Objectives	Content	Assessment
1	<ol> <li>This will enable students to:</li> <li>Know nutritional aspects of foods and their functions.</li> <li>Understand the importance and role of macronutrients in health</li> <li>Identify food sources</li> <li>Understand the principles of food science and discuss the relation between Food Science and Nutrition</li> </ol>	<ol> <li>Introduction to Nutrition</li> <li>Terms used in Nutrition and Health.         Definitions - Health, Nutrition, Nutrients,         Foods, Diet, R.D.A., Balanced diet,         Malnutrition, Under nutrition, Over nutrition, Optimum nutrition.     </li> <li>Five Food Groups and Food guide, relationship between food and nutrition, functions of food, classification of nutrients, factors affecting food consumption and food acceptance.</li> </ol>	25 Marks  Quiz / assignments
		Macronutrients	
		<ol> <li>Carbohydrates</li> <li>Proteins</li> <li>Fats</li> <li>Water</li> <li>Classification, functions, sources, requirements, deficiencies</li> </ol>	

		- Digestion, Absorption, Transport	
		- Food Science principles	
	This will enable students to:	Micronutrients:	
2	Know the role of     Vitamins and minerals     in health      Identify the color     pigments in foods      Understand the changes in color pigments	Classification of Vitamins: A, D, E, K, Thiamin, Riboflavin, Niacin, Ascorbic Acid and Minerals: Calcium, Iron and Iodine  - Functions, deficiencies sources, requirements - Digestion, Absorption, transport - Conservation of nutrients Color Pigments	25 Marks  Quiz / assignments
		Color Pigments	

# **Fundamentals of Food Science and Nutrition Practical**

### **Objectives**:

#### The course will enable the students to:

- 1.Relate weight and measures of raw foods with cooked amounts and associate them with serving size.
- 2. Apply the knowledge of food science and observe the changes occurring during food preparation.
- 3. List rich food sources of various nutrients and plan and prepare recipes

Module No.	Objectives	Content	Assessment
	This will enable students to:	<b>Basics of Food Preparation</b>	25 marks
1	<ol> <li>Understand the concept of portion size</li> <li>Know the specified amounts and proportion of ingredients used in the recipe</li> <li>Understand the basic scientific principles and the preparation of food</li> <li>Learn the preparation methods to optimize nutrient content and conserve nutrients</li> </ol>	<ol> <li>Cereal, pulse, milk, egg and vegetable and fruit preparation</li> <li>Weights and measures</li> <li>Standardization, portion size</li> <li>Methods of food preparation</li> <li>Food Science principles</li> <li>Calculation of nutrients</li> <li>Conservation of nutrients</li> </ol>	Quiz
_	This will enable students to:	Plan and Prepare Recipes for	25 marks
2	<ol> <li>Plan recipes and calculate nutrients</li> <li>Understand and relate the principles of food science to the preparation and methods to conserve nutrients</li> </ol>	One Serving:  - Energy: high and low calorie - Proteins - Calcium - Iron - Vitamin C - Vitamin A B- complex vitamins	Planning and Cooking

#### **References:**

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- 2. Food Science 1<sup>st</sup> Edition (2012) Sheth Publications. Maharashtra State Board of Secondary and Higher Secondary education Pune.
- 3. Roday S. (2012) Food Science and Nutrition (2<sup>nd</sup> Ed.) Oxford University Press.
- 4. Joshi S. (2009) Nutrition and DieteticsMcgraw Hill Higher Education
  - 5. Robinson, and Lawler (1990) *Normal and Therapeutic Nutrition* (17<sup>th</sup>Edn) Macmillan Pub. Co.
  - 6. Guthrie Helen (1986)Introductory Nutrition, Mosby College Publishing. Times Mirror
  - 7. Wardlaw G.M (1997) Contemporary Nutrition, Issues and Insights, 3rd Edition Tata

McGrawHill Inc. Boston.

8. Guthrie H. A. and Frances M. (1994) *Human Nutrition* William C Brown Pub.

# **Semester II**

# **Extension and Communication**

# **Objectives:**

- 1. To develop understanding about the concept of Extension Education.
- 2. To comprehend the role and importance of communication in Extension.
- 3. To be able to understand the needs of the community by using enquiry techniques.
- 4. To be able to plan, prepare and use the different communication methods.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9205	<b>Extension and Communication</b>	4	3	1	25	75	100

Module No.	Objectives	Content	Evaluation
	The students will learn to:	Concept of Extension:	
1	<ol> <li>Develop an understanding about the concept of Extension.</li> <li>Become aware of the significance of Home Science Extension.</li> <li>Develop an understanding of different Audio-Visual Aids</li> </ol>	<ol> <li>Concept, Need and Scope of Extension.</li> <li>Principles, philosophy and trends of Extension Education.</li> <li>Home Science Extension- Need and Significance.</li> <li>Qualities of an extension worker</li> </ol>	Assignment 25 marks
	available for Extension and Communication.	5. Introduction to Right to information Act (RTI).	

Module No.	Objectives	Content	Evaluation
2	<ol> <li>Understand concept and importance of communication.</li> <li>Comprehend the different models of communication.</li> <li>Identify and use different methods of communication.</li> </ol>	<ol> <li>Communication for Extension:</li> <li>Concepts, Nature (Upward, Downward and Horizontal), elements, functions, barriers of communication.</li> <li>Importance of communication for Extension Work.</li> <li>Models of communication.</li> <li>Communication Methods:         <ul> <li>Individual Methods- Interview, home and</li> </ul> </li> </ol>	Project on methods of communication

farm visits.	25 marks
Group Methods- Demonstration, Lecture, Workshop and Discussions.	
Mass Methods- Campaign, Exhibitions and Radio programme.	

Module No.	Objectives	Content	Evaluation
3	This will enable students to:  1. Develop an understanding of different audio visual aids available for communication and extension	<ol> <li>Audio visual aids</li> <li>Audiovisual aids-Meaning, importance and selection</li> <li>Classification –Edgardales cone of experience</li> <li>Importance of the cone of experience in learning</li> </ol>	Brain storming on the different topics and innovative ways of making audio visual aids 25 marks

Module No.	Objectives	Content	Evaluation
	This will enable students to:	Need Assessments of Community	Conducting a survey on different
	1 Develop an understanding of community for Extension activities.	Assessing prevailing conditions of community focusing on aspects such as Health, Population, Housing,	issues and preparing a report
	<ul><li>2 Get acquainted with Extension Work.</li><li>3 Explore community</li></ul>	Education, Sanitation, etc. Compilation of data collected utilizing it for preparing	Planning and preparing
4	opinions and field conditions 4 Develop skills in preparing graphic aids.	Community Contact Methods  1. Preparation of Graphic Aids- Posters, Charts, Leaflets etc. for selected target group.	- Different teaching aids 25 marks

Continuous Evaluation = 25 Marks per Module Internal : (Theory -15 +Practical - 10)= 25 marks External: (Theory -50+Practical - 25) = 75 marks Total :Internal - 25 +External - 75 = 100 marks

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- 2. Dahama, O.P., O. P. Bhatnagar (1995) Education and Communication for Extension, Communication and Management, NayaPrakash, Calcutta Development, Oxford and IBH Publication, New Delhi.Ray, G. L. (1991)

# **Semester III**

# **Nutrition for Life span**

## **Objectives**:

The course will enable students to -

- Understand the physiological changes, special needs and health concerns of people at different stages of life
- Understand the importance of nutrition to physical, psychological growth and development and ageing.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9301	Nutrition for Life span	4	-	4	100	-	100

Module No.	Objectives	Content	Assessment
1	This will enable students to:  1. Know the nutritional requirements and understand the concept of RDA  2. Comprehend the concept of food guide and translate the same into planning	Basics of Meal Planning  1. Overview of nutritional requirements 2. Food Guide/ Food Pyramid and its use 3. Food Exchange List 4. Balanced diet 5. Factors affecting meal planning 6. Maintaining a dietary record	Quiz/ Assignments / Projects Viva
2	This will enable students to:  1. Plan balanced diets for individuals keeping in mind their physical activity, income group, social and cultural background  2. Suggest dietary modifications for common ailments	Nutrition in Adulthood  1. Planning meals for sedentary, moderate and heavy workers  2. Dietary modifications for common ailments: diarrhea, constipation, Underweight, obesity and fever	Quiz Planning and Cooking Practical Viva
3	This will enable students to:  1. Learn the physiological changes during pregnancy and lactation  2. Understand the effect of physiological changes on nutritional requirements Understand the role of	Nutrition during Pregnancy and Lactation Planning meals for various physiological conditions - Pregnancy - Lactation	Quiz Planning and Cooking Practical Viva

	nutrition in pregnancy outcome and during lactation		
4	This will enable students to:  Understand the physiological changes during growth, development and ageing and their effect on nutritional needs	Nutrition during Life cycle  1. Planning meals for different age groups - Infancy - Childhood - Adolescence - Old age	Quiz Planning and Cooking Practical Viva

#### **Evaluation:**

- **Planning = 50 marks** (including projects and assignments) (Each plan to be evaluated out of 10 marks and average to be taken)
- Cooking practical = 30 marks
  (Each cooking practical to be evaluated out of 10 marks and average to be taken)
- Quiz = 20 marks (including viva)
- Total = 100 marks.

- 1. Mudambi, S.R., Rajgopal, M.V.(2012), Fundamentals of Foods and Nutrition, New Age International Pvt. Ltd.
- 2. Food Science (2012), Maharashtra State Board of Secondary and Higher Secondary education Pune, 1<sup>st</sup> Edition, Sheth Publications.
- 3. RodaySunetra, (2012), Food Science and Nutrition, 2<sup>nd</sup> Edition, Oxford University Press.
- 4. Joshi, Shubhangini (2009), Nutrition and Dietetics ,Mcgraw Hill Higher Education.
- 5. I.C.M.R. Publications 2010, Nutrient requirement and recommended Dietary Allowances for Indians.
- 6. C. Gopalan, B.V. Rama Sastriand S.C. Balasubramanium, Nutritive Value of Indian Foods, NIN, ICMR, Hyderabad.
- 7. Robinson, and Lawler, (1990), Normal and Therapeutic Nutrition 17<sup>th</sup> Edition MacMillan Pub. Co.
- 8. Guthrie Helen (1986). Introductory Nutrition, Times Mirror/ Mosby College Publishing.
- 9. Wardlaw G.M, (1997), Contemporary Nutrition, Issues and Insights, 3<sup>rd</sup> Edition Tata McGrawHill Inc. Boston.
- 10. Guthrie, Helen (1994), Human Nutrition, William C Brown Pub.

#### **Semester III**

#### **Consumer Studies**

#### **OBJECTIVES:**

- 1. The overall goal of consumer studies is to create awareness about consumer problems in the market.
- 2. To impart knowledge regarding the role of consumer guides and agencies.
- 3. To enable the students to develop good buymanship skills in the selection of goods and services in the market.
- 4. To help the students to realize their rights and responsibilities as informed consumers

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9302	Consumer Studies	4	4	-	25	75	100

Module No.	Objectives	Content	Evaluation
1	The learner understands the term consumer and can define it.  To provide information regarding the need for consumer education.  To create awareness regarding consumer problems.	<ul> <li>CONSUMER AND CONSUMER PROBLEMS</li> <li>1.1 DEFINITION AND NEED OF CONSUMER EDUCATION</li> <li>Introduction to Consumer Problems related to goods and services</li> <li>Meaning and Objectives of Consumer Education</li> <li>1.1. CONSUMER MOVEMENT</li> <li>Background/History of Consumer Movement</li> <li>Emergence of Consumer Movement in India</li> <li>Causes for slow growth of Consumer Movement in India</li> <li>1.2. CONSUMER PROBLEMS</li> <li>Adulteration</li> <li>Faulty Weights and Measures</li> <li>Misleading Advertisements</li> <li>Other Malpractices such as lack of safety and quality control regulations, sales gimmicks, unfair warranties, massive profiteering and illegal trading.</li> </ul>	Identify 5 consumer problems related to food adulteration/ faulty weights and measures/ sales gimmicks. Interview a consumer who has faced some problem related to any one of the areas mentioned above, in the market and document the same.  10 Marks  Presentation of the report 15 Marks

Module No.	Objectives	Content	Evaluation
2	To provide knowledge regarding various consumer guides To create an understand-ing of different brands, labels and grading and standard-ization.	<ul> <li>CONSUMER GUIDES</li> <li>2.1 BRANDS</li> <li>Meaning</li> <li>Types of brands such as Individual, Family, Umbrella, Combination device and Private or Middleman's brand.</li> <li>2.2. LABELS</li> <li>Meaning and types of labels</li> <li>Essentials of labels</li> <li>2.3 GRADING AND STANDARDIZATION</li> <li>Meaning and types (Qualitative and Quantitative)</li> <li>Standardization process - grading, sampling, sorting and packaging</li> <li>2.4 ADVERTISEMENTS</li> <li>Influence of advertisements on consumers</li> <li>Usefulness of advertisements to consumers</li> <li>Misleading advertisements</li> <li>2.5 ROLE OF CONSUMER AGENCIES</li> <li>Role of BIS, AGMARK, FPO and ECO MARKS</li> </ul>	Collect 5 samples for labels from various products such as food/ medicines/cosmetics/clo thing. 10Marks Write a detailed report regarding the information given to the Consumers through these labels followed by a discussion in the class regarding the positive and negative points of the labels. 5 Marks Observe and critically analyze 5 advertisements from any media like Television/ radio / print media and write a detailed report followed by a discussion in the class.  10 Marks

Module No.	Objectives	Content	Evaluation
3	To help students make better decisions in the market as a wise consumer.	3.1 CONSUMER DECISION MAKING  3.1 CONSUMER DECISIONS  Decision making process  • Problem recognition  • Information seeking  • Equation of alternatives  • Buying decisions  • Post purchase evaluation  3.2 GOOD BUYMANSHIP	Observe how decision making process is used, in your own family for the purchase of some consumer product like refrigerator/television/ food processor/ washing machine and write a report 25 Marks

Module No.	Objectives	Content	Evaluation
4	To make the learners aware about their protection from the malpractices in the market.  To create an understanding about different rights and responsibilities among the students. To inform the students regarding various Acts and Agencies	4.1 NEED FOR CONSUMER PROTECTION 4.2 CONSUMER RIGHTS  Right to be heard Right to choose Right to be informed Right to seek redressal Right for Protection Right to Basic needs Right to Consumer Education Right to secure ecological balance 4.3 CONSUMER RESPONSIBILITIES 4.4 CONSUMER ACTS AND AGENCIES Acts: COPRA, Agencies: CGSI, CERC, CFBP	A written report on Role of Consumer Agencies like CGSI/ CERC/CFBP in consumer protection. 10 Marks  Procedure for Redressal for a consumer problem. 15Marks

- 1) On Four Modules of 25 marks
- 2) External examination 75 marks
- 3) Total: Internal 25 + External 75 = 100 marks

- 1. AggarwalAnju D. "A practical Handbook for Consumers",1989, India Book House (Pvt) Ltd. Mumbai, India.
- 2. C.N.Sontakki, R.G. Deshpande "Marketing, Salesmanship and Advertising" Kalyani Publishers, New Delhi Ludhiana, 1984.
- 3. Dr. S.C.Saxena "Business Administration and Management".
- 4. Kotler Philip Principles of Marketing Prentice Hall of India Pvt. Ltd, New Delhi, 1985.
- 5. Nair Suja "consumer Behaviour" Text and Cases Himalaya Publishing House, 1999.
- 6. Niraj Kumar "Consumer Protection in India" Himalaya Publishing House, New Delhi.
- 7. S.A. Chunawala "Commentary on consumer Behaviour" Himalaya Publishing House, New Delhi.
- 8. S. A. Sherlekar, P.N. Reddy, H.R. Appannaiah "Essentials of Marketing Management" Himalaya Publishing House, Mumbai, 1995.
- 9. S.S. Gulshan "Consumer Protection and Satisfaction" wileyEastem Ltd, New Delhi, 1996.
- 10. Sheth J.N. "Model of Industrial Behaviour". Journal of Marketing 1973, 37 [4].
- 11. Sundaram I.S. "Consumer Protection in India" B.R. Publishing Corporation, Delhi, 1985.
- 12. V.S. Ramaswamy, S.Namakumari, "Marketing Management", Second Edition, McMillian India Ltd, New Delhi, 1997.

# **Semester III**

# **Family Dynamics**

#### **OBJECTIVES:**

- 1. To sensitize the student towards marriage and family life.
- 2. To understand the traditional and changing norms of the institution of the family with reference to its social environment.
- 3. To get familiar with the concept of marriage and the areas of adjustments within the family
- 4. To becomes aware about dynamics of family interactions and developmental tasks through family life
- 5. To becomes aware of problems in families and ways of coping

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9303	Family Dynamics	4	3	1	25	75	100

#### (THEORY)

Module No	Objective	Content	Evaluation
1	<ol> <li>This will enable students to:-</li> <li>To analyze the traditional and changing norms of institution of family.</li> <li>Be sensitive to variations in family practices of different ethnic groups.</li> <li>Understand stages of family life cycle.</li> <li>Create insight about the types of family.</li> <li>Identify alternate family patterns.</li> <li>Explore the dyadic relationships in family.</li> <li>Analyze the areas &amp; patterns of adjustments</li> <li>Bring awareness &amp; sensitize oneself about crisis in family life.</li> </ol>	<ol> <li>Family &amp; its structure</li> <li>Meaning of the term family</li> <li>Family composition &amp; structure</li> <li>Practices &amp; Patterns of family</li> <li>Changing family patterns</li> <li>Family life cycle: meanings, definition &amp; stages.</li> <li>Types of family</li> <li>Alternate family patterns:         <ul> <li>Causes, characteristics &amp; implications.</li> </ul> </li> <li>Dyadic relationships         <ul> <li>Family Responsibilities</li> </ul> </li> <li>Adjustments &amp; Crises within the family</li> <li>Areas &amp; patterns of Adjustment</li> <li>Meaning of crisis; Types of family crises &amp; ways of coping</li> </ol>	Use of experiential method by students: Role play, skit. etc. 5 marks  Poster making and exhibition 5 marks

Module No.	Objective	Content	Evaluation
2	<ol> <li>This will enable students to:-</li> <li>To understand the institute of marriage</li> <li>Develop awareness in mate selection process.</li> <li>Understand the goals of modern marriage.</li> <li>Know and realize the importance and need for pre &amp; post marital counseling.</li> <li>Create deeper insight into the concept of engagement.</li> <li>Understand the functions of traditional marriage.</li> <li>Gain knowledge about types of marriage.</li> </ol>	Marriage 1. To understand the concept of "Marriage as an Institution" 2. Mate Selection 3. Goals of modern marriage 4. Preparing oneself for marriage 5. Pre marital and post marital counseling 6. Engagement 7. Marriage rituals & Court marriage 8. Honeymoon 9. Annulment & Divorce & Marriage Counselling	Group presentatio n on any above topics, 10 marks

Module No.	Objective	Content	Evaluation
3	<ol> <li>This will enable students to:-</li> <li>Understand know how of Planned Parenthood.</li> <li>Get acquainted with family planning methods.</li> </ol>	Planned Parenthood  1. Concept & significance of Planned Parenthood.  2. Joys and hazards of parenting  3. Birth control  4. Parenthood (parenting at different ages)	Guest Lecture on family planning methods followed by objective test. 5 marks

- 1) Internal: Continuous evaluation on Four Modules = 25 marks
- 2) External examination -75 marks
- Total: Internal 25 + External 75 = 100 marks

#### (PRACTICAL)

Module No.	Objectives	Content	Evaluation
	This will enable students to -  1. understand and become aware about different alternate families	Family and its structure  1a. Survey report: different alternate families.	5marks

4	2. have an exposure through media	1b. Role play and skits	5marks
	3.get acquainted with different family planning methods	2.Films ,Movies, Review of the teleserials presenting/ focusing families	
	4. get knowledge and aware about pre and post marital counseling	<ul><li>3. Guest lecture and resource person.</li><li>4.seminar and workshops on counseling</li></ul>	5marks
			10marks

#### **REFERENCES:**

Benokraitis, V. N. (2011). Marriages and Families: Changes, Choices and Constraints, 7<sup>th</sup> edition, Prentice hall, New Jersey.

Blood, Robert and Wolfe (1960). Husband and Wife: Dynamics of Married Life, Free Press, New York.

Coleman, C.J. (1988) Intimate Relationships, Marriage &Family (2<sup>nd</sup> Ed.). New York: Macmillan Publishing Company.

Duvall, E.M. (1977). Marriage and Family Development, 5<sup>th</sup> edition, Lippincott Co. Philadelphia.

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Henslin, J. M. (ed.) (1989). Marriage and Family in a Changing Society, The free press, U.S.A.

# **Semester III**

# **Media Skill Development**

## **Objectives:**

- 1. To develop awareness about various forms of mass media.
- 2. To analyze the role of media in educating the masses.
- 3. To acquire the skills to design messages for communication
- 4.To develop skills in preparing and presentation of the different forms of media

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9304	Media Skill Development	4	3	1	25	75	100

Module No.	Objectives	Content	Evaluation
1	<ol> <li>Develop awareness of the need and importance of Mass-Media.</li> <li>Analyze the relationship between media and message.</li> <li>Learn writing for different media.</li> </ol>	<ul> <li>Mass Media:</li> <li>1. Concept of Mass Media, its importance and its role in development of society.</li> <li>2. Relationship of Medium and Message.</li> <li>3. Writing for different Media.</li> </ul>	Continuous assessment and project 25 marks

Module No.	Objectives	Content	Evaluation
2	<ol> <li>Become aware of different forms of media.</li> <li>Understand the role and importance of print, electronic, new and traditional media for development.</li> <li>Be able to select the appropriate form of media for Extension activities.</li> </ol>	<ol> <li>Forms of Media:</li> <li>Print Media- Newspapers,         Magazines, Periodicals.</li> <li>Electronic Media- Television,         Radio, films.</li> <li>New Media- Cell phones and         Internet.</li> <li>Traditional Media- Folk Media         including puppetry.</li> </ol>	Continuous assessment 25 marks

Internal: Continuous evaluation - 25 Marks

External :75 Marks

Total : Internal - 25 + External - 75 = 100 marks

Module No.	Objectives	Content:	Evaluation
3	<ol> <li>This module will enable students to:</li> <li>Understand how to identify and analyze articles on social issues in print media.</li> <li>Be able to analyze the content and form of electronic media.</li> <li>Develop the skill of preparing A.V. clipping</li> </ol>	Forms of Media:  1. Identify and analyze articles on social issues in Newspapers, Periodicals and Magazines.  2. Analysis of the content and form of Television Programmes.  3. Preparation of clippings on contemporary issues.	5 marks 5 marks 10 marks

Module No.	Objectives	Content:	Evaluation
4	<ol> <li>This will enable students to:</li> <li>Develop skills in writing for print media.</li> <li>Be able to develop programme for radio.</li> </ol>	<ul> <li>Media Skills:</li> <li>1. Planning and writing an article for Newspapers, Magazines on developmental issues.</li> <li>2. Preparing a format for radio</li> </ul>	7 marks
	3. Acquire skills in preparing the different forms of traditional media.	programme.  3. Preparation and presentation of traditional media- puppets and Street plays.	8 marks 15 marks

- 1. Kumar, K. J. (2001) Mass Communication in India, Jayco Publishing House, Mumbai
- 2. Modi, Bella (1991) Designing Messages for Development Communication- audience participation based approach, Sage Publication, New Delhi
- 3. Raidu C.S. (1993) Media and Communication Management, Himalaya Publishing House, New Delhi

# **Semester III**

# **Fabric Ornamentation & Accessory Design**

#### **OBJECTIVES:**

- 1.To familiarize the student with the role and application of various types of accessories used in Fashion Business.
- 2.To get acquainted with various materials used as accessories.
- 3.To learn to mix match different materials and accessories to suit.

Code No.	Course	TC	Th C	Pr C	Int M	Ext M	Total
9305	Fabric Ornamentation & Accessory Design	4	-	4	100	-	100

Module No.	Objective	Content	Evaluation
Module No.	Objective  1.To learn various embroidery stitches  2.To learn various painting techniques  3.To learn application of beads, sequences etc.	Fabric ornamentation by  Embroidery/ fabric painting.  To make any two articles with given techniques.  1. Kantha / Kasuti embroidery on dupatta/stole. OR  2. Satin embroidery on dupatta/ stole.  1. Fabric painting on handkerchiefs/ Table cover/ Apparel OR	For any two articles or applications 15+10 marks (25 Marks)
		2. Tie and dye on scarf/ dupatta/ stole	

Module No.	Objective	Content	Evaluation
	1. To learn various	Ornamentation	25 Marks
	knots of macramé.	To make any two articles with suitable	
	2.To learn various techniques of	techniques.	For any two

	crochet	1. Smocking technique on cushion cover	articles or
2	3. To learn technique of	OR	applications
	appliqué/patch work.	2. Bag/ purse with appliqué work/patch	15+10 marks
		work. OR	(25 Marks)
		3. Waist belt by Macrame OR	
		4. Edgings with crochet dupatta/handkerchief/ sleeve/neck lines.	

Module No.	Objective	Content	Evaluation
	To learn various     methods of making     jewelry.      To learn finishing	Fashion Jewelry/Shoe decoration To make any one set of jewelry  (necklace, bangle/bracelet, earrings) with suitable material.	25 Marks
3	techniques.  3. To learn to use various materials for making jewelry	(Traditional or funky type) OR  Shoe decoration with suitable technique.	For any one article or application

Module No.	Objective	Content	Evaluation
4	To apply learned technique to make the article	Any article by using textile material. For example - borders /jean fabrics, dupatta, left over fabric pieces, etc. to make wall hangings or decorative pieces, etc.	25 Marks  For selection of article and application

- 1. Continuous internal evaluation of 100 marks (each module 25 marks)
- 2. No Externals to be conducted.

#### **REFERENCES**:

S. No. Title of the Book Author

1 Anchor-educational service-(2007 & 2008 series)

2	Anchor needle & thread (2007 & 08 series)	
3	The step by step Art of Ribbon work	Anita Aarrison
4	The complete book of needle craft	Caroline Ollard
5	Making leather handbags	Ellen Goldstein Lyrich Sarah, &Micole Malone
6	The new needle craft project book	Lucinda Ganderton
7	Creative crochet	Locias Calder's
8	Fabulous Fabrics	Mary Jo Hinely
9	Making handbags—Retro/Chic/Luxurious	
10	Complete guide to crochet	Pam Dawson

# CODE NO: 05 Textile Science and Apparel Design SEMESTER IV

Code No.	Course		TC	Th C	Pr C	Int M	Ext M	Total
0541	Textile Science	(a)	4	3	1	25	75	100
0542	Basic Pattern Making & Grading	(a)	4	-	4	100	-	100
0543	Fundamentals of Apparel Merchandising & Marketing	(b)	4	4	-	25	75	100
0544	Traditional Textiles and Embroide of India	eries (b)	4	3	1	25	75	100
0545	Soft Skills Development	(b)	4	4	ı	100	1	100
	TOTAL		20	14	06	275	225	500

#### **SEMESTER V**

Code No.	Course		Th C	Pr C	Int M	Ext M	Total
0551	Basic Fashion Illustration (b)	4	-	4	100	-	100
0552	Textile and Garment Quality Control (a)	4	2	2	25	75	100
0553	Fashion Apparel Design (a)	4	-	4	25	75	100
0554	Textile Chemistry (a)	4	3	1	25	75	100
0555	Recent Advances in Textile Science and Apparel Design (Seminar) (b)	2	-	2	50	-	50
9356	Women's Studies (c)	2	2	-	50	-	50
	TOTAL		07	13	275	225	500

#### **SEMESTER VI**

Code No.	Course		TC	Th C	Pr C	Int M	Ext M	Total
0561	Wet Processing	(a)	4	2	2	25	75	100
0562	Fabric Construction and Analysis	(a)	4	2	2	25	75	100
0563	Theory of Knitting	(a)	4	4	-	25	75	100
0564	Professional Application in Textile Sc. & Apparel Design (Internship) (b)		8	1	8	100	100	200
	TOTAL		20	08	12	175	325	500

TC = Total Credits, Th C = Theory Credits, Pr C = Practical Credits Int M = Internal Marks, Ext M = External Marks

#### **PROGRAMME: B.Sc. in Home Science**

#### **Semester IV**

## **OBJECTIVES**:

The students will -

- 1. acquire the knowledge of different kinds of natural and man-made fibers.
- 2. understand the fabric behavior with reference to fiber, yarn and fabric properties
- 3. develop an understanding of different kinds of blends.
- 4. acquire the knowledge of different types of finishes.
- 5. learn to identify fiber blends and their percentage.
- 6. acquire the knowledge of various application of Textile fibers.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Textile Science	4	3	1	25	75	100

Module No.	Objective	Content	Evaluation
1	The students will:  1. Acquire the knowledge of different kinds of natural and man-made fibers.  2. Learn to identify fiber blends and their percentage.  3. Develop an understanding of different kinds of blends.  4. To understand the fabric behavior with reference to fiber, yarn and fabric properties.	FIBRES CLASSIFICATION, PROPERTIES BLENDING & FABRIC GEOMETRY  1. Fiber classification (TFPIA) Primary and secondary properties 2. Fiber identification 3. Polymerization 4. Chemical spinning 5. Mixtures and Blended Fabrics i. Definition of blended & mixed fabrics as ASTM ii. Reasons for mixing and blending. iii. Problems with mixtures and blends. iv. Advantages & disadvantages of blending v. Methods of blending. 6. Fabric Geometry i. Definition. ii. Geometric factors: Durability factors-Strength, Abrasion Resistance. Aesthetic factors - Wrinkle Recovery Comfort factors- Air Permeability, Moisture Relationship	Assignment Individual: 25 Marks

Module No.	Objective	Content	Evaluation
2	The students will:  1. Acquire the knowledge of different kinds of man-made fibers.  2. Acquire the knowledge of various applications of Textile fibers	<ol> <li>MANUFACTURING PROCESSES, PROPERTIES AND USES OF TEXTILE FIBRES</li> <li>Man-made Regenerated cellulosic fibres Viscose Rayon, and Polynosic Rayon</li> <li>Modified Cellulosic Fibres – Acetate.</li> <li>Polyamide fibres – Nylon 6 and Nylon 66, Nomex &amp; Kevlar (in short)</li> <li>Polyester fibres – Terelene</li> <li>Acrylic and Modacrylic fibres</li> <li>Olefin fibres – Polythylene, Polypropylene (Properties &amp; application only)</li> <li>Elastomeric Fibres – Spandex, Lycra</li> </ol>	Assignment Group 25 Marks

Module No.	Objective	Content	Evaluation
3	<ol> <li>The students will:</li> <li>Acquire the knowledge of different types of finishes.</li> <li>Learn about classification of textile finishes.</li> <li>Gain knowledge about functions of different textile finishes.</li> </ol>	<ol> <li>TEXTILE FINISHES</li> <li>Classification of finishes</li> <li>Definitions and uses of following finishes</li> <li>Basic routine finish – Tentering,         Mercerization, Calendaring</li> <li>Special finishes - Carbonizing,         Weighting, Degumming.</li> <li>Finishes for appearance, hand - Heat         setting, Embossing surfaces,</li> <li>Special finishes to improve performance         of fabrics- Antistatic finish, , Flame         Retardant finish, Moth proofing finish,         Stain -&amp; Soil Resistant finish, Water         Repellent &amp; Waterproof finish</li> </ol>	Assignment Quiz- 25 marks

Module No.	Objective	Content	Evaluation
4	The students will:  1. Develop skill in identifying different types of textile fibers & their blends  2. Analyze percentage of fibers in the blends.	IDENTIFICATON OF FIBERS BY MICROSCOPIC, BURNING AND CHEMICALTESTS  1. Identification of Pure Fibres:  i. Cotton ii. Jute iii. Wool iv. Silk v. Viscose Rayon vi. Nylon vii. Polyester viii. Acrylic 2.Identification of Blends:  Qualitative analysis  i. Teri cot ii. Cots wool (As per availability) iii. Teri viscose iv. Teri wool v. Cotton /acrylic Or any other latest blends, mixtures available in the market. 3. Quantitative analysis of Blends: i. Teri cot ii. Cots wool or silk and cotton blend (As per availability) iii. Teri viscose iv. Teri wool Demonstration of 1 sample by teacher and 1 sample performed by students in a group. (All the above blends should be included)	Assignment Continuous Assessment 25 Marks  External: 15 marks (1 blend sample for 60 minutes)
		a group. (All the above blends should	

**Theory:** Internal: 15 marks and External: 60 marks

Practical: Internal: 10 marks and External: 15

Credit	Credit	Internal	Internal	External	External	Total
TH	PR	TH	PR	TH	PR	
3	1	15	10	60	15	100

- 5) Internal: Theory 15 marks + Practical -10 marks = 25 marks
- 6) External: Theory 60 marks + Practical 15 marks = 75 marks
- 7) Total: Internal 25 + External 75 = 100 marks

- 1. Collier Billie & Epps, Helen (1999)- Textile Testing and Analysis, Upper Saddle River, Merill Publishing
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  - Hess K.P. (1966) Textiles Fibers and their use 6th edition, Calcutta: Oxford & IBH Pub.
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  - 7. Joseph M,.(1993) Introductory Textile Science, 6<sup>th</sup> Ed, Fort Worth Harcourt Brace Jovanovich College Publishers.
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## **PROGRAMME: B.Sc. in Home Science**

#### **Semester IV**

# **OBJECTIVES:**

- 1. To understand three methods of clothing construction.
- 2. To understand flat pattern method to design Apparel with various patterns.
- 3. To develop skills in designing various apparels as per fashion trend.
- 4. To acquire skills in sewing variety of patterns with accuracy, good taste by basic pattern adaptations.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Basic Pattern Making & Grading	4	-	4	100	-	100

Module No.	Objective	Content	Evaluation
1.	<ol> <li>To recognize the importance of accurate body measurements in order to make standard garments.</li> <li>To become aware of various types of standard measurement charts.</li> <li>To understand three methods of clothing construction</li> </ol>	<ul> <li>Tools and Equipments required for pattern making and grading.</li> <li>Study of standard measurement charts and various types of figures (example ladies figure, men's figure)</li> <li>Introduction to three methods of clothing constructions namely drafting, flat pattern method, and draping method.</li> <li>Introduction to Flat Pattern Method:         <ul> <li>Slash and Spread method</li> <li>Pivot method.</li> </ul> </li> </ul>	Journal 25 marks

Module No.	Objective	Content	Evaluation
2.	<ol> <li>To learn slash &amp; spread method to adopt various basic patterns.</li> <li>To understand flat pattern method to design apparels with various pattern.</li> </ol>	The following adaptations with slash and spread method on half scales 'Basic Bodice Blocks':  • DARTS, • YOKES AND FULLNESS • SLEEVES • COLLARS  Any six Patterns of each unit to be made on half size bodice basic block on paper only.  • SKIRTS  Any four Patterns to be made on half size bodice basic block on paper only	Journal 25 marks

Module No.	Objective	Content	Evaluation
3.	<ol> <li>To develop skills in designing various apparels as per fashion trend.</li> <li>To develop skills in sewing variety of patterns with accuracy, good taste by basic pattern adaptations.</li> </ol>	<ul> <li>Any one pattern on full scale basic bodice block to be made on fabric.</li> <li>Any two patterns on full scale combining the features from Module 2. (Kurta &amp; Top)</li> </ul>	25 marks

Module No.	Objective	Content	Evaluation
4.	<ol> <li>To understand the various types of Grading.</li> <li>To develop an ability to grade various patterns to desired sizes.</li> </ol>	<ul> <li>Definition of grading</li> <li>Making of Split diagrams using various standard measurement charts.</li> <li>Converting split diagrams into grade plans</li> <li>Various types of grading         <ul> <li>Nested Grading</li> <li>Track Grading</li> <li>Stock Grading</li> </ul> </li> <li>Grading with any one method         <ul> <li>skirt (A line only)</li> <li>Basic Front and Back bodice</li> <li>Basic set in Sleeves</li> <li>Collar (Any one basic)</li> </ul> </li> </ul>	Journal 25 marks

1] Continuous Internal Assessment of 100 Marks.

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- Bishop Edua B. and Arch M.S.Z. (1960), The Bishop method of clothing construction. Revised Edition, J.B. Lippmeof.
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- 20 Tanous, (1984), Designing Dress Pattern.
- 21 Zarapkar A,( 1987), The ABC's of Grading by Murray Scheier.

### **Semester IV**

## **OBJECTIVES:**

- 1. To understand the concept of marketing.
- 2. To learn general principles of marketing, sales, quality, packaging, distribution, advertising, branding, marketing research etc.
- 3. To understand the current scenario of business.
- 4. To gain the basic knowledge of international marketing.
- 5. To gain knowledge about the merchandising activities.
- 6. To develop skills and qualities needed for merchandiser
- 7. To learn framework for practical application of merchandising tools in solving problems and in taking correct business decisions. .

8. To enhance organizational performance by utilizing concepts involving individual behavior within an organization

Course	TC	ThC	PrC	IntM	ExtM	Total
Fundamentals Of Apparel Merchandising And Marketing	4	4	-	25	75	100

Module No.	Objective	Content	Evaluation
1	<ol> <li>Gain         Knowledge about the merchandising activities.     </li> <li>Develop skills and qualities needed for a merchandiser.</li> </ol>	<ol> <li>Introduction</li> <li>Definition</li> <li>Functions of Merchandising Organizing structure.</li> <li>Scope of Activities.</li> <li>Qualities needed, skills required.</li> <li>Role of Merchandiser in Garment production Units.</li> <li>Sampling and Sourcing</li> <li>Sampling Process and Garment development         <ul> <li>Buyer's specifications</li> <li>Pattern Making, Cutting, Stitching, Finishing and Accessories.</li> <li>Selection, Product design and development.</li> </ul> </li> </ol>	25 marks Assignment To prepare buyer's specification sheet.  To design a product to be developed

Module No.	Objective	Content	Evaluation
2	1. Explore the practical application of merchandising in solving problems and in taking correct business decisions. 2. Understand the current scenario of business 3. Understand the various domains of costing and budgeting. 4. Develop awareness about International commercial Terms.	<ul> <li>Current Market trends</li> <li>3Fashion Trends</li> <li>2.Costing/ Pricing and Budgeting</li> <li>Preparation of budget, Cash Flow, Break Even Point</li> <li>Elements of Costing of different Garments.</li> <li>3. Pricing Decisions</li> <li>Objectives</li> <li>Importance</li> <li>Factors affecting pricing</li> <li>4.International Commercial Terms (In brief)</li> <li>Cost Insurance</li> <li>Buyers Documents</li> <li>Purchase Requisitions</li> <li>Purchase Order</li> <li>Export documentations like Letter of credit, Performa Invoice, Sellers bill to buyer, Quality and Inspection Documents.</li> </ul>	25 marks  To prepare budget or costing for designed product

Module No.	Objective	Content	Evaluation
3	Understand the concept of Marketing.	<ul> <li>1. The Basics of Marketing</li> <li>Definition and Importance of Marketing</li> <li>Role of Marketers and Marketing</li> <li>2.Marketing research</li> <li>Definition of Marketing Research</li> <li>Role of Marketing Research</li> <li>3.Consumer Behaviour- Product and Brand</li> </ul>	25 Marks  To collect information data of consumer buying behavior, product / brand preferences etc.

Module No. Objective	Content	Evaluation
Learn the general principles of marketing, sales, quality, packaging, distribution, advertising, branding, marketing research etc.	<ul> <li>Advertising and importance of advertising.</li> <li>Sales promotion and their objectives Types of customer sales promotion</li> <li>Coupons</li> <li>Rebates</li> <li>Samples</li> <li>Free Product</li> <li>Demo Indoor/ Outdoor</li> <li>Point of purchase (POP)</li> <li>Trade fair</li> <li>Incentive allowance</li> <li>Back to Back sales promotion</li> <li>Window displays</li> <li>Fashion Shows</li> <li>Strategic planning</li> <li>Importance/objective</li> <li>Marketing plans &amp; types</li> <li>Types MP</li> </ul>	To find out different sales promotional techniques used in textiles/apparel industry.  Or  To find out effective sales promotional technique in textiles.  Or  To prepare a marketing plan to introduce or promote product.

- 1. Internal: 4 modules to be considered -25 marks
- 2.External- 75 marks
- 3. Total :Internal 25 + External 75 = 100 marks

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- 2) Donnellan, John 1996, Merchandise buying & management, New York Fairchild Publications.
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- 4) Govindarajan, M & Natrajan, S, 2005: Principles of Management, New Delhi, Prentice Hall of India Pvt Ltd.
- 5) Stone, E., 1985, Fashion Merchandising 4th Ed, New York Macmillan Book.
- 6) Sherlekar, S. A., 1985, Marketing Management (13<sup>th</sup> Rev Ed) Mumbai, Himalaya Publishing House.
- 7) <u>www.textilemaster.net</u>, Pocket Textile Merchandising & Marketing Expert.
- 8) Swapna Pradhan, Retail Management, Tata Mcgraw Hill Pub, Co, Ltd, New Delhi.

### PROGRAMME: B.Sc. IN HOME SCIENCE

#### **Semester IV**

## **OBJECTIVES:**

- 1. To acquire knowledge of different textiles produced in different states of India.
- 2. To acquaint the students with the different motifs, colors and weaving techniques used in the textiles along with their significance.
- 3. To acquire knowledge of various embroideries done in India with the historical background of each.
- 4. To learn different types of stitches, motifs, colors and materials used in the embroideries and their significance
- 5. To acquaint the students with the work of handloom board, khadi board in India.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Traditional Textiles & Embroideries of India	4	3	1	25	75	100

Module No.	Objectives	Content	Evaluation
	1. To acquire knowledge of different textiles produced in different states of India.  2. To acquaint the	<ol> <li>Introduction in brief about the         Traditional Textiles and Embroideries in India.     </li> <li>Influence of foreign countries on Indian Embroidery.</li> <li>Textiles of the following States listed</li> </ol>	25 marks  Traditional textiles -
1.	students with the different motifs, colors and weaving techniques used in the textiles along with their significance.	below:  Fiber used colors, motifs and weaving techniques used for the producing traditional textiles.	state wise (Group project)
		Maharashtra, West Bengal, Andhra Pradesh, Gujarat, Saurashtra, Kutch, Rajasthan, Uttar Pradesh, Orissa, Karnataka, Kerala, Madhya Pradesh, Tamil Nadu, Assam, Jammu & Kashmir, Punjab, Manipur.	

Module No.	Objectives	Content	Evaluation
2.	1. To acquire knowledge of various embroideries done in India with the historical background of each.  2.To learn different types of stitches, motifs, colors and materials used in the embroideries and their significance	<ol> <li>Embroideries of the following states listed below.</li> <li>Embroidery of the following States regarding history, materials used, stitches, motifs, colors, their significance and descriptive terms used per motifs.</li> <li>Kasturi of Karanataka</li> <li>Embroidery of Sindh, Kutch and Kathiawar</li> <li>Kashida of Kashmir</li> <li>Kantha of Bengal</li> <li>Chikankari of Uttar Pradesh</li> <li>Manipuri Embroidery</li> <li>Applique work of Bihar and Orissa</li> <li>Phulkari of Punjab</li> <li>Chamba Rumal</li> <li>Gold and silver</li> </ol>	25 marks  Collection of designs State-wise

Module No.	Objectives	Content	Evaluation
3.	To acquaint the students with the work of handloom board, khadi	Handloom Industry of India  1 History of Handloom Board  2 Functions of Handloom Board	25 marks  Visit any sector and report presentation on it.
	board in India.	3 Weaver's service centers	Visit an Industrial
		Khadi Board	& small scale embroidery unit
		1 Structure of Khadi Board	
		2 Functions of Khadi Board	

Module No.	Objectives	Content	Evaluation
4.	<ol> <li>To learn the stitches used in the Embroidery of different states.</li> <li>To acquire knowledge of different motifs and colors used in the Indian Embroidery with their significance.</li> </ol>	<ol> <li>Frame and prepare a samples with Traditional embroidery motifs. Any 5 embroidery motifs to be done on the sample</li> <li>Plan and design any one article/garment by application of the traditional embroidery stitches.</li> </ol>	25 marks  Application of embroidery on garment  Or  Samples

Proposed evaluation pattern for new modular structure syllabus						
Credit   Credit   Internal   Internal   External   External   Total						Total
TH	PR	TH	PR	TH	PR	
3	1			60	15	100
		Average of module 1 to 4=25				

- 1] Internal assessment for module 1-4= 100/4=25
- 2] Theory External Marks = 60
- 3) Practical External exam marks =15

#### **References:**

- 1. Jamila B. B. (1958). *Costumes and Textiles of India* Bombay Taraporevala's treasure house of books.
- 2. Chattopadhyaya K.(1969) *Carpets & Floor covering of India.* Taraporevala.
- 3. Dongerkery Kamala (1951) *Romance of Indian Embroidery* Mumbai Thacker & Company.
- 4. 4. <u>Dhamija</u> J. & <u>Jain</u> J. (1989) *Hand woven Fabrics of India* Mapin Publisher
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- 7. Mehta R.J. Masterpieces of Indian Textiles
- 8. Naik S. D. (1996) Traditional Embroidery of India. APH Publishing,
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### **Semester IV**

## **OBJECTIVES:**

- 1. To improve confidence level of the student by enhancing their communication skills
- 2. To equip students with employability skills so as to enhance career opportunities
- 3. To enable students to make timely and productive decisions so as to enable their career advancement
- 4. To train students on how to project a professional image at the workplace

Course	TC	Th C	Pr C	Int M	Ext M	Total
Soft Skills Development	4	4	-	100	-	100

Module No.	Objective	Content	Evaluation
1	<ul> <li>The learners will be able-</li> <li>To understand the processes of both interpersonal and public communication</li> <li>To prepare for, and deliver an effective formal presentation</li> </ul>	Effective Communication skills 1. Processes of Communication 2. Barriers to Communication- external and psychological 3. Hints for effective verbal delivery 4. Preparing an outline for a formal presentation	Assignments Students must prepare the outline/ structure of a given topic - 15 marks And present the same in a short 10 min. presentation with visual aids -10 marks

Module No.	Objective	Content	Evaluation
2	<ul> <li>The learners will be able -</li> <li>To understand the correlation between self-esteem and image building</li> <li>To enhance self-confidence through improved body language</li> <li>To understand the importance of etiquette in professional interactions</li> <li>To learn techniques of stress management</li> </ul>	Image building Self-Esteem 1. Impact of Body Language 2. Power dressing/grooming 3. Etiquette/Cross cultural interactions 4. Managing Stress Students are required to convey the required etiquette in given professional /cross cultural situations Stress management techniques of student's choice	Role play 15 marks  Presentation 10 marks

Module No.	Objective	Content	Evaluation
3	<ul> <li>The learners will be able-</li> <li>To prepare effectively for an interview</li> <li>To participate in a group discussion with confidence</li> <li>To prepare a professional resume</li> </ul>	<ol> <li>Enhancing Employability</li> <li>Preparing for an interview</li> <li>Appearing for an interview</li> <li>Writing an effective resume</li> <li>Methods and procedures in group discussions</li> <li>Assessment Criteria</li> <li>preferably conducted by an expert from the industry</li> <li>Students must submit it in stipulated format.</li> <li>A group of 10 students are asked to discuss a given topic for duration of 15 minutes. The remaining students will act as evaluators</li> </ol>	Assignments  Mock interview 10 marks Personal Resume 10 marks Group Discussion 5 marks

Module No.	Objective	Content	Evaluation
4	The student will be able -  • To understand the processes wherein one can arrive at a decision  • To set their personal short term and long term goals  • To understand techniques of problem solving	<ol> <li>Decision Making</li> <li>Goals - short term and long term</li> <li>Setting personal goals</li> <li>Importance of Time Management in achieving goals</li> <li>Steps towards making an effective decision</li> <li>Analytical skills and potential problem analysis</li> <li>Students will be given a case study wherein they will have to come to root cause/arrive at a situational analysis.</li> </ol>	Assignment 25 marks 15 Marks for written analysis + 10 marks for presentation

1. Continuous evaluation of 100 marks on all four Modules

#### References

- 1) Agrawal, Deepak. (2011) Group discussion: theory and technique. Jaipur: Yking.
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### **Semester V**

## **OBJECTIVES:**

- 1. To help students to understand the concept of fashion illustration and fashion designing.
- 2. To impart skill in making of Basic Silhouettes and variation.
- 3. To enable the students to develop skills in designing fashion accessories.
- 4. To help students in gaining confidence in fashion illustration and designing so as to sustain in the highly competitive market.

Course	TC	ThC	PrC	IntM	ExtM	Total
Basic Fashion Illustration	4	-	4	100	-	100

Module No.	Objective	Content	Evaluation
1	The learners willdevelop the skills in making of Croqui and its movement.	<ul> <li>1. Human Anatomy</li> <li>Introduction of human anatomy and proportions</li> <li>2.Croqui And Movement</li> <li>Croqui and movement- showing different movements and mechanical poses (leg and hand movement, front back and ¾ view), 8 head,10 head and 12 head croqui for women, men and children.</li> </ul>	10 marks

Module No	Objective	Content	Evaluation
2	The learners will understand the law of fabric suspension	<ul> <li>1. Accessory Designing</li> <li>Accessory details to show Indian and western look that go well with the garment. (1 or 2 examples to give basic concepts) such as jewelry, bags, shoes, hats, watches, purses, umbrella, hair styles etc.</li> <li>2. Basic Necklines, collars, sleeves and Variations</li> </ul>	5 marks

1		1
Ohioctivo	<ul> <li>Drawing of different neckline patterns (Any 10)</li> <li>Drawing of different collars patterns (Any 10)</li> <li>Drawing of different sleeves patterns (Any 10)</li> <li>3.Law of Fabric Suspension</li> <li>Rendering different fabrics and falls such as cotton, chiffon, silk, pleats, frills, ruffles, gathers, Denim, leather, fur, terry pile effects etc.</li> </ul>	10 marks  Evaluation
Objective	Content	Evaluation
The learners will learn to illustrate according to the type of material and design details.	<ul> <li>Possibilities of different patterns in different sizes and their dress details such a print, weaves, embroideries etc.(Make 10 samples of the above)</li> <li>Basic Silhouettes and Variations</li> <li>5 basic types of silhouettes of women garments.</li> <li>Variation in designing. (Any5 sets of basic women's, men and children garments designs)</li> </ul>	10 marks 15 marks
Objective	Content	Evaluation
The learners will understand the concept of suitable colors for various age groups and personality types.	1. Preparation of Mood board, colour palette, collection of fabric swatches for the theme based fashion Apparel Designing.  2. Illustration of Theme Based Fashion Apparel for Women.  • Wedding wear • Sports wear • Swim Wear • Casual Wear • Evening Wear and Party Wear • Street Wear  (Illustrate any 2 themes of the above)	10 marks
	will learn to illustrate according to the type of material and design details.  Objective  The learners will understand the concept of suitable colors for various age groups and personality	Drawing of different collars patterns (Any 10)     Drawing of different sleeves patterns (Any 10)     3.Law of Fabric Suspension     Rendering different fabrics and falls such as cotton, chiffon, silk, pleats, frills, ruffles, gathers, Denim, leather, fur, terry pile effects etc.  Objective  The learners will learn to illustrate according to the type of material and design details.  Possibilities of different patterns in different sizes and their dress details such a print, weaves, embroideries etc. (Make 10 samples of the above)  2. Basic Silhouettes and Variations  • 5 basic types of silhouettes of women garments. • Variation in designing. (Any5 sets of basic women's, men and children garments designs)  Objective  Content  1. Preparation of Mood board, colour palette, collection of fabric swatches for the theme based fashion Apparel Designing.  2. Illustration of Theme Based Fashion Apparel for Women.  • Wedding wear • Sports wear • Sports wear • Swim Wear • Casual Wear • Evening Wear and Party Wear • Street Wear

1) Internals: All Four Modules of 25 marks each

2) No External examination3) Total : Internal =100 marks

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- 7) McKelvey, Kathryn & Munslow, J. Anine, (2007), Illustrating fashion. (2nd Ed.).Oxford, Blackwell Publishers Ltd.
- 8) Stecker, Pamela, (1996), The fashion design manual. South Yarra, Macmillan Education Australia Pvt, Ltd.
- **9)** Tate, Sharon Lee & Edwards, Mona Shafer, (1996), The Complete book of fashion illustration. (3rd Ed.) Englewood Cliffs. Prentice Hall Inc.

### Semester V

## **OBJECTIVES:**

This course will enable students to-

- Acquire knowledge of different physical properties of fiber, yarn and fabric.
   Analyze the utility of different physical testing equipment's.
- 3. Analyze and interpret the results obtained by carrying out various tests.

Course	TC	ThC	Pr. C	Int M	Ext M	Total
Textile & Garment Quality Control	4	2	2	25	75	100

Theory			
Module	Objective	Content	Evaluation
No.	22,000		
1	This module will highlight -  1. Importance of standards and quality control, specifications.  2. Selection of Samples for testing.  3. Importance environmental conditions for Testing.  4. Acquire Knowledge of different physical properties of fibers.  5. Develop an understanding of utility of different physical testing equipment's  6. Enable students to analyze and interpret the results obtained by carrying out various tests.	<ol> <li>Definition and importance of standards and quality control, specifications and standard laid by institutions of Textiles (IS, ISO, B.S, E.N., DIN, AATCC, ASTM).</li> <li>Testing and quality control institutes in India and Abroad.</li> <li>Selection of Samples for Fabric Sampling</li> <li>MOISTURE RELATIONS AND TESTING (ENVIRONMENTAL CONDITIONS FOR TESTING)</li> <li>Definition: Moisture regain, Moisture content, standard atmosphere, Testing atmosphere, Absolute humidity.</li> <li>Relative Humidity: Determination of relative humidity.</li> <li>Factors affecting relative humidity Moisture in Textiles: Importance of moisture regain and moisture content, Effect of moisture on Textile Properties, Factors affecting regain of textile materials, Measurement of regain.</li> <li>FIBER TESTING - Definition, objectives and methods of testing staple length, effective length, and percentage short fibers by Comb Sorter method. Resiliency.</li> <li>Interpretation of results according to end use.</li> </ol>	<b>Assignment</b> Quiz 25 marks

Module No.	Objective	Content	Evaluation
2	The students will -  1. Acquire Knowledge of different physical properties of fabrics.  2. Develop an understanding of utility of different physical testing equipment's  3. Enable students to analyze and interpret the results obtained by carrying out various tests.  4. Inspection with reference to quality  5. Control in Apparel Industry.  6. Develop an understanding of utility of different materials testing.	<ol> <li>Yarn testing- Definition and objectives of testing, Methods of Testing yarn Liner density in different systems- Direct &amp; indirect, twist and crimp.</li> <li>Explanation of Load, breaking load, stress-strain, tenacity, elastic recovery, Count Strength Product (CSP).</li> <li>Interpretation of results according to end use.</li> <li>Fabric Testing- Definition and objectives of testing, Methods of testing fabric count, thickness, crease recovery, stiffness.</li> <li>CRL, CRT, CRE principle for tensile strength testing machine. Tensile strength tester (CRL &amp; CRT type), Tear strength tester (Elmendorf)</li> <li>Colorfastness Tests-         <ul> <li>Colorfastness to Washing, (5 tests)</li> <li>Colorfastness to Rubbing</li> <li>Interpretation of results according to end use.</li> </ul> </li> <li>Garment Testing- Inspection with reference to quality control in Apparel Industry. Fabric inspection, correlation between fabric quality and apparel quality.</li> <li>Sewing threads, zippers, buttons and interlining. In process inspection (in brief).</li> <li>Interpretation of results according to end use.</li> </ol>	Assignment Quiz 25 marks

# **Practical**

Module No.	Objective	Content	Evaluation
3	<ol> <li>This module will enable the students to</li> <li>Develop an understanding of different testing methods for testing textile materials.</li> <li>Acquire skill of operating testing equipment's.</li> <li>Learn to interpret and compare the results obtained by testing various fabrics.</li> </ol>	<ol> <li>Staple length (2 samples)</li> <li>Cotton yarn count</li> <li>Yarn denier</li> <li>Yarn twist (Ply yarn &amp; Single yarn)</li> <li>Crimp (1 sample)</li> <li>Yarn Strength (Hank/Lea) &amp; CSP</li> <li>(Sewing thread to be tested as one of the sample where ever possible)</li> </ol>	Assignment Quiz 25 marks

Module No.	Objective	Content	Evaluation
4	The students will be able -  1. To inspect, measure and evaluate characteristics and properties of textile materials.  2. Evaluate fabric performance, to determine its end use.  3. Assess textile product performance &to use test result to make predictions about product performance.	<ol> <li>Fabric count (2 samples)</li> <li>Weight/ Sq. meter (4 samples-Woven, Knitted, Interlining, Blended)</li> <li>Thickness (Any 3 samples-Woven/Knitted/Interlining/Blended)</li> <li>Tensile strength (2 samples-Cotton, Blended)</li> <li>Tearing strength (2 samples-Cotton)</li> <li>Crease recovery (2 samples-Cotton)</li> <li>Stiffness</li> <li>Dimensional stability (Cotton)</li> <li>Color fastness to Washing (Any one from 5 tests)</li> <li>Color fastness to Rubbing</li> </ol>	Assignment Quiz (25 marks)

Proposed evaluation pattern for new modular structure syllabus								
Credit	Credit   Credit   Internal   Internal   External   External   Total							
TH	PR	TH	PR	TH	PR			
2	2	Avg of Mo	Avg of Module 1-4		25	100		
		100/4=25						

- 1. Internal: Theory 25 + Practical 25 = 50/2 = 25 marks
- 2. External: Theory 50 + Practical 25 = 75 Marks
- 3. Total: Internal 25 + External 75 = 100 marks

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- A.S.T.M. Standards, American Society for testing materials, Philadelphia, New York.
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- 8 I.S.I. Bulletin, Indian Standard Institution, New Delhi, India.
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- Mehta Pradip V. (1992) An Introduction to Quality Control for Apparel Industry. Milwaukee ASQC / Marcel Dekker Inc.
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- Sundaram V. (1979) Handbook of Methods of Tests for cotton fibers, yarns and fabrics, 2 rev ed, C T R L, Bombay, India.

### **Semester V**

# **OBJECTIVES:**

After completing this course the students will:

- 1. Acquire skills in handling different types of fashion fabrics.
- 2. Develop skills in sewing variety of patterns.
- 3. Understand flat pattern method and design for self and others.
- 4. Finish the garments as per standard methods.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Fashion Apparel Design	4	-	4	25	75	100

Module No.	Objectives	Content	Evaluation
1	<ul> <li>be able to design, select fabric and trimmings as per fashion trends.</li> <li>Will adapt basic patterns and stitch salwar and kurta by standard methods.</li> </ul>	Construct the following Apparels considering suitability of patterns Personality wise.  • Salwar - Pattern to be selected as per fashion trend.  • Kameez/ Designer Kurta -  Any Designer pattern with fancy neckline and sleeves.	25 marks

Module No.	Objectives	Content	Evaluation
2	<ul> <li>learn the principles of flat pattern method for yokes and fullness.</li> <li>be able to draft, cut and stitch different types of collars and sleeves.</li> <li>adapt the basic skirt draft to different patterns and construct the same.</li> </ul>	<ul> <li>Construct the following Fashion Apparels as per current trends.</li> <li>Western Top with suitable fullness, yoke, Collar and sleeves</li> <li>Skirt:Pattern with Pleats/Yoke &amp; gathers /Wrapper round/ Umbrella /Tiered</li> </ul>	25 marks
Module No.	Objectives	Content	Evaluation
3	<ul> <li>be able to adapt the basic block to western outfit/jacket.</li> <li>procure suitable fabrics, cut, stitch and finish the garment by standard methods.</li> </ul>	Construct the following Fashion Apparels as per current trends-  • Western Outfit (1piece) OR  • Jacket: Pattern with Princess line or as per fashion trend.	Continuous assessment 25 marks

Module No.	Objectives	Content	Evaluation
4	<ul> <li>The learners will -</li> <li>Will design, adapt, cut, stitch and finish the party wear garment as per fashion trends.</li> </ul>	Construct the following Fashion Apparels as per current trends.  • Kids Wear-Party Frock/ Gown OR	25 marks
	Be able to handle and use lining and trimmings.	Party wear Pattern with lining & use of Trimmings Frills/Ruffles/laces/ Show Buttons etc.	

- 1] First 5 garments(10 marks each) =50 marks + Party wear-15 marks + Journal-10 marks = 75 marks
- 2] One unit test of 25 marks to be conducted. Duration = 5 hours. (Drafting of basic block to be brought from home).
- 3] Internal 100 Marks to be converted into 25 marks.
- 4] External 75 Marks Practical (Drafting of basic block to be brought from home)
- 5] Total: Internal 25 + External -75 = 100 Marks

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- 2. Armstong Helen Joseph,( 2006 ),Pattern Making for Fashion Design ,3<sup>rd</sup> Edition, New Jersey

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- 7. Cooklin Gerry, Pattern cutting for women's future wear ,Blackwell Sciences.
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- 9. Norma Hollen & Kundel, (1993), Pattern Making by Flat Pattern Method ,7th Ed. Macmillan

Publishing Co. New Co. New York.

- 10. Reader's Digest, (1976) Complete Guide to Sewing, Reader's Digest Association.
- 11.Zarapkar, (1980), System of Cutting, Navneet Pub. Ltd.

### **Semester V**

## **OBJECTIVES:**

- 1. To learn chemical structures and reaction mechanism of dyes.
- 2. To learn the selection and application on various fibers.
- 3. To learn the role of auxiliaries in dyeing and printing.
- 4. To learn selection of dyes on different textile fibers and their dyeing methodology.
- 5. To learn the color fastness properties of dyed fabrics

Course	тс	Th C	Pr C	Int M	Ext M	Total
Textile Chemistry	4	3	1	25	75	100

## **THEORY**

Module No.	Objective	Content	Evaluation
1	The students will-  1. be able to understand the chemical structure and reaction of fibers.  2. be able to understand the chemical constitution of dyes and their application	<ul> <li>Introduction to Chemistry of Fibers like Cotton, Wool</li> <li>Cotton</li> <li>Chemical composition of cotton (Structure and groups, degree of polymerization),</li> <li>Hydrolysis and Oxidation of cotton (Hydrocellulose and oxy-cellulose formation)</li> <li>Action of alkali on cotton.</li> <li>Wool</li> <li>Structure of wool (Linkages and bonds)</li> <li>Chemical composition of wool.</li> <li>Reaction of wool with acids and alkalis.</li> <li>Introduction to Dyes-Definition of dyes, auxochrome, chromophore and their basic concepts.</li> <li>Phenomenon of dying. Classification based on their methods of application.</li> </ul>	Assignment QUIZ: 25Marks

Module No.	Objective	Content	Evaluation
2	The students will -  1. Be able to understand the dyeing of fibers with different dyes	Study of different classes of Dyes:  Dyeing of different fibres with different dyes - Direct, acid, vat, azoic, disperse, reactive, basic and sulphur dyes in detail with reaction mechanism and fastness properties. Effect of temperature, time, concentration, pH, exhausting and retarding agents on dyeing	Assignment 25 Marks

Module No	Objective	Content	Evaluation
3	The students will-  1. be able to know the different methods of dyeing & working of piece dyeing machines.  2. get oriented to the various auxiliaries used in dyeing and printing.	<ul> <li>Methods of Dyeing Textile Material &amp; Role of Auxiliaries:</li> <li>1. Methods of dyeing textile material</li> <li>Dyeing at different stages: Stock, dope, yarn, piece. Union and Cross dyeing.</li> <li>Machinery used for piece dyeing-Jigger dyeing, winch dyeing, Jet dyeing, Beam dyeing, Padding mangles, High Temperature – High Pressure dyeing.</li> <li>Role of Auxiliaries in Dyeing and Printing Detergents, diazostabilisers, carriers, dyeing auxiliaries, wetting agents, solvents, solution aids, thickeners, de-foaming agents, oxidizing and reducing agents, swelling agents,</li> </ul>	Assignment  1 Individual Project 25 Marks

Internal: Theory Module 1, 2 and 3 - 15 marks + Practical Module 4 - 10 marks Total=25  $\,$ 

marks

External: Theory - 50 marks; Practical exam + College level - 25 marks = 75 marks

Total marks = Internal 25 + External 75 = 100 marks

Credit	Credit	Internal	Internal	External	External	Total
TH	PR	TH	PR	TH	PR	
3	1	Module 1-4 100/4 = 25		60	15	100

## **PRACTICAL:**

Module No.	Objective	Content	Evaluation
4	Learners will be able to gain practical knowledge regarding dyeing of different fibers with different class of dyes.	<ol> <li>Application of Dyes on different textile fibers</li> <li>Application of Dyes (use 1%, 2%, 3%, 4% &amp; 5 % shades - any two/students)</li> <li>Direct on cotton /Viscose rayon/ jute.</li> <li>Acid Dye on silk/ wool /Nylon.</li> <li>Vat dye on cotton /Viscose rayon / jute.</li> <li>Reactive dye (Hot/ Cold Brand) on cotton.</li> <li>Azoic dye on cotton</li> <li>Union or Cross Dyeing</li> <li>Dyeing of polyester/cellulose blend with suitable dyes.(Any two blends)</li> </ol>	Regular class work - 25 marks.

## **Evaluation:-**

- 1. Internal evaluation of 25 marks.
- **2.** Final Practical exam 15 marks. (Any 2 classes of dyes on 2 different textile fibers)

- 1. Trotman E.R. (1975) *Dyeing and Chemical Technology of Textile Fibres* (5th Ed), Griffin and company, London.
- 2. Venkataramen K. (1978) Chemistry of Synthetic Dyes, 8 Vols. New York Academic Press
- 3. Corbman B. P. and Potter M.D. (1975) *Textiles- Fiber to Fabrics* (5th Ed.). McGrew Hill Book Company. New York.
- 4. Peters R.H. (1975) *Textile Chemistry*, Vol. 1, 2, 3, American Elsevier Publishing Company New York.
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- 10. <u>P.G. Tortora</u>, <u>B. J. Collier</u> and <u>M. J. Bide</u> (2009) *Understanding Textiles* (4th Ed.), Macmillan Publishing Company New York.
- 11. Norma H. and Saddler J. (1988) *Modern Textiles* (6th Edition), Macmillan Publishing Co, New York
- 12. BIS Part 4 Handbook of Textile Testing
- 13. Desai M. & Dr. Padhye R.N. *Laboratory manual in Textile Chemistry*, Dept. of Textile & Clothing SVT College of Home Science, Mumbai.
- 14. ATIRA Chemical Processing of Cotton and Polyester / Cotton blends.
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- 16. Dr. Shenai V. A. and Dr Saraf N. *Principles & Practice of Dyeing* Sevak Publications, Mumbai 400 031.
- 17. Ponting, K. G. (1981). A dictionary of dyes and dyeing. Bell and Hymen Ltd London.
- 18. Rouette, H. K. (2001). *Encyclopedia of textile finishes*. Springer Verlag Publication. Berlin.
- 19. Shenai, V. A. (1985). *Technology of printing: Technology of textile processing.* Vol. IV, Sevak Publication Mumbai.
- 20. Shenai, V. A. (1998) *Toxicity of dyes and intermediates*. Sevak Publication Mumbai.

#### Semester V

## **OBJECTIVES:**

- 1. Students learn to trace reference material, analyze, evaluate and condense articles, reports or research articles.
- 2. Students gain experience of group discussion on various topics.
- 3. The learner develops ability to collect and effectively present information before students.
- 4. The learner learns to prepare review and present on selected articles.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Recent advances in Textile Science & Apparel Design	2	-	2	50		50

### **COURSE CONTENT:**

#### For Practical

Each student has to select one latest topic related to the subject, collect information from literature, industry, library and other sources, compile it and present it in class.

#### **EVALUATION: (For Practical)**

Student's presentation to be evaluated based on the given format -

Language - 10 marks

Audio Visual Aids - 10 marks

References / Bibliography - 20 marks

Overall Presentation - 20 marks

File Matter and Presentation - 20 marks

Ability to Explain the Topic - 10 marks

Ability to answer the audience's queries - 10 marks

**Total** - 100 marks - divide by 2 = 50 marks

Note: Only internal evaluation, no examination

## PROGRAMME: B.Sc. IN HOME SCIENCE

## Semester V

## **WOMEN'S STUDIES**

# **Objectives:**

- 1. To help students to know the demographic profile of women in India.
- 2. To help students to understand the present situation and changes in the status of women.

Course	Total credits	Th	Pr	Int	Ext	Total
WOMEN'S STUDIES	2	2	-	50	-	50

Module No Objectives		Content	Evaluation
			25 Marks
1.Demographic	This module will	1.Sex Ratio	Debate 5 marks
profile of women in	enable students to:	2.Health	
India and towards		3.Education	Discussion 10 marks
change	1. Understand the	4.Employment	
	demographic profile	5.National Policy of	Presentation 10
	of women in India.	Empowerment of women 2001	marks
	2. To create	6.The role and	
	awareness about the	importance of media	
	role and importance	portraying women	
	of media portraying		
	women		

Module No	Objectives	Content	Evaluation
			25 Marks
2.Women, work and	This module will	1. Women in the	Discussion 10 marks
development	enable students to:	unorganized sector.	
			Presentation 15
	1. Understand the	2. Women in the	marks
	present situation	Organized sector.	
	and changes in the		
	status of women.	3.Legal provision for	
		the protection of	
		working women	
	2. Create awareness		

about Governmental	4.Governmental	
policies and	policies and	
strategies for	strategies for	
women's	women's	
	development	
role of voluntary		
organizations and	-	
NGO's in women's	9	
development.	NGO's in women's	
	development	

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Bhadauria M (1997): Women in India (Some Issues), APH Publication, New Delhi.

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Tandon R.K. (1994): Women in Modern Indi. Indian Publication Distributors. Delhi.

## **Semester VI**

The students will -

- 1. Acquire basic knowledge about the different operations involved in textile processing.
- 2. Understand the basics of the dyes and auxiliaries used in dyeing and printing.
- 3. Understand different styles and methods of printing.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Wet Processing	4	2	2	25	75	100

Module No.	Objective	Content	Evaluation
1	The student will learn:  Different methods of singeing, desizing and scouring.  Bleaching and different methods used for different fibers.  The process of mercerization.	<ul> <li>1.Pre Treatments - I</li> <li>SINGEING</li> <li>DESIZING         <ul> <li>Introduction to desizing. Different methods of desizing - Acid Steeping rot steeping, enzyme.</li> </ul> </li> <li>SCOURING         <ul> <li>Scouring with different chemicals. Method of scouring cotton, wool and polyester.</li> </ul> </li> <li>2.Pre Treatments - II</li> <li>BLEACHING         <ul> <li>Introduction to bleaching.</li> <li>Hypochlorite and peroxide bleaching of cotton, J Box bleaching.</li> </ul> </li> <li>Peroxide &amp; Sulphur dioxide bleaching on wool.</li> <li>MERCERIZATION         <ul> <li>Definition of mercerization.</li> <li>Changes in different properties of cotton due to mercerization</li> </ul> </li> </ul>	One group assignment - 25 marks

Module No.	Objective	Content	Evaluation
2	<ul> <li>The student will learn:</li> <li>Various printing styles and methods.</li> <li>Printing with different dyes.</li> <li>Concept of post processing of dyed and printed textiles.</li> </ul>	<ol> <li>Printing</li> <li>Different styles of printing Direct, Resist, Discharge, Transfer, Burnout (Brasso).</li> <li>Different methods of printing Block, Stencil, Screen, along with equipment.</li> <li>Post Processing         <ul> <li>Post-Processing of dyed, printed and finished goods of each printing method and style- curing, ageing, Steaming, Reduction clearing.</li> </ul> </li> </ol>	One group assignment / quiz - 25 marks

Proposed evaluation pattern for new modular structure syllabus							
Credit Credit Internal Internal External External Total							
TH	PR	TH	PR	TH	PR		
2	2	Modu	le 1-4	50	25	100	
		100/4=25					

1. Internal: Theory + Practical Module 1-4 100/4= 25

2. External: Theory - 50 marks

3. Practical - 25 marks

# **OBJECTIVES:** (PRACTICAL)

The students will -

- 1. Understand the different textile processing methods.
- 2. Develop the skill of dyeing and printing fabrics with the various styles and methods.

Module No.	Objective	Content	Evaluation
3	The student will:  1. Learn to desize, scour and bleach cotton grey material and assess the same.  2. Gain detailed knowledge about the techniques and methods of tie and dye.  3. Be able to create various batik effects on fabric.	<ul> <li>1.Prepratory Processes</li> <li>(To be done in group on 1 meter grey cloth)</li> <li>Desizing- acid desizing/Enzyme desizing</li> <li>Scouring- with Soda Ash, TRO &amp; alkali.</li> <li>Bleaching-</li> <li>(a) Bleaching of cotton with hydrogen peroxide.</li> <li>(b) Bleaching of cotton with any one readily available bleach in the market, (Robinhood, Ala, Amway etc.)</li> <li>Note: Comparison of various bleached samples by visual Assessment.</li> <li>2.Tie &amp; Dye</li> <li>12 techniques and 3 techniques in combination. Total no. of samples – 15</li> <li>Techniques –Marbelling, Knotting, tritik (stitching), chevron, ruching, binding, Folding Type I, Folding Type II, Batik effect, Laheria, Twisting &amp; Coiling, Pleating with pegs</li> <li>3. BATIK – 4 samples :</li> <li>Crack (crackle), Splash Scratch, Batik Painting</li> </ul>	Continuous assessment - 25 marks

Module No.	Objective	Content	Evaluation
4	The student will:  Learn about the various methods of printing the textile fabrics.	<ol> <li>Printing</li> <li>Block Printing – 1 sample pigment paste, with 2 colors.</li> <li>Stencil Printing – prepare 1 stencil out of card sheet and spray with pigment printing paste.</li> <li>Screen printing one sample with one color, use pigment printing paste, screen can be made in group.</li> </ol>	Continuous assessment - 25 marks

• University practical External: 1 sample – 16" x 16 "Tie & Dye – 2 techniques in 2 colors – 3 hours = 25 marks

(Calculations for Dye Bath = 10 marks)

- 1) Trotman E.R. (1975) *Dyeing and Chemical Technology of Textile Fibres* (5th Ed), Griffin and company, London.
- 2) Venkataramen K. (1978) Chemistry of Synthetic Dyes, 8 Vols. New York Academic Press
- 3) Corbman B. P. and Potter M.D. (1975) *Textiles- Fiber to Fabrics* (5th Ed.). McGrew Hill Book Company. New York.
- 4) Peters R.H. (1975) *Textile Chemistry*, Vol. 1, 2, 3, American Elsevier Publishing Company New York.
- 5) Moncrieff R.W. (1975) Man-made Fibers (6th Ed.) John Wiley and Sons New York.
- 6) Dr. Shenai V. A. (1073) *Chemistry of dyes and Principles of dyeing* Vol. II (3rd Ed.). Sevak Publications, Mumbai 400 031.
- 7) Dr. Shenai V. A. (1984) *Technology of Dyeing Vol. VI.* (5th Ed.) Sevak Publications, Mumbai 400 031.
- 8) Prayag R.S. (1989) *Dyeing of wool, silk and manmade fibers,* Court Press, Salem, Dharwad.
- 9) Wyanne A. (1997) Textiles Motivate series, Macmillan Education, Ltd. London,
- 10) P.G. Tortora, B. J. Collier and M. J. Bide (2009) *Understanding Textiles* (4th Ed.), Macmillan Publishing Company New York.
- 11) Norma H. and Saddler J. (1988) *Modern Textiles* (6th Edition), Macmillan Publishing Co. New York
- 12)BIS Part 4 Handbook of Textile Testing
- 13) Desai M. & Dr. Padhye R.N. *Laboratory manual in Textile Chemistry*, Dept. of Textile & Clothing SVT College of Home Science, Mumbai.

- 14) ATIRA Chemical Processing of Cotton and Polyester / Cotton blends.
- 15) Giles (1989) *Laboratory Course in Dyeing-* 4th Ed, Bradford, Society of Dyers & Colorists.
- 16)Dr. Shenai V. A. and Dr Saraf N. *Principles & Practice of Dyeing* Sevak Publications, Mumbai 400 031.
- 17) Ponting, K. G. (1981). A dictionary of dyes and dyeing. Bell and Hymen Ltd London.
- 18) Rouette, H. K. (2001). *Encyclopedia of textile finishes*. Springer Verlag Publication. Berlin.
- 19) Shenai, V. A. (1985). *Technology of printing: Technology of textile processing.* Vol. IV, Sevak Publication Mumbai.
- 20) Shenai, V. A. (1998) Toxicity of dyes and intermediates. Sevak Publication Mumbai.

### **Semester VI**

## **OBJECTIVES**:

The learners will:

- 1. Acquire knowledge about the different types of traditional and modern looms.
- 2. Acquire basic knowledge about the different operations involved in fabric weaving.
- 3. Acquire knowledge of the different types of fabric structures and design and be able to prepare woven designs with suitable draft and peg plan.
- 4. Be able to analyze different types of weave patterns.

5. Learn the principles of creating different colour and weave effects in weaving.

Course	TC	Th C	Pr C	Int M	Ext M	Total
Fabric Construction and Analysis	4	2	2	25	75	100

#### **THEORY**

Module No.	Objective	Content	Evaluation
1	The learners will:  1. Acquire    knowledge about    various fabric    manufacturing    techniques from    past to present  2. Acquire    knowledge about    the different    types of    traditional and    modern looms  3. Learn the parts    of a handloom    and the weaving    motions  4. Be able to    prepare draft for    different weave    design	<ol> <li>Introduction to Fabric Manufacturing</li> <li>(a) Fabric manufacturing Techniques from past to present</li> <li>(b) Introduction to history of weaving</li> <li>(a) Parts of Loom and Weaving</li> <li>Operation.</li> <li>(b)Different parts of a simple handloom.</li> <li>General principles of working of following Looms, Handloom, Semi automatic, loom, Power-loom, Commercial (Shuttle less looms Air jet, Water jet and Gripper loom) in brief.</li> <li>Drafting – Definition and introduction to drafts:         <ul> <li>a. Straight</li> <li>b. Pointed</li> <li>c. Herringbone</li> <li>d. Skip</li> <li>e. Satin</li> <li>f. Broken</li> </ul> </li> </ol>	Assignments on types of loom and sharing in the class 25 Marks

Module No.	Objective	Content	Evaluation
2	The learners will:  1. Gain knowledge about basic and fancy weaves  2. Learn to make a point paper design, draft and peg plan of the same  3. Be able to distinguish between different types of weaves  4. Acquire knowledge about the application of weaves on various commercial fabrics  5. Will learn to create various colour and weave effect using basic weaves	<ol> <li>Fabric Construction – Weaves and their different types.</li> <li>Plain weave and their derivatives- Rib weave- Warp and weft rib, Basket weave, ornamentation of plain weave</li> <li>Twill weave- and its variation - herringbone, broken,</li> <li>Combined, figured- diamond and diaper twill.</li> <li>Satin- Regular satin and Sateen, Irregular satin and sateen.</li> <li>Huck-a-back.</li> <li>Honey comb- Ordinary and Brighton honeycomb.</li> <li>Crepe.</li> <li>Mock-leno.</li> <li>Dobby mechanism</li> <li>Jacquard- Ordinary and single lift jacquard.</li> <li>Color and Weave Effect</li> <li>Continuous line effect</li> <li>Hounds tooth effect</li> <li>Bird's eye and spot effect</li> <li>Step patterns</li> <li>All over effect</li> </ol>	Assignment: Quiz -25 Marks

## **Objectives**: PRACTICAL

After completing this course the learners will -

- 1. understand the preparatory processes of weaving.
- 2. learn to set & operate handloom for weaving.
- 3. get acquainted with the weaving calculations.
- 4. learn to weave different design
- 5. acquire knowledge of the different types of fabric structures and design and be able to prepare woven designs with suitable draft and peg plan

6. be able to analyze the woven designs (weaves).

Module No.	Objective	Content	Evaluation
3	The learners will:  1. understand the preparatory processes of weaving  2. Get acquainted with the weaving calculations.  3. learn to set & operate handloom for weaving.  4. learn to weave different design of basic and fancy weaves.	<ol> <li>Weaving Calculations</li> <li>Yarn and cloth calculations</li> <li>Count (Yarn numbering)</li> <li>Preparatory Process for Weaving</li> <li>Warp and weft preparation</li> <li>Winding of warp and weft yarns</li> <li>Warping- Sectional and continuous.</li> <li>Sizing</li> <li>Drawing and looming.</li> <li>Setting up of loom for weaving</li> <li>Beaming</li> <li>Drafting</li> <li>Denting</li> <li>End Piecing, all to be done on Table Loom.</li> <li>Weaving of samples by using the following weaves</li> <li>Plain Basket</li> <li>Rib</li> <li>Twill (even and uneven)</li> <li>satin</li> <li>Diamond</li> <li>Diaper</li> <li>Huck-a-back</li> <li>Honeycomb</li> <li>Mock leno</li> <li>Crepe</li> <li>Herring bone sample size for weaving - Length - 2"</li> <li>Width - 6" to 8", 10s to 12s count yarn can be used.</li> </ol>	Assignment Continuous Assessment -25 Marks

Module No.	Objective	Content	Evaluation
4	<ol> <li>The learners will:</li> <li>be able to identify the weaves.</li> <li>be able to analyze the woven designs and make design, draft, peg plan .</li> <li>understand the concept of design repeat .</li> <li>learn to calculate thread count and crimp percentage</li> </ol>	Analysis of the 15 samples of the following weaves and their variations showing design, draft, peg plan and design repeat.  Plain. Rib & Basket Twill (even and uneven), Herring bone, Diamond & Diaper Satin & sateen Huck-a-back Honeycomb Mock leno Crepe	Assignment Continuous assessment - 25 marks

Credit	Credit	Internal	Internal	External	External	Total
TH	PR	ТН	PR	ТН	PR	
2	2	Modul	e 1-4=	50	25	100
		100/4=25				

1) Internal: Theory+ Practical = 25 marks

2) External: Final Exam Theory - 50 marks

3) External Practical exam 25 marks

4) Total: Internal - 25 + External - 75 = 100 marks

- 1. Gokarneshan, N. (2004),Fabric : structure and design New Delhi New Age International (P) Ltd.
- 2. Watson, W. Grosicki, Z.( 1988) Watson's textile design and colour Elementary weaves and figured fabrics 7th rev ed. Bombay Universal Publishing Corporation .
- 3. Jean Wilson, (1967) Weaving is for anyone, New York Van Nostrand Reinhold Co.

- 4. Singh, R.B. (1989)Modern Weaving Theory and practice, Ahmedabad Mahajan Book Distributors
- 5. Aswani, K.T. (1986) Plain weaving motions, Ahmedabad Textile Trade Press
- 6. Watson, W.Grosicki Z. Watson's Advanced Textile Design and Color, Universal Publishing Corporation, Bombay
- 7. Shirley E. Held , Weaving, A Handbook of the fiber Arts, Rinehart and Winston, New York
- 8. Robinson R., Marks, (1986) Principles of weaving, A.T.C. Manchester The Textile Institute
- 9. Muthuswamy, R. Kathirvelu, S. Komarapalayam (2003) Technology of fabric manufacture I : Yarn preparation and shuttle weaving S.S.M.Institute Of Textile Technology
- 10. The complete technology book on textile spinning, weaving, finishing and printing NIIR Board Delhi Asia Pacific Business Press Inc
- 11. Tod, Gallinger Osma,(1964), The Joy of hand weaving 2nd ed. Torento D.Van Nostrand Co. Inc.
- 12. John Tovey, (1965), The Technique of weaving London B.T.Bastsford Ltd.
- 13. Mohamed M.H.,Lord P.R. (1973) Weaving conversion of yarn to fabric2nd ed. England Woodhead Publishing Limited.
- 14. Shirley Held, (1972) Weaving A handbook for Fibre craftsmen New York Holt, Rinehart & Winston.
- 15. Yvonne Deurch, (1977), Weaving and spinning London Marshall Cavendish.
- 16. Puneet, Kishore, (1990) Weaving technology in India: Jacquards New Delhi Vikas Publishing House Pvt. Ltd.
- 17. Wynne J.W., (1997) Textiles Andrea London Macmillan education Ltd.

## **Semester VI**

# **OBJECTIVES:**

- 1. To understand the basics of knitting
- 2. To gain knowledge about various knitting techniques used in modern knitting industry.
- 3. To gain knowledge of the basic and specialized knitted fabrics used in knitwear production.

Course	TC	ThC	PrC	IntM	ExtM	Total
Theory Of Knitting	4	4	-	25	75	100

Module No.	Objective	Content	Evaluation
1	1.To understand the basics of knitting	1.Elements of knitted fabric  Loop structure and its parts, technical face & back, single and double faced structures, selvedge fabric, tubular & cut edged fabrics, course, wale, stitch density, GSM, effect of the number of Wales and courses (fabric construction) on knit fabric properties, salient features of knits, comparison of woven and knitted fabrics.  2.Knitting needles  Types of needles, diagram of each needle, name and functions of various parts of each needle, merits and demerits of each needle, knitting cams (raising cam, stitch cam, up throw cam, guard cam, running cam) and their functions, knitting action of the latch needle, machine gauge.	Assignment / Quiz -25 Marks

Module No.	Objective	Content	Evaluation
2.	1.To gain knowledge about the weft knitted fabrics	1.Basic weft knitted fabrics  Structure and characteristics of four basic weft knitted fabrics (single jersey, purl, rib, interlock), comparison of warp and weft knitted fabrics	25 Marks Visit to knitting unit & collection of different fabric samples

ModuleNo.	Objective	Content	Evaluation
3	To know common fabric defects and be able to identify it.  To understand basic fabric structures.	<ol> <li>Definition And Causes Of Common Fabric Defects (cloth fall out, holes / cracks, vertical lines, bar or horizontal stripes, drop stitches, laddering, cloudiness, spiral, bow, skew).</li> <li>Specialised weft knit fabrics</li> <li>Basic principles, silent features and end uses of high-pile, terry, velour, full-fashioned, jacquard, intarsia, inlay, plated, racked and loop transferred fabrics.</li> </ol>	Collection of different knitted fabric samples & preparing a swatch book.

Module No.	Objective	Content	Evaluation
4	To develop skills about the notatio n for analysis of knitted fabrics.	ENITTING NOTATION  Description of weft (loop diagram, stitch & running notations) and warp (lapping diagram and chain notation) knitting notations  Stitch and running notations of weft knitted fabrics:cross miss, birds eye, weft lockknit, single cross tuck, double cross tuck(double la coste), fredperry(lacoste), popcorn, moss stitch (seed stitch), double moss stitch, basket purl, half & full cardigans, half and full milano ribs, swiss and french double piques, punto di roma  Point paper notation (lapping diagram & chain notation) of warp knitted pillar (open & closed), atlas (open & closed), tricot, lock nit, satin, sharkskin, queen's cord, and loop raised structures	25 marks  Making representative diagrams of given fabric structures. With suitable method of notations.

- 1.Internal: Continuous evaluation of all 4 modules 25 marks
- 2. External Examination-75 marks
- 3. Total: Internal 25 + External 75 = 100 marks

- 1) A Wynne, Textiles, Motivate Series, Macmillan, Education Ltd, London and Basingstoke.
- 2) Brackenbury Terry, (1992), Knitted Clothing Technology, Oxford Blackwell Science Ltd.
- 3) D.B. Ajgaonkar, Knitting Technology, Universal Publication Corporation, Mumbai.
- 4) Iyer / Mammel / Schach, Circular Knitting, Meisenbach, Newyork
- 5) NCUTE- Programme Series, Knitting Technology Indian Institute of Technology.
- 6) Pam Dawson, 1984, Encyclopedia of Knitting, Lindon:Orbis Publishing Ltd.

#### Semester VI

### **OBJECTIVES:**

- 1. Students acquire practical knowledge of the actual working conditions in the industry.
- 2. Students get acquainted with the application systems followed in the industry.

Course	TC	Th C	Pr C	Int M	Ext M	Total
PROFESSIONAL APPLICATION IN TEXTILE SCIENCE & APPAREL DESIGN	8	-	8	100	100	200

#### **COURSE CONTENT:**

The students are required to have work experience with reference to the thrust areas in the field of textiles and apparels. This would be for the duration of one month in consultation with the industry. The students will be placed in various units of textiles and apparels such as mills, testing laboratories, garment export houses, designing studios etc. where they will gain practical knowledge.

#### **EVALUATION:**

The evaluation of the performance of the students during their internship period will be done by the authorities in the firm where they are placed and the teacher guiding students in consultation with each other.

## [A] Evaluation Format for Industry:

Knowledge & application of knowledge - 10 marks

Working relationship (interaction/ cooperation / coordination) - 10 marks

Subject interest & involvement - 10 marks

Creativity / skills - 10 marks

Overall behaviour (punctuality / sincerity) - 10 marks

Total 50 marks

To be converted out of 100 marks

# [B] Evaluation Format for College:

Individual file - 20 marks

Presentation - 10 marks

Group file - 10 marks

Attendance - <u>10 marks</u>

Total 50 marks

To be converted out of 100 marks

# Total evaluation of [A] + [B] to be done out of 200 marks

Total workload to be counted as 8 credits only