

# **UNIVERSITY OF DELHI**

**Scheme of Examination**

**and**

**Courses of Reading**

**for**

**B.Sc. (Pass) Home Science**

**Department of Home Science**

**Faculty of Science**



**University of Delhi**

**2011 – 2012**

## SEMESTER SYSTEM AT THE UNDER GRADUATE LEVEL

Course of Study **B.Sc. Pass Home Science**

Total number of papers: 24 + EVS (online)

### Semester I

<b>Paper – 1</b> Fundamentals of Human Communication HSPT 151	<b>Paper – 2</b> Introduction to Resource Management HSPT 121	<b>Paper – 3</b> Introduction to Fabric and Apparel Science HSPT 141	<b>Paper – 4</b> Technical writing in English/ Computational skills ENAT 101 / CSAT 101
---	---	--	---

### Semester II

<b>Paper – 5</b> Technical writing in English/ Computational skills ENAT 201 /CSAT 201	<b>Paper – 6</b> Introduction to Physical Sciences HSPT 201	<b>Paper – 7</b> Introduction to Food and Nutrition HSPT 211	<b>Paper -8</b> Foundations of Human Development HSPT 231
--	---	--	---

### Semester III

<b>Paper – 9</b> Introduction to Social Sciences HSPT 302	<b>Paper – 10</b> Housing and Space Planning HSPT 322	<b>Paper – 11</b> Textile Science HSPT 342	<b>Paper – 12</b> Media Systems HSPT 352
---	---	--	--

### Semester IV

<b>Paper -13</b> Introduction to Economics HSPT 403	<b>Paper – 14</b> Introduction to Life Sciences HSPT 404	<b>Paper – 15</b> Nutrition: A Life Cycle Approach HSPT 412	<b>Paper – 16</b> Development in Childhood HSPT 432
---	--	---	---

### Semester V

<b>Paper – 17</b> Physiology and Promotive Health HSPT 505	<b>Paper – 18</b> Public Nutrition and Dietetics – I HSPT 513	<b>Paper – 19</b> Development in Adolescence and Adulthood HSPT 533	<b>Paper – 20</b> (Elective I) HSPT 514/524/534/544/554
--	---	---	---

### Semester VI

<b>Paper – 21</b> Family Finance & Consumer Studies HSPT 623	<b>Paper – 22</b> Apparel Design & Construction HSPT 643	<b>Paper – 23</b> Extension Management HSPT 653	<b>Paper – 24</b> (Elective II) HSPT 615/625/635/645/655
--	--	---	--

### Elective I

HSPT 514 Nutritional Biochemistry

HSPT 524 Basics of Design Applications

HSPT 534 Child Rights & Gender Justice

HSPT 544 Textile Design

HSPT 554 Development Communications & Journalism

### Elective II

HSPT 615 Public Nutrition & Dietetics II

HSPT 625 Entrepreneurship & Enterprise and Management

HSPT 635 Care & Wellbeing across the Life Span

HSPT 645 Fashion: Design & Development

HSPT 655 Public Relations & Advertising

## B.Sc. HOME SCIENCE (PASS) SCHEME OF EXAMINATION

Paper No.	Code	Title	Theory		Practical	
			Maximum Marks	Duration	Maximum Marks	Duration
<b>YEAR - 1</b>						
<b>SEMESTER - I</b>						
1	HSPT 151	Fundamentals of Human Communication	100	3	50	3
2	HSPT 121	Introduction to Resource Management	100	3	50	3
3	HSPT 141	Introduction to Fabric and Apparel Science	100	3	50	3
4	ENAT 101 *	Technical Writing in English	100	3	–	–
	CSAT 101 *	Computational Skills	100	3	50	3
<b>SEMESTER - II</b>						
5	ENAT 201 *	Technical Writing in English	100	3	50	3
	CSAT 201 *	Computational Skills	100	3	50	3
6	HSPT 201	Introduction to Physical Science	100	3	50	3
7	HSPT 211	Introduction to Food & Nutrition	100	3	50	3
8	HSPT 231	Foundations of Human Development	100	3	50	3

- \*The College will have the option to take either of the two papers in a particular semester for a particular course, while student have to appear in both the papers.

In addition there shall be one qualifying paper in self – learning mode called Environmental Studies offered in Semester II.

Paper No.	Code	Title	Theory		Practical	
			Maximum Marks	Duration	Maximum Marks	Duration
<b>YEAR 2</b>						
<b>SEMESTER - III</b>						
9	HSPT 302	Introduction to Social Science	100	3		
10	HSPT 322	Housing and Space Planning	100	3	50	3
11	HSPT 342	Textile Science	100	3	50	3
12	HSPT 352	Media Systems	100	3	50	3
<b>SEMESTER - IV</b>						
13	HSPT 403	Introduction to Economics	100	3		
14	HSPT 404	Introduction to Life Sciences	100	3	50	3
15	HSPT 422	Nutrition : A Life Cycle Approach	100	3	50	3
16	HSPT 432	Development in Childhood	100	3	50	3
<b>YEAR - 3</b>						
<b>SEMESTER - V</b>						
17	HSPT 505	Physiology & Promotive Health	100	3		
18	HSPT 513	Public Nutrition and Dietetics I	100	3	50	3
19	HSPT 533	Development in Adolescence and Adulthood	100	3	50	3
20	HSPT 514/524/534/ 544/554	Elective I (Anyone of the Following)	100	3	50	3
<b>SEMESTER - VI</b>						
21	HSPT 623	Family Finance & Consumer Studies	100	3	50	3
22	HSPT 643	Apparel Design & Construction	100	3	50	3
23	HSPT 653	Extension Management	100	3	50	3
24	HSPT 615/625/635/ 645/655	Elective II (Anyone of the Following)	100			

## **B.Sc (PASS) HOME SCIENCE**

### **PREAMBLE**

B.Sc. (Pass) Home Science Course has been running in 2 Colleges of University of Delhi in annual mode and was last revised in the year 2004. From 2011 onwards, it will follow the semester mode. The course would be of 3 years duration, divided into 3 parts – Part I, part II, and Part III. Each part would consist of 2 semesters. There will be 4 papers including practicals in each semester, thus making a total of 24 papers plus one course in Environmental Studies in self learning mode at the end of 2<sup>nd</sup> semester.

- There are five areas of Home Science

Food and Nutrition

Resource Management

Human Development

Fabric and Apparel Science, and

Communication and Extension

- There shall be 3 papers from each of the 5 streams plus 2 elective papers offering choices of all 5 areas for the student to choose from.
- There shall be 5 interdisciplinary papers from science and humanities. Remaining 2 papers will be Technical Writing and Communication in English and Computational Skill. Thus making a total of 24 papers. This new course will commence from the academic session 2011-2012.
- Home Science being an applied science, the syllabus has been prepared keeping in view the unique requirements of B.Sc. Home Science students. Practical and field experience are an essential part of the learning process. Laboratory work has been integrated in all areas of specialization.
- Students exposure to subject like Communication and Extension, Media Systems and Entrepreneurship Development will give them professional training and skills for wider employment opportunities.
- Scientific advances have made available food, clothing, tools, hardware and novel biological material. The speed of socio-economic and psychological transformation requires that Higher Education be placed in a context which permits the students to intelligently choose life styles that are safe and healthy and provide them with socio-economic and psychological security and enable them to transact in knowledge markets. The revised curriculum of Home Science in Semester mode is designed to assist to study human development in a holistic manner.
- For each paper the objectives have been listed and the content divided into units.
- The detailed syllabus for each paper is appended with a list of suggested readings.

Teaching time allotted for each paper shall be 4 periods for each theory paper and 4 periods for each practical class per week and 1 tutorial period for each paper per week. Each practical batch ideally is between 20-25 students. This is because practical requires individual attention for imparting training to the students.

# FUNDAMENTALS OF HUMAN COMMUNICATION THEORY

<b>Paper No</b>	<b>: HSPT - 151</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## OBJECTIVES

1. To introduce the concept of human communication and its components.
2. To understand the basic concept of extension and its inter-relationship with communication.
3. To familiarize with the various tools and techniques in the process of communication.

## CONTENT

## PERIODS

<b>Unit I:</b>	<b>Introduction to Communication (Ch 1 Devito)</b>	<b>14</b>
	<ul style="list-style-type: none"><li>● Historical background, nature and functions of communication.</li><li>● Postulates/principles of communication</li><li>● Elements of communication and their characteristics</li></ul>	
<b>Unit II:</b>	<b>Understanding Human Communication (Ch 1 Barker / Ch 4, 7, 16 Devito)</b>	
	<ul style="list-style-type: none"><li>● Models of communication</li><li>● Barriers to communication</li><li>● Empathy and perception- concept and relevance to communication process</li></ul>	
<b>Unit III:</b>	<b>Types of Communication (Ch 5 Zeuschner / Ch 2, 3 Barker / Ch 9, 10 Devito)</b>	<b>18</b>
	<ul style="list-style-type: none"><li>● Types of communication transactions</li><li>● Formal and informal communication</li><li>● Verbal and Non-verbal communication</li></ul>	
<b>Unit IV:</b>	<b>Communication, Extension and Media (Ch 1, 2, 3, 6 Kumar and Hansra)</b>	<b>16</b>
	<ul style="list-style-type: none"><li>● Concept and goals of extension, relationship between communication and extension</li><li>● Principles of extension</li><li>● Extension programmes in India.</li><li>● Communication and Extension - classification, characteristics and selection</li></ul>	

## RECOMMENDED READINGS

- Barker, L. (1978). "Communication", New Jersey: Prentice Hall, Inc; 171.
- Dahama, O.P. and Bhatnagar, O.P., (2003), Education and Communication for Development, New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd.
- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Kumar, B. and Hansra, 2000; Extension education for Human Resource Development, Concept Publishers, New Delhi.
- Zeuschner, Raymond F (1997). Communicating Today. Allyn and Bacon publishers.

## **FUNDAMENTALS OF HUMAN COMMUNICATION PRACTICAL**

**Paper No** : HSPP - 151  
**Maximum Marks** : 50  
**Credits** : 2  
**Teaching Periods** : 4/week  
**Teaching Load** : 12 Practical/ Semester (4 periods each)

### **OBJECTIVES**

1. To familiarize the students with various communication methods and media.
2. To develop skills in preparation, presentation and evaluation of select methods and media.

### **CONTENT**

### **PRACTICALS**

- |   |   |
|---|---|
| • Developing skills in planning and conducting small group exercises. | 4 |
| • Review of media on selected issues.                                 | 4 |
| • Design and use of graphic media.                                    | 4 |

## **INTRODUCTION TO RESOURCE MANAGEMENT**

### **THEORY**

**Paper No.** : HSPT - 121  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### **OBJECTIVES**

1. To understand the fundamentals of resource management in a changing scenario.
2. To inculcate skills in identifying, creating, selecting and using available resources judiciously with emphasis on maximization and conservation.
3. To understand the scientific application of the process of management in the judicious use of resources.

### **CONTENT**

### **PERIODS**

<b>Unit I: Introduction to Resource Management (Ch 1 Koontz and Donnel / Ch 1, 2 Stoner)</b>	<b>6</b>
<ul style="list-style-type: none"><li>• Concept and scope of management</li><li>• Universality of management</li><li>• Approaches to management</li><li>• Ethics in management</li><li>• Motivation Theory</li></ul>	



**Unit II: Resources (Part 2 Nickell and Dorsey) 8**

- Meaning, definition, importance and characteristics of resources.
- Identification and classification of resources, including natural resources – water, air, fuels (wood, kerosene, petrol, CNG), Land and soil (solid waste management), Green cover.
- Factors affecting utilization of resources.
- Maximizing use of resources.
- Resource conservation – importance and methods.
- Availability of resources at self and family level

**Unit III: Functions of Management: An overview (Ch 7, 8, 9, 10, 11, 12 Rao and Narayana) 14**

- Decision Making
- Planning
- Supervising
- Controlling
- Organizing
- Evaluation

**Unit IV: Management of resources: focus on maximization and conservation (Ch 4 Kreitner/ Ch 3 Robbins) 10**

- Management of specific resources by an individual/ family
  - Money
  - Time
  - Energy
  - Space
- Application of Management Process in:
  - Event Planning & Execution

**Unit V: Resource Management: Domains and Application (Ch 14 Stoner / Ch 11 Kreitner) 10**

- Concepts, Scope, Dimensions & future trends of:
  - Product Design
  - Sustainable Development
  - Training and Development
  - Consumer Studies

**RECOMMENDED READINGS**

- Koontz.H. and O'Donnel C., 2005, Management – A systems and contingency analysis of managerial functions. New York: McGraw-Hill Book Company
- Kreitner. 2009, Management Theory and Applications, Cengage Learning: India
- Nickell, P., & Dorsey, J.M., Management in family living, 1962, (4th Edition). New York NY: Wiley.
- Rao V.S. and Narayana P.S., Principles and Practices of Management, 2007, Konark Publishers Pvt. Ltd.
- Stoner J., 2008, Management. PHI Learning.

## INTRODUCTION TO RESOURCE MANAGEMENT

### PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 121</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### OBJECTIVES

- To familiarize the students with the available resources, their uses and conservation.
- To enable the students to utilize resources in a prudent manner.

### CONTENT

### PRACTICALS

1. Resource conservation and optimization/green technologies (natural resources): Portfolio	1
2. Identification and development of self as a resource.	2
- SWOT analysis-who am I and Micro lab	
- Building Decision Making abilities through management games	
3. Preparation of time plans for self and family	2
4. Time and Motion Study	3
5. Event planning ,management and evaluation-with reference to	4
- Managerial process	
- Resource optimization - time, money, products, space, human capital	

## INTRODUCTION TO FABRIC AND APPAREL SCIENCE

### THEORY

<b>Paper No.</b>	<b>: HSPT - 141</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

1. To impart the knowledge of textile fibers in terms of their production and properties.
2. To acquaint the students with the types and properties of yarns.
3. To create awareness regarding the selection of textile and apparel.
4. To familiarize students with appropriate care and maintenance parameters of textiles and apparel.

<b>CONTENTS</b>		<b>PERIODS</b>
<b>UNIT I:</b>	<b>Introduction to fabric and apparel science &amp; their components</b>	<b>1</b>
<b>UNIT II:</b>	<b>Textile fibres and their properties (Ch 2, 3 Joseph/ Ch 2, 4 Sekhri)</b>	<b>6</b>
	<ul style="list-style-type: none"> <li>• Primary and secondary properties</li> <li>• Molecular structure of fibres</li> <li>• Classification of fibres</li> </ul>	
<b>UNIT III:</b>	<b>Fibres and their processing, chemistry and properties (Ch 5, 6, 7 Joseph/ Ch 1 Corbman)</b>	<b>20</b>
	<ul style="list-style-type: none"> <li>• Natural – cellulosic (cotton, linen, jute), protein (wool, silk)</li> <li>• Man-made - regenerated rayon, acetate</li> <li>• Synthetic - polyester, nylon 6,6, acrylic, olefins, elastomeric</li> </ul>	
<b>UNIT IV:</b>	<b>Importance of clothing (Ch 2,3,4,6 Marshall et al)</b>	<b>9</b>
	<ul style="list-style-type: none"> <li>• Why do we dress the way we do?</li> <li>• Clothing functions and theories of origin</li> <li>• Clothing terminology</li> <li>• Individuality and conformity, conspicuous consumption and emulation</li> <li>• Evaluating the figure: Figure types-standard, ideal &amp; symmetrical figure, asymmetrical figure, posture evaluation</li> <li>• Selection of clothes for self</li> </ul>	
<b>UNIT VI:</b>	<b>Introduction to fashion (Ch 2, 3, 4, 6 Marshall et al)</b>	<b>5</b>
	<ul style="list-style-type: none"> <li>• Terminology</li> <li>• Fashion cycle</li> <li>• Sources of fashion</li> <li>• Factors favouring and retarding fashion</li> </ul>	
<b>Unit VII:</b>	<b>Care and maintenance of textiles and apparel (Ch 19 Marshall et al / Ch 9, 10, 11, 12 D'souza)</b>	<b>7</b>
	<ul style="list-style-type: none"> <li>• Water- role of water, hardness and its removal</li> <li>• Laundry aids-soaps and detergents, bleaches, blueing, whitening and stiffening agents</li> <li>• Principles of laundering and dry-cleaning</li> <li>• Labels and standards</li> <li>• Consumer problems &amp; remedies</li> </ul>	

### **RECOMMENDED READINGS**

- Corbman, P.B., (1989) Textiles-Fibre to Fabric, (6th Edition) New York, McGraw-Hill.
- Joseph, M. L. (1988), Essentials of Textiles 5<sup>th</sup> edition, Holt Rinehart and Winston, New York.
- Marshall S. G., Jackson, H.O., Stanley, M.S., Marshall et al M and Specht,(2004), Individuality in clothing selection & personal appearance, 6<sup>th</sup> edition, Pearson Education, NJ.
- Sekhri S., (2011) Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning, Delhi.

# INTRODUCTION TO FABRIC AND APPAREL SCIENCE

## PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 141</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

<b>CONTENTS</b>	<b>PRACTICALS</b>
1. Fibre Identification	2
• Microscopic test	
• Burning test	
• Chemical tests	
2. Stain removal on white and coloured cottons	2
3. Hand Stitches	2
• Functional- Temporary: basting Permanent: hemming, running, back stitch, run & back stitch, overcasting, buttonhole	
• Decorative: lazy-daisy, satin, chain, stem, bullion, French knots, Herringbone	
4. Fasteners and their application	1
5. Sewing Machine	1
• Its parts and their functions	
• Basic operations	
• Machining- straight, curve, spiral, reverse & corners	
6. Seams	2
• Plain seam and its finishing	
• Flat seam (run & fell)	
• Ridge seam (French seam)	
• Decorative seam(lapped seam)	
7. Finishing of hem lines	1
8. Soaps, detergents, stiffening & blueing agents	1

## TECHNICAL WRITING AND COMMUNICATION IN ENGLISH

### THEORY

<b>Paper No.</b>	<b>: ENAT-101/201.</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## CONTENT

- Unit I :** Communication: Language and communication, differences between Speech and writing, distinct features of speech, distinct features of writing.
- Unit II:** Writing Skills of topic, thesis statement, developing the thesis; Introductory, development, transitional and concluding paragraph, linguistic unity, coherence and cohesion, descriptive, narrative, expository and argumentative writing.
- Unit III:** Technical Writing: Scientific and technical subjects; formal and informal writings; formal writing/ reports, handbooks, manual, letters memorandum, notice, agenda, minutes; common errors to be avoided.

## SUGGESTED READINGS

- M. Frank. Writing as thinking: A guided process approach, Englewood Cliffs, Prentice Hall Regents.
- L. Hamp-Lyons and B. Heasley: Study Writing; A course in written English. For academic and professional purposes, Cambridge Univ. Press.
- R. Quirk, S. Greenbaum, G. Leech and J. Svartik: A comprehensive grammar of the English language, Longman, London.
- Daniel G. Riordan & Steven A. Panley: “ Technical Report Writing Today” – Biztantra.

## ADDITIONAL REFERENCE BOOKS

- Daniel G. Riordan, Steven E. Pauley, Biztantra: Technical Report Writing Today, 8<sup>th</sup> Edition (2004).
- Contemporary Business Communication, Scot Ober, Biztantra, 5<sup>th</sup> Edition (2004).

## COMPUTATIONAL SKILLS

### THEORY

<b>Paper No.</b>	<b>: CSAT-101 /201.</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## CONTENT

## PERIODS

### Unit 1: Computer Fundamentals

12

- Introduction to Computer: Characteristics of Computers, Uses of Computers, Types and generations of Computers.

- Basic Computer Organization – Units of a computer, CPU, ALU, memory hierarchy, registers, I/O devices
- User Interface with the Operating System, System Tools

**Unit 2: Data Representation** **8**

- Binary representation of integers and real numbers, 1's Complement, 2's Complement
- Addition and subtraction of binary numbers, BCD, ASCII, Unicode;

**Unit 3: Network terminology** **4**

- Types of network, router, switch, server-client architecture

**Unit 4: Multimedia** **4**

- Introduction, Characteristics, Elements, Applications

**Unit 5: Problem Solving** **10**

- Notion of algorithms, stepwise methodology of developing an algorithm, developing macros in spreadsheet

**Unit 6: General Awareness** **4**

- IT Act, System Security (virus/ firewall etc.), **I- Tax, Reservations, Banking**

## COMPUTATIONAL SKILLS

### PRACTICAL

<b>Paper No.</b>	<b>: CSAP – 101/201.</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### CONTENT

### PRACTICALS

1. Defined project will be done by the student and evaluated by the instructor.
2. Document Preparation
3. Presentation Software
4. Familiarizing with the Operating System, Control Panel, Networking Configuration , Firewall setting
5. Spreadsheet Handling, Working with worksheets, Creating a spreadsheet, entering and formatting information, basic functions and formulas, creating charts, tables and graphs.

## SUGGESTED BOOK

- V Rajaraman, **Fundamentals of Computers**, Fourth Edition, PHI.
- Anita Goel, **Fundamentals of Computers**: Forthcoming title in Pearson -Education

**Note:** Use of Open Office/ Star Office is recommended, as they are freely downloadable.

Reference manual for Open Office available at: <http://www.openoffice.org>

Reference manual for Star Office available at: [http:// www.sun.com/software/staroffice](http://www.sun.com/software/staroffice)

# INTRODUCTION TO PHYSICAL SCIENCES

## THEORY

<b>Paper No.</b>	<b>: HSPT - 201</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### SECTION –A

### CHEMISTRY

#### OBJECTIVES

1. To familiarize the students with basic principles of Chemistry as applied in Home Science

#### CONTENTS

#### PERIODS

<b>UNIT I: Organic Chemistry (Ch 8 Bahl and Bahl)</b>	<b>5</b>
Introduction, Classification of organic compounds, functional groups, homologous series, nomenclature of alkanes, alkenes, alkynes, alcohols, aldehydes, ketones, carboxylic acids and its derivatives (esters, amides), amines and nitro compounds.	
<b>UNIT II : Biomolecules (Ch 28, 31 Bahl and Bahl)</b>	<b>4</b>
<b>Carbohydrates:</b> Introduction. Elementary study of chemical structure. Classification with examples <b>Proteins:</b> Introduction. Elementary idea of amino acids, peptide bond, polypeptides, denaturation and enzymes.	
<b>UNIT III: Polymers (Ch 22 Chawla)</b>	<b>6</b>
Introduction of high polymers, resins, plastics. Classification with examples. Properties, Structures of PE, PP, PS, PVC, PTFE, Nylon 6, Nylon 66, PET.	
<b>UNIT IV: Solutions (Ch 8 Lowrie)</b>	<b>5</b>
Distinction between true solutions, colloids, suspensions. Types of colloids, properties of colloids and their applications. Types of emulsions.	
<b>UNIT V: Cleaning Agents (Ch 2 Jacob)</b>	<b>4</b>
1. Soaps and detergents 2. Antiseptics and disinfectants.	



## SECTION –B PHYSICS

### OBJECTIVES

1. To familiarize the students with basic concepts in Physics.
2. To provide an understanding of various phenomenon in Physics.

### CONTENTS

### PERIODS

#### UNIT I (Ch 3, 6, 7, 11 Puri)

6

- Measurement of physical quantities – Units and dimensions.
- Different types of motion, Laws of motion and examples.
- Gravity and Gravitation .
- Work, Power and Energy
- Physical quantities of matter – concept of Elasticity, Viscosity, Surface tension.

#### UNIT II (Ch 1, 5 Puri)

4

- Temperature and its measurement
- Calorimetry, change of state with applications.
- Heat transfer – modes and examples.
- Solar Energy and its applications.

#### UNIT III (Ch 9 Bhatia)

5

- Reflection, Refraction and Diffusion of light.
- Lighting fixtures – Fluorescent tube, incandescent lamp, night lamp, CFL, LED.
- Dispersion of light – Spectrum, colour of bodies.

#### UNIT IV (Ch 2 Brijlal)

5

- Concept of current, voltage and resistance – Ohm's law.
- Conductors and insulators of electricity and their applications
- Household wiring – safety features – fuse, MCB and earthing.
- Current sources – Primary and secondary cells, inverter, UPS.
- Efficient transmission of electric power.

#### UNIT V (Ch 39 Chawla / Ch 2, 8 Brijlal)

4

- X-rays – properties and applications.
- Radioactivity – Natural and artificial, Radioisotopes and their applications in various fields.
- Lasers – Properties and applications.

## RECOMMENDED READINGS

- A. N. Puri, Elementary course of Physics S. Chand and Sons, 1972.
- Bahl and Bahl, Advanced organic Chemistry S. Chand and Co.
- Bhatia, K.B., Elements of Electrical Gadgets, Arya Book Depot, 1993
- Brijlal and Subramaniam, Fundamentals of Physics S. Chand and Co., 1983.
- P. L. Soni, H. M. Chawla, Textbook of Organic Chemistry, Sultan Chand and sons.

## INTRODUCTION TO PHYSICAL SCIENCES

### PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 201</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### SECTION A CHEMISTRY

#### CONTENT

#### PRACTICALS

<b>I. Volumetric Analysis:</b>	<b>2</b>
<b>a. Redox titration</b>	
i. Estimation of copper in brass solution	
<b>b. Precipitation titration</b>	
i. Estimation of salinity in saline water	
c. Acid-base titration	
i. Estimation of free alkali in soap solution	
<b>II. Salt analysis:</b>	<b>3</b>
Anions: acetate, carbonate, chloride, nitrate, sulphate.	
Cations: ammonium, lead, cupric, aluminium, ferric, zinc, calcium, magnesium.	
<b>III. Identification of the following organic compounds:</b>	<b>1</b>
a. Methyl and ethyl alcohol	
b. formaldehyde and acet aldehyde	
c. formic acid and acetic acid	

## SECTION B PHYSICS

### CONTENT

### PRACTICALS

6

1. Determination of Volume of a given body using Vernier Callipers
2. To determine the correct weight of a body using a false balance.
3. To verify principle of moments and determine weight of an unknown body using a lever.
4. Comparison of thermometric scales of temperature by graph method.
5. Determination of focal length of a double convex lens by one pin method.
6. To determine Magnifying power of a telescope by linear method.
7. Setting up of two way lighting circuit and calculation of cost of electricity consumed.
8. Repair and testing of electric Iron and fuse.
9. To verify the Ohm's law and determine resistance of a conductor by graph method.
10. Determination of 'g' by simple pendulum method.

### RECOMMENDED READINGS

- Vogel A. I., Practical Organic Chemistry Orient Longmans Limited.
- Vogel A. I., Textbook of Quantitative Inorganic Chemistry Orient Longmans Limited.
- P. L. Soni and S. C. Jain, B. Sc. Practical Chemistry Sultan Chand and Sons.
- Harnam Singh, B. Sc. Practical Physics S. Chand and Co., 2001.
- S. Kohli and S. D. Yadav, Practical Laboratory Manual 2010.
- Khare and Gangal, Oral questions with answers on Practical Physics Atma Ram and Sons, 1967.

## INTRODUCTION TO FOOD AND NUTRITION

### THEORY

<b>Paper No.</b>	<b>: HSPT - 211</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period/week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods/semester</b>

### OBJECTIVES

This course will enable the student to:

1. Understand the relationship between food, nutrition and health.
2. Understand the functions of food.
3. Understand the various food groups with respect to nutritive content, properties, selection and cookery.
4. Understand the function of various nutrients and their sources.
5. Learn about the various methods of preparing food.

## CONTENT

## PERIODS

### **Unit I: Basic concepts in food and nutrition (Ch 1 Srilakshmi / Ch 25, 26, 27 Bamji et al) 3**

- Basic terms used in study of food and nutrition
- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social

### **Unit II: Nutrients (Ch 3, 5, 6, 7 Wardlaw and Insel / Ch 5, 6, 7 Bamji et al) 15**

Functions, Dietary Sources and Recommended Dietary Allowances of the following nutrients:

- Energy, Carbohydrates, lipids and proteins
- Fat soluble vitamins-A, D, E and K
- Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B<sub>12</sub> and vitamin C
- Minerals – calcium, iron and iodine

### **Unit III: Methods of cooking (Ch 1 Srilakshmi) 4**

- Dry, moist, frying and microwave cooking
- Advantages, disadvantages and the effect of various methods of cooking on foods

### **Unit IV: Food Groups (Ch 2, 3, 5, 6, 7, 8, 10, 11 Srilakshmi) 22**

Nutritional contribution, selection and changes in cooking of the following food groups:

- Cereals
- Pulses
- Fruits and vegetables
- Milk
- Eggs, meat, poultry and fish
- Fats and Oils
- Spices and herbs

### **Unit V: Nutrient losses in cooking and enhancing the nutritional quality of foods (Ch 1 Srilakshmi) 4**

## RECOMMENDED READINGS

- Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3<sup>rd</sup> edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Srilakshmi (2007). Food Science, 4th Edition. New Age International Ltd.
- Wardlaw and Insel MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition. Mosby.

## INTRODUCTION TO FOOD AND NUTRITION

## PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 211</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester ( 4 periods each)</b>

## OBJECTIVES

This course will enable the students to:

1. To understand the concepts of weights and measures (raw and cooked) and its importance.
2. To acquire skill in food preparation techniques.
3. To use appropriate methods of cooking for preparation of specific food products.
4. To observe and understand the principles involved in preparation of different foodstuffs.

## CONTENT

## PRACTICALS

1. Weights and measures; and table setting **1**
2. Food preparation, understanding the principles involved, nutritional quality and portion size **10**
  - **Beverages:** Hot tea/coffee, Milk shake/ lassi
  - **Cereals:** Boiled rice, pulao, chapatti, parantha, puri, pastas, and sandwiches
  - **Pulses:** Whole, dehusked
  - **Vegetables:** curries, dry preparations
  - **Milk and milk products:** Kheer, custard
  - **Meat, Fish and poultry preparations**
  - **Egg preparations:** Boiled, poached, fried, scrambled, omelettes, egg pudding
  - **Soups:** Broth, plain and cream soups
  - **Baked products:** Biscuits/cookies, cream cakes, sponge cake preparations, tarts and pies
  - **Snacks:** pakoras, cutlets, samosas, upma, poha
  - **Salads:** salads and salad dressings
3. Recipe writing **1**

## RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.
  - Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2002). Basic Food Preparation: A Complete Manual, Third Edition. Orient Longman Ltd.
- 

## FOUNDATIONS OF HUMAN DEVELOPMENT

### THEORY

<b>Paper No.</b>	<b>: HSPT - 231</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## OBJECTIVES

1. To become familiar with Human Development and its relation to other subjects of Home Science.

2. To comprehend the content and scope of Human Development.
3. To develop an understanding of the role of family and the community in the lives of individuals.

<b>CONTENT</b>	<b>PERIODS</b>
<b>UNIT I: Basic concepts in Human Development (Ch 1 Bee / Ch 1 Santrock)</b>	<b>8</b>
<ul style="list-style-type: none"> <li>• Human development as a unit of Home Science</li> <li>• Definition and meaning of human development</li> <li>• Interdisciplinary nature of HD</li> <li>• Principles and determinants of development</li> <li>• Stages of development and developmental milestones</li> </ul>	
<b>UNIT II: Contexts of development (Ch 1 Berk / Ch 1, 2 Santrock)</b>	<b>8</b>
<ul style="list-style-type: none"> <li>• The macro context</li> <li>• The micro contexts</li> </ul>	
<b>UNIT III: Prenatal Development and the neonate (Ch 2, 3 Bee / Ch 2 Berk)</b>	<b>14</b>
<ul style="list-style-type: none"> <li>• Issues related to sexuality and fertility</li> <li>• Conception, pregnancy and birth</li> <li>• Capacities and care of the new born</li> </ul>	
<b>UNIT IV: Infant Development (Ch 3 Cole/ Ch 3, 4, 5 Santrock)</b>	<b>18</b>
<ul style="list-style-type: none"> <li>• Physical Development</li> <li>• Motor Development</li> <li>• Cognitive Development</li> <li>• Language Development</li> <li>• Social and Emotional Development</li> </ul>	

#### **RECOMMENDED READINGS**

- Bee. H., (1995). The Developing Child. Harper Collins College Publisher
- Berk, L. (2006). Child development. New York: Allyn & Bacon
- Cole, M. and Cole, S. R. (1996). The Development of Children. W. H. Freeman and Company
- Santrock. (2006). Child Development. New York: Mc Graw- Hill.

# FOUNDATIONS OF HUMAN DEVELOPMENT

## PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 231</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### CONTENT

### PRACTICALS

1. Methods of study and their use	5
(i) Interviews	
(ii) Observation	
2. Audio and video sources of studying prenatal development and infancy	2
3. Survey of selected resources for family and children in the community and the market	2
4. Preparation of material for parents and children (posters, toys etc.)	3

# INTRODUCTION TO SOCIAL SCIENCES

## THEORY

<b>Paper no.</b>	<b>: HSPT - 302</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## PART- A: PSYCHOLOGY

### CONTENTS

### PERIODS

<b>UNIT-I (Ch 1, 3 Morgan et al / Ch 1, 3 Huffman / Ch 1, 4 Hilgard and Atkinson)</b>	<b>6</b>
• The nature of Psychology	
• The work of Psychologists	
• Perceptual processes	

**UNIT-II (Ch 4, 5, 6 Morgan et al / Ch 5, 6, 7 Huffman / Ch 7, 8, 10 Hilgard and Atkinson)**

6

- Various theories of learning
- Thinking and Language
- Memory

**UNIT-III (Ch 7,8,15 Morgan et al / Ch 11, 12, 15, 16 Hilgard and Atkinson)** 8

- Motivational Processes
- Emotions
- Stress and stress management
- Behaviour disorders

**UNIT-IV (Ch 14 Morgan et al / Ch 13 Hilgard and Atkinson / Ch 3 Coleman)** 4

- Personality- Theories of personality
- Patterns of Development – healthy and faulty development of personality

**RECOMMENDED READINGS**

- Coleman, C. James (1979). Contemporary Psychology and Effective Behaviour. Scott, Foresman and Company.
- Hilgard R. Ernest, Atkinson C. Richard, Atkinson L.Rita (1975). Introduction to Psychology, 6<sup>th</sup> Edition, Oxford and IBH Publishing House.
- Huffman, Karen, Vernoy, Mark, Vernoy, Judith, (2002). Psychology in Action, 5<sup>th</sup> Edition. John Wiley and Sons.
- Morgan, T.Clifford, King A. Richard, Weisz R. John, Schopler John, (1986), 7<sup>th</sup> Edition, Brief Introduction to Psychology. Tata Mcgraw-Hill, New Delhi.

**PART- B: SOCIOLOGY**

**OBJECTIVES**

- To introduce concepts related to scope and content of sociology
- To understand social institutions of society and social changes in them.
- To sensitise students to their identity vis- a- vis the socio-cultural dimensions of society.

**UNIT- I Introduction (Ch 1 Giddens / Ch 1, 7 Abraham / Ch 1, 2, 14 Bhushan / Ch 4 Rawat)**

6

- Definition, nature, scope and content of sociology
- Relationship to other social sciences
- Methods of data collection
- Social groups



**UNIT –II Institutions of society (Ch 11 Abraham / Ch 18, 19 Bhushan / Ch 4 Madan and Majumdar / Ch 1 Giddnes) 5**

- Family
- Kinship and Marriage

**UNIT- III Social Stratification (Ch 9 Abraham / CH 12 Rawat / Ch 20, 21 Bhushan) 5**

- Social stratification- caste and class and manifestation of social Inequality
- Social mobility- Sanskritisation and Westernisation etc.

**UNIT-IV Village India and Demography (Ch 15 Abraham / Ch 27, 30 Bhushan) 5**

- Indian Village- salient feature and ethnographic data
- Basic demographic data in India- Influence of fertility, mortality and migration on population

**UNIT- V Social Change (Ch 17 Abraham / Ch 37, 38 Bhushan / Ch 2 Madan and Majumdar) 3**

- Theories and factors of social change
- Concept of evolution diffusion and acculturation

**RECOMMENDED READINGS**

- Abraham, M. F. (2006). Contemporary Sociology: An Introduction to concepts and Theories. New York: Oxford University Press
- Bhushan, V. (2005). An Introduction to Sociology. Allahabad: Kitab Mahal
- Giddens, A. (1989) Sociology. Polity Press.
- Madan T.N., Majumdar, D.N. (1986). An Introduction to Social Anthropology, National Publishing House.
- Rawat, H. K. (2007). Sociology: Basic Concepts. New Delhi: Rawat Publications

**HOUSING AND SPACE PLANNING**

**THEORY**

<b>Paper No.</b>	<b>: HSPT - 322</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

**OBJECTIVES**

1. To understand the fundamentals of house planning and space articulation.
2. To incorporate ergonomic considerations while space organization and designing.
3. To gather information regarding building construction technologies, materials and interior services.

## CONTENT

## PERIODS

<b>Unit I: Basic Concepts in Space Planning and Design (Ch 1 Kumar)</b>	<b>8</b>
<ul style="list-style-type: none"><li>• Concept of house, housing, architecture;</li><li>• Functions and concept of adequacy of space</li><li>• Characteristics of space, principles of planning spaces; planning and designing</li><li>• Types of house plans: floor, elevation, structural drawings and perspective plans</li><li>• Types of houses: Row, Semi-detached, detached, independent houses or flats/apartments, multi-storeyed buildings</li><li>• The Planning Process: steps in preparing a plan, synthesis of a house.</li><li>• The architects' lingo: symbols and common terms used in house planning</li></ul>	
<b>Unit II: Design Specifics (Ch 32 Kumar / Ch 2 Adler/ Ch 1.1 Gupta)</b>	<b>6</b>
<ul style="list-style-type: none"><li>• Basic norms and space standards in operation – NBC and MPD</li><li>• Ergonomic considerations in planning and designing spaces, space configuration: space standards for different activities with focus on home based workstations; provision for storage (built-in storage)</li><li>• Structuring spaces: indoor and outdoor; space articulation: zones in spatial planning.</li><li>• Analysis of furniture needs of different zones in a house/workstations</li></ul>	
<b>Unit III: Building Construction Techniques And Technologies: Innovations For Sustainable Development (Ch 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 Kumar)</b>	<b>16</b>
<ul style="list-style-type: none"><li>• Purpose, Types and considerations</li><li>• Classification of building materials – Conventional/Non Conventional</li><li>• Site selection – Factors</li><li>• Foundation – Purpose, types of foundations, reasons for failure of foundation</li><li>• Damp-proofing and water-proofing - defects, sources and treatment.</li><li>• Masonry- types</li><li>• Flooring</li><li>• Ceilings- types</li><li>• Lintels and Arches- definitions and purpose</li><li>• Doors and Windows- types</li><li>• Staircase - types</li><li>• Partitions and Panelling</li><li>• Cost economy in construction</li><li>• Concept and scope of pre-fabrication and modular housing</li></ul>	
<b>Unit IV: Interior Environment and Services: Climatic Considerations (Ch 7, 11 Ching / Ch 16 Gupta)</b>	<b>12</b>
<ul style="list-style-type: none"><li>• HVAC<ul style="list-style-type: none"><li>○ Heating of Interiors</li><li>○ Ventilation: terminology, efficient ventilation system, air exchange</li><li>○ Air-conditioning: Types, duct design and filters used, energy efficient air-conditioning system</li></ul></li><li>• Lighting: terminology, day-lighting, types of lighting systems, energy efficient lighting systems, user specific lighting for specific areas, solar lighting systems</li></ul>	

- Water and Plumbing systems: water supply system, waste water disposal, water harvesting.
- Insulation: sound and thermal – materials used and types of insulation
- Safety systems: fire protection – materials and systems used
- Security systems
- Parking and outdoor planning

**Unit V: Special Housing Needs (Ch 35, 37 Adler) 6**

- Housing for special groups – old, disabled, families with infants, toddlers and young children
- Housing for specific areas: for hilly, desert and earthquake prone areas

**RECOMMENDED READINGS**

- Adler, David. 2004, Metric HandBook planning & Design, Architectural press.
- Ching, Francis D.K., 2001, Building Construction Illustrated, John Wiley & Sons.
- Gupta M.K., 2005, Nabhi's Practical Handbook on Building Construction, 4<sup>th</sup> Edition, A Nabhi Publication.
- Kumar, Sushil, 2008, Building Construction, Standard publisher.

## HOUSING AND SPACE PLANNING

### PRACTICAL

<b>Paper Number</b>	<b>: HSPP - 322</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester ( 4 periods each)</b>

**OBJECTIVES**

- To familiarize the students with various aspects of building construction, building materials, light fittings and fixtures, etc.
- To understand the procedures involved in the preparation of house plans, furnishing plans, drawings of service specifications.
- To learn the techniques of preparing designs using computer-aided-design.

### CONTENT

### PRACTICALS

- |   |   |
|---|---|
| • Housing by-laws and symbols (architectural, plumbing, electrical, furniture), Steps in House planning, Different types of plans (site plan, layout plan, floor plan, elevation, section plan) | 1 |
| • Critical Evaluation of independent houses and apartment.  | 1 |
| • Identification of building materials and evaluation concerning their characteristics (favourable and unfavourable features), uses and applications, cost and environment friendliness.        | 2 |
| • Evaluation of buildings on energy efficiency parameters using green rating systems like GRIHA, LEED, ECBC.  | 1 |
| • Portfolio- Observe and prepare plan of residential unit.  | 1 |
| • Observe and prepare house plans for different income groups OR Studio apartment (Computer aided /manual)  |   |

# TEXTILE SCIENCE

## THEORY

<b>Paper No.</b>	<b>: HSPT - 342</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

1. To impart knowledge about yarns in terms of their production and properties.
2. To equip the students with an in-depth information regarding various fabric construction techniques and fabric properties.
3. To provide knowledge about the concepts of mechanical and chemical finishing of textiles.
4. To enable intelligent use and care of fabrics.

### CONTENT

### PERIODS

<b>UNIT I: Yarns (Ch 2, 3 Corbman / Ch 9, 10 Sekhri)</b>	<b>6</b>
<ul style="list-style-type: none"><li>• Types of yarns: staple, filament, simple, complex</li><li>• Yarn properties: yarn number, twist, thread</li><li>• Basic principles of yarn making<ul style="list-style-type: none"><li>-Mechanical spinning--cotton system, wool system</li><li>-Chemical spinning--wet, dry, melt</li></ul></li><li>• Textured yarns: manufacture and properties</li><li>• Blends: properties and usage</li><li>• Yarn defects</li></ul>	
<b>UNIT II: Techniques of fabric construction (Ch 21, 22, 23 Joseph / Ch 11, 12, 13 Sekhri / Ch 4, 5, 7 Corbman)</b>	<b>9</b>
<ul style="list-style-type: none"><li>• Weaving</li><li>• Terminology</li><li>• Operations and motions of the loom</li><li>• Types of weaves</li><li>• Properties and fabrics in common use</li></ul> <b>Knitting</b>	<b>4</b>
<ul style="list-style-type: none"><li>• Classification of knits: warp and weft</li><li>• Knitting machines, knitting needles</li><li>• Properties and fabrics in common use</li></ul> <b>Non woven</b>	<b>3</b>
<ul style="list-style-type: none"><li>• Types-felts, needle felts, bonded fabrics</li><li>• Construction</li><li>• Properties and usage</li><li>• Other methods of fabric construction-braiding, knotting</li><li>• Fabric defects</li></ul>	
<b>UNIT III: Finishing (Ch 25, 26 Joseph / Ch 9, 10 Corbman / Ch 14 Sekhri)</b>	<b>12</b>

- Classification of finishes
- Preparatory finishes
- Finishes affecting appearance and texture
- Finishes for enhancing special characteristics

**UNIT IV: Dyeing and printing (Ch 29 Joseph / Ch 11, 12 Corbman / Ch 15 Sekhri) 12**

- Classification of dyes
- Stages of dyeing and equipment in use
- Printing: styles and methods of printing
- Colourfastness of fabrics
- Dyeing and printing defects

**UNIT V: Factors affecting use and care of fabrics (Ch 32 Joseph) 2**

- Durability, appearance, comfort, maintenance

**RECOMMENDED READINGS**

- Corbman, P.B., (1985) Textiles- Fiber to Fabric (6<sup>th</sup> Edition), Gregg Division/McGraw Hill Book Co., US.
- Joseph, M.L., (1988) Essentials of Textiles (6<sup>th</sup> Edition), Holt, Rinehart and Winston Inc., Florida.
- Sekhri S., (2011) Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning, Delhi.

**TEXTILE SCIENCE**

**PRACTICAL**

**Paper No. : HSPP- 342**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

**CONTENTS**

**PRACTICALS**

1. Yarn count	1
2. Yarn & thread identification in terms of size, content, twist and use	2
3. Fabric identification- woven, knitted, non woven and their variations	1
4. Weaves – Identification	2
5. Thread count- different fabrics	1
6. Evaluation of weight of various fabrics –GSM	1
7. Dimensional stability- cotton and wool	1
8. Colour fastness--wash, crock	1
9. Tie and dye: techniques & article	2

# MEDIA SYSTEMS

## THEORY

<b>Paper No</b>	<b>: HSPT - 352</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

1. To develop understanding of various communication systems.
2. To understand various types of communication transactions.

### CONTENT

### PERIODS

<b>Unit I: Communication (Ch 5 Barker and Lee / Ch 1 Devito)</b>	<b>12</b>
<ul style="list-style-type: none"><li>• Intrapersonal Communication</li><li>• Awareness of self in communication</li><li>• Self concept and self esteem</li></ul>	
<b>Unit II: Interpersonal Communication (Ch 3, 6, 7 Barker and Lee / Ch 2, 3 Devito)</b>	<b>10</b>
<ul style="list-style-type: none"><li>• Concept of interpersonal communication</li><li>• Dyadic communication</li><li>• Stages in human relationship development</li><li>• Small group communication: types and functions</li></ul>	
<b>Unit III: Organizational and Public Communication (Ch 8 Barker and Lee/ Ch 4 Devito)</b>	<b>14</b>
<ul style="list-style-type: none"><li>• Organizational communication: concept, types, functions and networks</li><li>• Public communication- concept and techniques</li><li>• Skills in public speaking</li></ul>	
<b>Unit IV: Mass and Intercultural Communication (Ch 1 Devito / Ch 13 Barker and Lee)</b>	<b>12</b>
<ul style="list-style-type: none"><li>• Intercultural communication- concept, stages and barriers</li><li>• Relationship between culture and communication</li><li>• Mass Communication- concept, significance, functions and elements</li></ul>	

### RECOMMENDED READINGS

- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Barker, Larry Lee. (1990) Communication. Eaglewood Cliffs, New Jersey: Prentice Hall.

# MEDIA SYSTEMS

## PRACTICAL

<b>Paper No</b>	<b>: HSPP - 352</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>

**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

## OBJECTIVES

1. To understand the concept of intrapersonal communication.
2. To develop skills in preparation, presentation and evaluation of communication aids/media.

<b>CONTENT</b>	<b>PRACTICALS</b>
• Know yourself exercises.	2
• Studying group dynamics in organizations- formal and informal.	3
• Developing public speaking and presentation skills.	3
• Exercises in Intercultural transactions.	4

## INTRODUCTION TO ECONOMICS

### THEORY

**Paper No. : HSPT - 403**  
**Maximum Marks : 100**  
**Credits : 4**  
**Teaching Periods : 4 Theory + 1 Interactive period / week**  
**Teaching Load : 48 Theory Periods + 12 Interactive periods / semester**

## OBJECTIVES

- To make students understand basic concepts of economics and their utilization in day to day life.
- To familiarize students with major economic problems of India and their implications.
- To enable students to know various policy measures adopted in the country.

<b>CONTENTS</b>	<b>PERIODS</b>
<b>Unit I: Introduction (Ch 1, 2, 3 Sundaram / Ch 1, 2, 3, 4, 5 Dhingra and Garg)</b>	<b>6</b>
<ul style="list-style-type: none"> <li>• Definition &amp; scope of studying Economics.</li> <li>• Central problems of an economy</li> <li>• Economic system – various types</li> </ul>	
<b>Unit II: Consumption and production (Ch 4, 5, 6, 7, 8, 9, 10, 11, 12 Sundaram)</b>	<b>16</b>
<ul style="list-style-type: none"> <li>• Wants – Classification and Characteristics.</li> <li>• Utility – Law of Diminishing Marginal Utility, Law of Equi-Marginal Utility Demand – Law of Demand, Elasticity of Demand.</li> <li>• Engel’s Law of Consumption.</li> <li>• Consumer’s Surplus</li> <li>• Supply – Law of Supply, Elasticity of Supply.</li> <li>• Equilibrium of Demand and Supply.</li> <li>• Factors of Production</li> <li>• Land – Peculiarities of Land and Types of Cultivation</li> <li>• Labour – Types, Labour Market: Supply of Labour – Theories of Population</li> <li>• Demand for Labour – Efficiency and Mobility</li> </ul>	

- Capital Formation
- Organization – Role of Entrepreneur and types of Organization
- Laws of returns
- National Income estimates

**Unit III: Exchange (Ch 1, 2, 5, 12, 13, 14 Mithani) 14**

- Types of Markets
- Types & functions of money
- Value of money – quantity theory
- Measurement of the value of money-Index number
- Inflation
- Types & functions of Banks
- Revenue – sources
- Taxation
- International trade and balance of payment.

**Unit IV: Development & Planning (Ch 1, 2, 17, 29, 37, 41, 42, 54, 55, 61, 62 Mishra and Puri) 12**

- Growth and development – major indicators
- Indian Economy – status : Population, employment, price, food , environment and poverty
- Various developmental programmes of the Government of India
- Sustainability
- Planning: models, objectives and achievement
- Liberalization, privatization and globalization

**RECOMMENDED READINGS**

- Ahuja H.L., 2010, Modern Micro Economics. Sultan Chand & sons
- Dhingra IC and Garg VK, 2010, Introductory Economic Theory. Sultan Chand & Sons
- Mishra and Puri, 28th revised Edition 2010, Indian Economy. Himalaya Publishing House
- Mithani D.M., 2010 New Edition, Macro-Economics. Himalaya Publishing House
- Sundaram K.P.M., 2010, Introduction to Economics. Ratan Prakashan

**INTRODUCTION TO LIFE SCIENCES**

**THEORY**

<b>Paper No.</b>	<b>: HSPT - 404</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

**OBJECTIVES**

1. To introduce the basic concepts from cell to plant
2. To identify common flowering plants



3. To equip the students with the knowledge of cell biology, biotechnology and common genetic diseases.
4. To know about common household pests and human parasites, with emphasis on transmission and control.

## CONTENTS

## PERIODS

### PART – A (BOTANY)

<b>UNIT I: Diversity of Life (Ch 27, 28, 29, 30 Raven et al)</b>	<b>4</b>
<ul style="list-style-type: none"> <li>• Classification of plants with examples. Characters of Algae, Fungi, Bryophyta, Pteridophyta and Gymnosperms.</li> <li>• Economic importance of Algae, Fungi and Bacteria and its relation to man.</li> </ul>	
<b>UNIT II: Introduction to plant science (Part 1 Dutta)</b>	<b>7</b>
<b>Morphology of flowering plants</b>	
<ul style="list-style-type: none"> <li>• Root and its modifications (only tap root modification)</li> <li>• Stem and its modifications (only underground and sub-aerial modifications)</li> <li>• Leaf (parts of a leaf, simple and compound leaf, venation)</li> <li>• Parts of a flower and floral description of few angiospermic families</li> <li>• Structure of ovule and fertilization in Angiosperms</li> <li>• Seed and germination</li> <li>• Structure of fruit; Dispersal of seeds and fruits.</li> </ul>	
<b>UNIT III: Anatomy of Plants (Part 2 Dutta)</b>	<b>5</b>
<ul style="list-style-type: none"> <li>• Plant cell – structure of chloroplast and cell wall of flowering plants</li> <li>• Types of plant tissues – meristematic and permanent tissue               <ul style="list-style-type: none"> <li>○ Simple tissues – parenchyma, collenchyma, sclerenchyma, stomata</li> <li>○ Complex tissues – xylem and phloem</li> </ul> </li> <li>• Anatomy of stem, root and leaf</li> </ul>	
<b>UNIT IV: Physiology (Ch 3, 4, 5, 6, 12, 13, 18 Kochar)</b>	<b>8</b>
<ul style="list-style-type: none"> <li>• Important physiological Processes (Diffusion, Osmosis and Plasmolysis)</li> <li>• Ascent of sap, Absorption of water, transpiration</li> <li>• Brief account of photosynthesis and respiration in plants.</li> <li>• Role of microorganisms in soil fertility (Nitrogen cycle, carbon cycle, sulphur cycle)</li> </ul>	

### PART – B (ZOOLOGY)

<b>UNIT I: Overview of Animal Diversity (Ch 1, 2 Kotpal / Ch 1, 41 Jordan and Nigam)</b>	<b>3</b>
General Characters & classification of animals with examples.	
<b>UNIT II: Biology of the cell (Ch 2 Kotpal / Ch 5, 14, 11 Raven / Ch 6 Jordan and Nigam)</b>	<b>10</b>
<ul style="list-style-type: none"> <li>• Types of cell and structure of cell</li> <li>• Structure and function of cell organelles; plasma membrane, Nucleus, Endoplasmic reticulum, ribosomes, Golgi apparatus, lysosomes, Mitochondria.</li> <li>• Human Chromosomes:- Structure and functions</li> <li>• Structure and functions of – DNA, RNA</li> <li>• Protein synthesis</li> <li>• Types of cell division;</li> </ul>	

- Mitosis,
- Meiosis,
- Significance of cell Division
- Sex determination and sex linked inheritance (colourblindness and haemophilia) Mongolism, Genetic Counselling.

**UNIT III: Biotechnology and its applications (Ch 15, 16 Raven et al) 3**

- Introduction to Stem cell technology
- Cloning
- Transgenic animals & their importance
- Gene Therapy

**UNIT IV: Pests and parasites (Unit 1, 2, 3 Vij and Gupta) 2**

- Morphology, Economic importance and Control of the following: Mosquito, Housefly, Cockroach, and Termites. 2
- (b) Identification, Control and Management of following stored grain pests Cowpea weevil, Khapra beetle, & Rice weevil. 2
- Transmission, Prevention and control of following human parasites. Entamoeba, Plasmodium, Tape worm and Ascaris. 4

**RECOMMENDED READINGS**

- Dutta A.C., Botany for Degree Students, 1968, Oxford University Press, New Delhi.
- Jordan and Nigam: Animal Biology (Hindustani Book Depot, Lucknow, 2003.
- Kochhar P.L, Krishnamoorthy H. N., A textbook of plant Physiology, 1984, Atma Ram Publishing House.
- Kotpal R.L., Modern Text Book of Zoology (2008) Rastogi publications.
- Raven, P.H et. al (2005) Biology 7<sup>th</sup> Edition Tata McGraw Hill Publications, New Delhi.
- Vij and Gupta, (2001) Applied Zoology, Phoenix Publishing house.

**INTRODUCTION TO LIFE SCIENCES**

**PRACTICAL**

**Paper No. : HSPP - 404**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (periods each)**

**PART – A (BOTANY)**

<b>CONTENT</b>	<b>PRACTICALS</b>
1. Structure of seeds and germination.	1
2. Study of permanent slides of dicot stem, monocot stem, dicot root, monocot root, dorsiventral leaf and isobilateral leaf.	1
3. Preparation of temporary mounts:	1
a. Onion peel. (study of typical plant cell)	

- b. Epidermis of Rhoec (to study the structure of epidermis with stomata)
4. Physiology Experiments 2
- a. Role of light, CO<sub>2</sub>, Chlorophyll in photosynthesis.
  - b. Transpiration in leaf by using cobalt chloride method.
  - c. Demonstration of osmosis using semi-permeable membrane in plant.
  - d. Aerobic respiration in germinating seeds by Ganong's respirometer.
5. Floral description of few Angiospermic families e.g. Malvaceae, Solanaceae and Papilionaceae.1

### PART – B (ZOOLOGY)

<b>CONTENT</b>	<b>PRACTICALS</b>
<b>1. To learn the use of Microscope</b>	<b>1</b>
<ul style="list-style-type: none"> <li>• Dissecting Microscope</li> <li>• Compound Microscope</li> <li>• Binocular Microscope</li> </ul>	
<b>2. Preparation of temporary mounts</b>	<b>2</b>
<ul style="list-style-type: none"> <li>• Squamous epithelium</li> <li>• Nerve Cells</li> <li>• Blood Cells</li> <li>• Muscle Cells</li> </ul>	
<b>3. ABO Blood group determination</b>	<b>1</b>
<b>4. Study of slides &amp; specimens of</b>	<b>1</b>
Protozoa, Helminthic Parasites & Arthropod Vectors (mosquito, housefly) associated with human diseases	
<b>5. Economic Importance of following pests based on identification of their adult:</b>	<b>1</b>
Termite, Cowpea weevil, Khapra beetle, Rice weevil.	
<b>6. Vermicomposting</b>	

## NUTRITION: A LIFE CYCLE APPROACH

### THEORY

<b>Paper No.</b>	<b>: HSPT - 412</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive Period/week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive Periods/Semester</b>

## OBJECTIVES

This course will enable the student to:

1. Understand the concept of meal planning.
2. Understand the nutritional concerns of an individual throughout the life cycle.
3. Exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

## CONTENT

## PERIODS

### Unit I: Principles of meal planning (Ch 2, 3, 4 Khanna et al)

8

- Balanced diet
- Food groups
- Food exchange list
- Factors affecting meal planning and food related behavior
- Dietary guidelines for Indians

### Unit II: Nutrient requirements (Ch 12 Bamji et al)

6

- Concept of minimum nutrient requirements
- Overview of methods for assessment of nutrient needs
- Recommended Dietary Allowances

### Unit III: Nutrition during adulthood (Ch 5, 6, 9 Khanna et al / Ch 17 Wardlaw et al)14

Physiological changes, RDA, nutritional guidelines, nutritional concerns, energy balance and healthy food choices.

- Adults
- Pregnant women
- Lactating mothers
- Elderly

### Unit IV: Nutrition during childhood (Ch 7, 8 Khanna et al / Ch 16 Wardlaw et al) 20

Growth and development, growth reference/standards, RDA, nutritional guidelines, nutritional concerns, energy balance and healthy food choices.

- Infants
- Preschool children
- School children
- Adolescents

## RECOMMENDED READINGS

- Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3<sup>rd</sup> edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Khanna K, Gupta S, Passi SJ, Seth R, Mahna R, Puri S (1997). Textbook of Nutrition and Dietetics. Phoenix Publishing House.
- Wardlaw GM, Hampl JS, DiSilvestro RA (2004). Perspectives in Nutrition, 6<sup>th</sup> edition. McGraw Hill.

## NUTRITION: A LIFE CYCLE APPROACH PRACTICAL

**Paper No. : HSPP - 412**

**Maximum Marks : 50**

**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals/ semester (4 periods each)

## **OBJECTIVES**

This course will enable the student to:

1. Learn the rich dietary sources of various nutrients.
2. Understand basic principles of meal planning and the use of food exchange list.
3. Plan and prepare nutritious meals and dishes for different age groups.

## **CONTENT**

## **PRACTICALS**

<b>1: Introduction to meal planning</b>	<b>2</b>
• Rich sources of nutrients	
• Use of food exchange lists	
• Food market survey	
<b>2: Planning nutritious diets for:</b>	<b>7</b>
• Young Adult	
• Pregnant/ Lactating woman	
• Preschooler	
• School age child/Adolescent	
• Elderly	
<b>3: Planning nutrient rich snacks/dishes for:</b>	<b>3</b>
• Infants (Complementary foods)	
• Children/Adults	

## **RECOMMENDED READINGS**

- Gopalan C, Rama Sastri BV, Balasubramanian SC (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, ICMR, Hyderabad.
- Seth V and Singh K (2005). Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual. Elite Publishing House Pvt. Ltd. New Delhi.

-----

## **DEVELOPMENT IN CHILDHOOD**

### **THEORY**

**Paper No.** : HSPT - 432  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

## OBJECTIVES

1. To understand development through the childhood years
2. To develop awareness about the factors influencing development during childhood years
3. To study development in different domains

## CONTENT

## PERIODS

### Unit I: Early childhood Years- Preschool Age (Ch 4, 5, 8, 10, 11, 12 Bee / Ch 3, 4, 5 Santrock)

16

- Developmental tasks of preschool years
- Physical and motor development
- Cognitive, and language development
- Social and emotional development
- Play and learning

### Unit II: Early Childhood Care and Development (Ch 4, 5 Santrock)

16

- Care of the Infant
  - Safety, feeding, hygiene, immunization and stimulation
- Care at home
  - Family
  - Working Mothers
  - Single parent families
- Extra Familial Care
  - Crèche
  - Day Care Centre
  - Orphanages Developmentally Appropriate practices for young children
- Fostering development during early years
- ECCE activities

### Unit III: Middle Childhood Years (Ch 9, 10 Berk / Ch 3, 4 Papalia et al)

16

- Developmental tasks of middle childhood
- Physical and motor development
- Cognitive, language and moral development
- Social and emotional development
- School as a context for development

## RECOMMENDED READINGS

- Bee, H., (1995). The Developing Child. Harper Collins.
- Berk, L. E. (2007). Development through the life span (4<sup>th</sup>ed.). Boston: Allyn & Bacon.
- Papalia, D., Olds, S., Feldman, R, (2009). Human development (11<sup>th</sup> ed.). Tata Mcgraw-Hill: New York.
- Santrock, J. W., (2006). Life span development (10<sup>th</sup>ed.). Mc Graw Hill

## DEVELOPMENT IN CHILDHOOD

## PRACTICAL

**Paper No.** : HSPP - 432  
**Maximum Marks** : 50  
**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

## CONTENT

## PRACTICALS

- |   |   |
|---|---|
| 1. Multiple and mixed methods of studying children                                | 3 |
| • Interview   |   |
| • Questionnaire   |   |
| • Observations  |   |
| 2. Plan and develop activities to facilitate development in different domains     | 2 |
| 3. Study of the role of salient others in child's life- familial and non-familial | 2 |
| 4. Use of secondary sources to understand the depiction of children               | 2 |
| 5. Psychometric tests for children- any 4   | 3 |

## PHYSIOLOGY AND PROMOTIVE HEALTH

### THEORY

**Paper No.** : HSPT - 505  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### OBJECTIVES

This course will enable the students to:

1. Understand the physiology of all the systems of the human body.
2. Develop a holistic understanding of mental, reproductive and social health.
3. Develop the awareness of major communicable and non-communicable diseases.

### CONTENT

### PERIODS

#### Unit I: Cardio Thoracic Physiology (Ch 1, 5, 7 Ross and Wilson/ Ch 6 Ganong)

9

##### Blood and Cardio-vascular Physiology

- Blood -Composition and function
- Structure of heart, circulations (systemic, pulmonary, coronary and portal)
- Cardiac cycle, Cardiac output

- Blood pressure, Hypertension
- Respiratory Physiology
- Structure of lungs and its function
- Hypoxia
- Lung volume and Capacities

**Unit II: Gastro Physiology (Ch 9 Ross and Wilson/ Ch 5 Ganong) 6**

- Structure of stomach, liver, gallbladder, pancreas and their functions
- Composition, function and regulation of GI secretions

**Unit III: Neurophysiology (Ch 12 Ross and Wilson) 2**

- Organization of nervous system

**Unit IV: Endocrine Physiology (Ch 14 Ross and Wilson/ Ch 5 Ganong) 4**

- Actions and disorders of Pituitary, Thyroid and Parathyroid, Adrenal and Pancreatic hormones

**Unit V: Reproductive Physiology (Ch 15 Ross and Wilson) 4**

- Structure of uterus, ovaries and mammary gland and its functions
- Physiology of Menstruation and Menopause
- Physiology of Pregnancy and lactation

**Unit VI: Excretory Physiology (Ch 10 Ross and Wilson) 3**

- Structure of kidney and its function
- Urine formation
- Renal function test

**Unit VII: Geriatric Physiology (Ch 1 Ganong) 2**

- Basic concepts of aging

**Unit VIII: Epidemiology of Disease (Ch 2, 5, 6 Park) 9**

- Concept of health and Disease
- WHO definition of Health
- Definition and Basic concept of Disease and Disease transmission
- Epidemiological triad of disease
- Communicable Diseases
- Causative organism, Mode of transmission and Prevention and Control of Measles, Enteric Fever, Malaria, Dengue fever, HIV/AIDS
- Non Communicable Diseases
- General risk factors for non communicable diseases
- Risk Factors and Prevention of Cancer

**Unit IX: Promotive Health (Ch 3, 10, 18 Park) 9**

- Concept of Prevention
- Definition of Public Health and Prevention,
- Levels of prevention of a disease



- General modes of Intervention
- Concept of Immunization and Immunization Schedule (WHO and IAP)
- Maternal Health
- Preconception and Antenatal Care
- Family Planning; Definition and Health Aspects
- Brief outline of the common contraceptive methods used
- Mental Health and Wellbeing
- Introduction to Drug Dependence and Alcoholism
- Introduction to the Benefits of Yoga/Exercise and its role in coping with stress

## RECOMMENDED READINGS

- Ganong WF (2005). Review of Medical Physiology, 22<sup>nd</sup> ed. McGraw Hill.
- Park K (2009). Park's Textbook of Preventive and Social Medicine, 20<sup>th</sup> edition. M/s Banarsi Das Bhanot, Jabalpur.
- Ross and Wilson (1987). Foundation of Anatomy and Physiology, 6<sup>th</sup> ed. Medical Division of Longman Group Ltd.

## PUBLIC NUTRITION AND DIETETICS-I

## THEORY

<b>Paper No.</b>	<b>: HSPT - 513</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive Period/ week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive Periods/ semester</b>

## OBJECTIVES

This course will equip the students to:

1. Understand common nutrition related problems of the community.
2. Be able to assess the nutritional status at community level.
3. Learn the basic principles of diet therapy.
4. Understand the dietary management in common diseases/ disorders.

## CONTENTS

## PERIODS

**Unit I: Concept and scope of public nutrition (Ch 1.1 Wadhwa and Sharma)**

**2**

**Unit II: Assessment of nutritional status: methods and application (Ch 5.1 Wadhwa and Sharma)**

**10**

- Direct methods – anthropometry, biochemical and clinical examination
- Indirect methods – dietary surveys, vital statistics

**Unit III: Common nutritional deficiencies (Ch 5.3 Wadhwa and Sharma)**

**14**

Etiology, prevalence, clinical features, prevention and management of nutritional deficiencies

- PEM
- Micronutrient deficiencies such as Vitamin A deficiency, Nutritional Anemias, Iodine Deficiency Disorders

**Unit IV: Introduction to Diet Therapy (Ch 10 Khanna et al)** **3**

- Basic concepts of diet therapy
- Therapeutic modifications of the normal diet

**Unit V: Common diseases/ disorders (Ch 11, 12, 13, 14 Khanna et al)** **15**

Etiology, clinical features and nutritional management of:

- Febrile disorders and HIV-AIDS
- Diarrhoea, constipation
- Infective hepatitis
- Underweight, overweight and obesity

**Unit VI: An overview of common lifestyle disorders and their prevention - Diabetes and Cardiovascular diseases (Ch 15, 16 Khanna et al / Ch 15, 26 Stacy)** **4**

**RECOMENDED READINGS**

- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (1997). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- Stacy Nix (2009). William’s Basic Nutrition and Diet Therapy, 13<sup>th</sup> Edition. Elsevier Mosby.
- Wadhwa A and Sharma S (2003). Nutrition in the Community- A Textbook. Elite Publishing Pvt Ltd, New Delhi.

**PUBLIC NUTRITION AND DIETETICS-I  
PRACTICAL**

**Paper No.** : HSPP - 513  
**Maximum Marks** : 50  
**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

**OBJECTIVES**

This course will equip the students to:

1. Plan and prepare low cost nutritious dishes for nutritional deficiencies of public health significance.
2. Use simple techniques for assessment of nutritional status.
3. Plan and prepare diets for individuals suffering from common diseases/ disorders.

**CONTENTS**

**PRACTICALS**

1. Assessment of nutritional status: 24 hour dietary recall, anthropometry, clinical assessment 2
2. Development of low cost nutritious recipes for population groups vulnerable to nutritional deficiencies 2

3. Planning and preparation of diets/dishes for individuals suffering from: **8**
- Febrile disorders
  - Diarrhoea, constipation
  - Infective hepatitis
  - Underweight, overweight/ obesity

**RECOMMENDED READINGS**

- ICMR (1989) Nutritive value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- ICMR (1998) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Seth V and Singh K (2007). Diet Planning through the Life Cycle Part II: Diet Therapy. A Practical Manual, 4<sup>th</sup> edition. Elite Publishing House Pvt. Ltd.

-----

**DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD**

**THEORY**

**Paper No. : HSPT - 533**  
**Maximum Marks : 100**  
**Credits : 4**  
**Teaching Periods : 4 Theory + 1 Interactive period / week**  
**Teaching Load : 48 Theory Periods + 12 Interactive periods / semester**

**OBJECTIVES**

1. To understand developmental stages and issues in adolescence in India
2. To study significant changes from young adulthood to late adulthood
3. To gain knowledge of the processes in aging and appreciate the status of the aging person in the Indian context

**CONTENTS**

**PERIODS**

**UNIT I: Introduction to Adolescence and Physical Development (Ch 5 Berk / Ch 1, 2, 3, 4 Rice) **8****

- Definitions of adolescence and theoretical perspectives
- Physical and physiological changes
- Puberty and sexual maturity
- Nutrition, health and psychological well-being

**UNIT II: Cognitive, Language and Moral Development (Ch 6, 12 Rice) **10****

- Perspectives on cognitive development

- Development of intelligence and creativity
- Adolescent language
- Adolescent morality
- Influences on development of cognition, intelligence, creativity and morality

**UNIT III: Social and Emotional Development (Ch 8, 9, 10, 11, 12 Rice / Ch 13 Santrock) 10**

- Self and identity at adolescence- contemporary perspectives
- Developmental tasks of adolescence in India
- Family relationships- parents, siblings, grandparents and significant others
- Peer relationships
- Interface with media, politics and civil society

**UNIT IV: Introduction to Adulthood and Physical Changes (Ch 11, 14 Santrock) 6**

- Definitions and theoretical perspectives; transition from adolescence to adulthood
- Developmental tasks of adulthood
- Physical and physiological changes from young adulthood to late adulthood
- Significance of health, nutrition and well being

**UNIT V: Social and Emotional Changes (Ch 18, 19 Rutter and Rutter / Ch 14, 15 Santrock) 10**

- Developmental tasks of adulthood
- Diversity in roles and relationships with maturity
- Marriage-contemporary trends
- Relationships within and outside family
- Parenting growing children
- Being a grandparent
- Growing old in the Indian context
- Perspectives on Death

**UNIT VI: Cognition, Creativity, and Morality: Applications in Adult Life (Ch 16 Santrock / Ch 14 Tennant) 4**

- Cognition and creativity: implications for personal, social, vocational life and work
- Moral values- practice and reflection in family life and work

**RECOMMENDED READINGS**

- Berk, L.E. (2007). Development through the lifespan. Delhi: Pearson Education.
- Rice, F.P. (1998). Human development: A lifespan approach. New Jersey: Prentice Hall.
- Rutter, M. and Rutter, M. (1992) Developing Minds. Challenge and continuity across the life span. London: Penguin.
- Santrock, J.W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw-Hill.
- Tennant, M. and Pogson, P. (1995) Learning and Change in the Adult Year, San Francisco: Jossey-Bass.

# DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD

## PRACTICAL

<b>Paper No.</b>	<b>: HSPP - 533</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### CONTENT

### PRACTICALS

1. Study of physical and sexual changes in adolescence. 2
2. Studying cognitive development and creativity at adolescence 2
3. Case profile of an adolescent- including study of self, family relationships and peer relationships. 2
4. Use of interview/questionnaire methods to study adult roles ( at least one male and female) 3
  - Father/husband
  - Home maker
  - Employed woman
  - Grandfather/grandmother
  - Single mother/father
  - College -going young adults
5. Familiarity with Psychological Tests of Intelligence and Personality- any four 3

## NUTRITIONAL BIOCHEMISTRY

### THEORY

<b>Paper No.</b>	<b>: HSPT - 514</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

This course will enable the students to:

1. Develop an understanding of the fundamentals of biochemistry.
2. Obtain an insight into basic chemistry of major nutrients and physiologically important biomolecules.

### CONTENT

### PERIODS

<b>Unit I: Introduction to Biochemistry (Ch 1 Lehninger et al)</b>	<b>1</b>
<ul style="list-style-type: none"> <li>• Definition, objectives, scope and inter-relationship between biochemistry and other biological sciences</li> </ul>	
<b>Unit II: Carbohydrates (Ch 7 Lehninger et al)</b>	<b>8</b>
Definitions, classification, structure and general properties of: <ul style="list-style-type: none"> <li>• Monosaccharides-glucose, fructose, galactose, ribose, xylulose</li> <li>• Disaccharides – maltose, lactose, sucrose</li> <li>• Polysaccharides – dextrin, starch, glycogen</li> </ul>	
<b>Unit III: Lipids (Ch 10 Lehninger et al)</b>	<b>8</b>
Definitions and classification of lipids <ul style="list-style-type: none"> <li>• Types and properties of fatty acids</li> <li>• Composition and properties of fats</li> <li>• Significance of acid value, iodine value and saponification value</li> </ul>	
<b>Unit IV: Proteins (Ch 3 Lehninger et al)</b>	<b>9</b>
<ul style="list-style-type: none"> <li>• Definition, classification, structure of amino acids</li> <li>• Essential and non-essential amino acids</li> <li>• Definition, classification, elementary knowledge of structure of proteins</li> <li>• Introduction to Enzymes, Co-enzymes, Mechanism of action of enzymes</li> </ul>	
<b>Unit V: Digestion and absorption of- (Ch 25 Murray et al)</b>	<b>6</b>
<ul style="list-style-type: none"> <li>• Carbohydrates</li> <li>• Proteins</li> <li>• Fats</li> </ul>	
<b>Unit VI: Vitamins - Structure and biochemical role of: (Ch 24 Murray et al)</b>	<b>10</b>
<ul style="list-style-type: none"> <li>• Fat soluble vitamins – A, D</li> <li>• Water soluble vitamins – B<sub>1</sub>, B<sub>2</sub>, niacin, pyridoxine, folic acid, B<sub>12</sub> and C</li> </ul>	
<b>Unit VII: Minerals (Ch 26 Murray et al)</b>	<b>6</b>
<ul style="list-style-type: none"> <li>• Biological role and occurrence of inorganic elements – iron, calcium, phosphorous, iodine, selenium and zinc</li> </ul>	

### RECOMMENDED READINGS

- Lehninger A L, Nelson D L and Cox M M (2009). Principles of Biochemistry, 6<sup>th</sup> Ed. CBS Publishers and Distributors.
- Murray R.K, Granner D K, Mayes P A and Rodwell V W (2009). Harper's Biochemistry, 28<sup>th</sup> Ed, Lange Medical Book.

## NUTRITIONAL BIOCHEMISTRY

### PRACTICAL

**Paper No.** : **HSP - 514**  
**Maximum Marks** : **50**

**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

## OBJECTIVES

This course will enable the student to understand:

1. Qualitative analysis of carbohydrates and proteins.
2. Quantitative estimation of sugars.
3. Characterization of fats.
4. Estimation of vitamins and minerals.

## CONTENT

## PRACTICALS

- |   |   |
|---|---|
| 1. <b>Carbohydrates</b>   | 7 |
| • Qualitative tests for mono, di and polysaccharides and their identification in unknown mixtures |   |
| • Quantitative estimation of glucose, sucrose and lactose by titrimetric method                   |   |
| 2. <b>Fats</b>  | 1 |
| • Properties of Fats  |   |
| 3. <b>Proteins</b>  | 1 |
| • Qualitative tests for proteins / amino acids  |   |
| 4. <b>Minerals</b>  | 1 |
| • Estimation of calcium using EDTA by titration   |   |
| 5. <b>Vitamins</b>  | 2 |
| • Estimation of ascorbic acid by using 2, 6 dichlorophenol indophenol method                      |   |

## RECOMMENDED READINGS

- Hawk PB, Oser BL and Summerson WH (1954). Practical Physiological Chemistry, Mcgraw Hill, New York.
- Sundararaj P and Siddhu A (2006). Qualitative Tests and Quantitative Procedures in Biochemistry. Elite Publishing House Pvt. Ltd., New Delhi.

-----

## BASICS OF DESIGN APPLICATION

## THEORY

**Paper No.** : HSPT - 524  
**Maximum Marks** : 100  
**Credits** : 4

**Teaching Periods : 4 Theory + 1 Interactive period / week**  
**Teaching Load : 48 Theory Periods + 12 Interactive periods / semester**

## **OBJECTIVES**

1. To understand the elements of art & Design as applied to daily life.
2. To understand and apply the fundamental principles of design & décor for the interiors.
3. To develop skill in drawing, sketching and graphics to prepare interior plans.

<b>CONTENT</b>	<b>PERIODS</b>
<b>Unit I: Design Fundamentals (Ch 2 Lawrence)</b>	<b>16</b>
<ul style="list-style-type: none"> <li>• Objectives of Art &amp; Interior Design.</li> <li>• Types of Design: Structural &amp; Decorative.</li> <li>• Elements of Content: Space, Point, Line, Shape, Form, Texture, Light &amp; Color.</li> <li>• Elements of Order: Scale, Similarity, Proximity, Sequence, Trends, Themes, Geometrical Organization.</li> <li>• Principles of Composition – Rhythm, Balance, Proportion, Emphasis, Unity, (Variety, Simplicity/Economy, Suitability).</li> <li>• Composition of a Drawing – Harmony, Clarity, Adequacy.</li> <li>• Color &amp; its Application.               <ul style="list-style-type: none"> <li>○ Dimensions of color.</li> <li>○ Importance of color &amp; its role in creation of the design.</li> <li>○ Color systems &amp; Theories.</li> <li>○ Color Harmonies.</li> <li>○ Principles of Design as applied to color use.</li> <li>○ Color Forecasting</li> </ul> </li> <li>• Design Drawing – Drawing as a language to explore &amp; communicate Ideas.</li> </ul>	
<b>Unit II: Furniture &amp; Furnishings: Historical Perspectives &amp; Contemporary Trends (Ch 8 Reznikoff / Ch 10, 11, 12, 13, 14 Riley and Bayen)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Furniture – Types, Construction, Selection and purchase, Arrangement, Care and maintenance</li> <li>• History of Interior Design – including periods like Mughal Architecture, Colonial style, Renaissance.</li> <li>• Contemporary Trends in Interior Design with respect to furniture, furnishings &amp; accessories.</li> <li>• Furnishings – selection, care and maintenance of fabrics used for -               <ul style="list-style-type: none"> <li>○ Soft furnishings: curtains and draperies, upholstered furniture, cushions and pillows, etc.</li> <li>○ Floor coverings</li> </ul> </li> <li>• Accessories – Uses, Classification, Design, Selection &amp; Arrangement.</li> </ul>	
<b>Unit III: Interior &amp; Exterior (Ch 8, 10 Reznikoff)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Architectural Styles –based on themes and main periods, like post Renaissance and modern style.</li> <li>• Traditional and Modern Surface Finishes – types and uses               <ul style="list-style-type: none"> <li>○ Furniture</li> </ul> </li> </ul>	



- Wall
- Floor
- Ceilings
- Roofing
- Lighting applications (Energy efficient lighting design – number and type of lamps and luminaires for efficiency in lighting).

**Unit IV: Landscaping (Ch 1, 4 Reznikoff)**

**8**

- Concept: Interiorscaping and Exteriorscaping /Landscape
- Elements of Landscape- Planting, earthwork form, use of decorative elements, Indoor & Outdoor Plants- Shrubs & Trees (Types, characteristics like appearance, height & girth, economic plants – using less water and resources to grow)
- Maintenance of landscape

**RECOMMENDED READINGS**

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Reznikoff, S.C., (2002), Interior Graphic & Design, Whitney Library of Design.
- Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.

**BASICS OF DESIGN APPLICATION**

**PRACTICAL**

**Paper Number : HSPP - 524**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

**OBJECTIVES**

1. To sharpen the drawing skills as a tool to express ideas.
2. To create awareness of various materials & finishes available for aesthetically designed interiors.
3. To develop skill in drawing, sketching and graphics to prepare interior plans.
4. To impart skills in developing computer aided designs.

**CONTENT**

**PRACTICALS**

- Drawing **2**  
 Introduction to drawing instruments & tools (manual & computer tools)
  - Drawing lines (freehand & with drawing instruments) - both 2-dimensional & 3-dimensional.
  - Lettering.
  - Sketching (figures, buildings, trees & plants, vehicles) - both 2-dimensional & 3-dimensional.

- Rendering of Trees (both floor plan & elevation), brick, grass, water, wood, stone, earth, concrete with
  - Water Colors.
  - Stubbing.
  - Pencil Colors.
- Preparation of catalogue comprising pictures denoting application of Art & Design; Color- Color Wheel, Dimension & Harmonies of Color. Elements of Color. 1
- Floor plans with rendering (Theme based- Manual/Computer aided) 2
- Elevation & perspective plans with rendering (Manual/Computer aided). 2
- Furniture & furnishing plans of specific areas- Critical Analysis 3
- Preparation of portfolio based on historical designs & market review of furniture and furnishing materials (upholstery, curtains and draperies, bed & table linen) 1
  - Wall coverings & decorations (pictures, etc)
  - Floor coverings & decorations.
  - Window & door treatments.
  - Lighting systems.
  - Artifacts (sculptures, ceramics/terracotta, handicrafts, flower arrangements, etc )
  - Fittings and fixtures.
  - Wood and its substitutes.
- Landscape plan (Manual/Computer aided) 1

## CHILD RIGHTS AND GENDER JUSTICE

### THEORY

<b>Paper No.</b>	<b>: HSPT - 534</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

1. To study the concepts of social exclusion and discrimination in the context of children and women.
2. To understand rights, gender equity and empowerment.
3. To study relevant legislations, policies and programmes.

### CONTENT

### PERIODS

<b>Unit I: Introduction: Rights of children and women (Ch 1, 2, 6, 7 Bajpai)</b>	<b>8</b>
<ul style="list-style-type: none"> <li>• Child and women rights</li> <li>• Role of state, parents/family and the child herself in promotion and protection of child rights</li> </ul>	

- Discrimination, disadvantage, disability and social exclusion and oppression in the context of childhood and gender
- Relevance and need of studying gender and child rights

**UNIT II: Children in need of care and protection (Ch 5, 7, 8 Bajpai) 12**

- Vulnerable groups: causes and consequences
- Street, homeless, institutionalised and working children
- Children living with: chronic illness, HIV
- Children in conflict with law
- Constitutional and Legal provisions and programmes

**Unit III: Disadvantage and disability in childhood (Ch 1, 2, 4, 9 Agarwal et al) 10**

- Introduction to concept of disability
- Different types of disabilities
- Causes and prevention of disabilities
- Programmes for children with disability

**Unit IV: Gender and Indian society (Ch 3, 5, 7 Agnes / Ch 2, 7 Kishwar) 10**

- Being male and female in Indian society – social traditions and contemporary issues
- Health, nutrition, education and reproductive health
- Patriarchy, gender roles, gender stereotypes
- Exploring the issues of violence against female in Indian

**Unit V: Empowering Society (Ch 9 Bajpai / Ch 1, 6 Satyarthi et al)**

- Laws, policies and programmes –
  - children
  - women
- Major concerns and obstacles, role of education and media

**RECOMMENDED READINGS**

- Agarwal, A. & Rao, B.V. (2007). Education of Disabled Children. New Delhi: Eastern Book Corporation.
- Agnes, F. (1999). Law and Gender Inequality: The Politics of Women's Rights in India. Oxford University Press
- Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press
- Kishwar, M.(1999). Off the Beaten Track: Rethinking Gender Justice for Indian Women. New Delhi: OUP
- Satyarthi, K. and Zutshi, b. (Ed) (2006). Globalisation, Development and Child Rights. New Delhi: Shipra Publication

**CHILD RIGHTS AND GENDER JUSTICE**

**PRACTICAL**

**Paper No. : HSPP - 534**  
**Maximum Marks : 50**

**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (periods each)

## CONTENT

## PRACTICALS

- |    |   |   |
|----|---|---|
| 1. | Visits to organizations working in the area of Child Rights and Gender to understand their objectives, programmes and experiences | 4 |
| 2. | Workshops on issues relevant issues like Gender, Childhood disability, Inclusive education.                                       | 3 |
| 3. | Understanding child rights and gender issues in diverse social groups through field visits and interactions                       | 3 |
| 4. | Media portrayals of disability, women and children  | 2 |

## TEXTILE DESIGN

## THEORY

**Paper No.** : HSPT - 544  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

## OBJECTIVES

1. To acquaint the students with the concept of design in traditional Indian textiles.
2. To impart knowledge of various types of dyes and auxiliaries for dyeing and printing of fabrics.
3. To study methods and styles of printing fabrics.
4. To create awareness about the socio-economic significance of various sectors of textile industry.

### UNIT I: Design interpretation (Ch 1 Leichty)

4

- Aspects of design
- Elements of design
- Principles of design

**UNIT II: Design through fabric processing, colour and texture (Ch 1 Leichty / Ch 1, 2, 3, 4, 5, 6, 7, 8 Storey)** 1

**UNIT III: Dyeing and printing (Ch 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 Shenai)** 17

- Preparation of fabric for dyeing and printing: cotton, wool, silk
- Classification and application of dyes
- Methods of printing
- Styles of printing
- Auxiliaries in dyeing and printing
- Fixation and after treatments
- Dyeing and printing defects

**UNIT IV: Development of textiles in India (Ch 4, 6, 7, 8 Ghosh)** 2

- Importance
- Production & Processing of different fibres -Cotton, Wool, Silk

**UNIT V: Traditional textiles: with reference to origin, production, colour and design Woven Textiles (Ch 5, 13 Ghosh)** 5

- Muslins
- Brocades
- Shawls

**Embroidered Textiles** 6

- Classification -folk, religious, court and commercial embroideries
- Regional Forms

**Resist dyed Textiles** 4

- Ikats
- Bandhini

**Painted- printed Textiles** 3

- kalamkari, bagh, ajrakh

**UNIT VI: Carpets and floor coverings (Ch 1, 2, 4, 5 Chattopadhyaya/ Pg 62- 298 Ruedin)** 3

- Classification
- Regional variations

**UNIT VI: Status of textile traditions in modern India (Ch 2 Ghosh)** 3

- Socio economic significance of khadi, handloom, powerloom

## REFERENCES

- Chattopadhyaya, K.D. 1977 Indian Carpets and floor coverings: All India Handicrafts Board, New Delhi.
- Ghosh, G.K. and Ghosh, Shukla, 1995, Indian Textiles, APH Publishing Co, New Delhi
- Liechty E.G.D.N. Potterberg and J.A. rasband (2001), fitting and pattern Alteration: A multi method approach, 2<sup>nd</sup> edition, Fairchild publication, New York.
- Ruedin, E. G. (1984) Indian Carpets, Thames and Hudson Ltd., London
- Shenai, V.A. (1987) Chemistry of Dyes and Principles of Dyeing, Vol II, Bombay, India, Sevak Publications
- Storey, Joyce (1974) Textile Printing, London, Thames and Hudson

## TEXTILE DESIGN

## PRACTICAL

**Paper No.** : HSPP - 544  
**Maximum Marks** : 50  
**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

### CONTENTS

### PRACTICALS

1. Colour study	1
2. Design development	2
• Motif development (big and small)	
• Placement of motifs	
3. Dyeing	7
• Preparation of shade cards	
–on cellulosic using direct, reactive and azo	
– on proteins using acid	
• Tie & dye using various techniques on cellulose & protein fibers	
• Batik on cotton	
4. Block printing: pigment	2

## DEVELOPMENT COMMUNICATION AND JOURNALISM

### THEORY

**Paper No** : HSPT - 554  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### OBJECTIVES

1. To understand the concept of development communication and journalism
2. To understand the various models of development as well as mass communication.
3. To understand the use of traditional as well as modern media for the purpose of development.

### CONTENT

### PERIODS

**Unit I: Concept of Development Communication (Ch 1 Rogers and Singhal / Ch 5 Pannu and Tomar / Ch 1 Narula)** **10**

- Concept and uses of development
- Models of development
- Role of communication in development
- Development communication– concept, history and scope

- Philosophy and approaches of development communication

**Unit II: Media for Development (Ch 1 Rogers and Singhal / Ch 5, 6 Pannu and Tomer)**

**12**

- Development Support Communication – concepts and applications (agriculture, health, education and environment)
- Role of traditional media in development communication
- Role of ICTs in development communication- meaning, types and significance
- Innovation and trends in development communication

**Unit III: Introduction to Journalism (Ch 1 Aggarwal and Gupta)**

**14**

- Definition, nature, scope, origin and types of journalism
- News value, news ingredients, types of news reports and structure of news reports
- Role and responsibilities of a journalist, ethics in journalism
- Media agencies- national and international news agencies

**Unit IV: Journalistic skills for various media (Ch 2 Aggarwal / Ch 16, 17, 20, 21 Pannu and Tomar)**

**12**

- Print journalism- fundamentals of good writing for various sections of various types of print media
- Radio journalism- writing for radio, radio news, features and commentary
- Television journalism- writing for television bulletins, features and documentaries

**RECOMMENDED READINGS**

- Aggarwal, B.V. and Gupta, V.S. (2002) 'Handbook of Journalism and Mass Communication', Concept Publishing Company, New Delhi
- Narula Uma, 1991; Development Communication: Theory and Practice, Haranand Publications, Delhi.
- Pannu, Parveen and Tomar Yuki Azaad (2010) 'ICT4D Using Information Communication Technologies for Development' IK International Publishing House, New Delhi.
- Rogers Everett and Singhal Arvind. 'Information Communication from Bullock Carts to Cyber Marts'. Sage Publications.

**DEVELOPMENT COMMUNICATION AND JOURNALISM  
PRACTICAL**

**Paper No : HSPP - 554**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

**OBJECTIVES**

1. To develop skills in preparing and using media for development communication.
2. To develop competencies in script writing for print media.

**CONTENT**

**PRACTICAL**

- Content writing and editing- news features, interview, articles, editorials, etc. on developmental issues. 4
- Designing and developing selected media. 4
- Evaluating selected ICTs on their applications for different development issues. 4

## **FAMILY FINANCE AND CONSUMER STUDIES**

### **THEORY**

<b>Paper No.</b>	<b>: HSPT - 623</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### **OBJECTIVES**

1. To familiarize the student with the changing socio-economic environment and consumer behavior.
2. To strengthen the financial management practices of the students for wise consumer behavior.
3. To develop an understanding of the types of markets, changing concepts of markets, changes in socio-economic environment, and marketing strategies from consumer's perspective.
4. To have an overview of the consumer problems, consumer movement and consumer protection

### **CONTENTS**

### **PERIODS**

#### **Unit I: Consumer in India (Ch 2 Sawhney and Mital)**

**8**

- Definition of a consumer
- Role of consumers in the economy
- National Income, Per Capita Income, Household wise distribution of income
- Changing nature of the business world, e-commerce, e-business

#### **Unit II: Family Income and Expenditure and credit (Ch 3 Seetharaman and Sethi)**

**12**

- Family Income – Types, Sources, Supplementation of family income, use of family income, budgets, maintaining household accounts
- Factors influencing expenditure pattern
- Family savings and investments-principles and channels of investment
- Consumer Credit – need and sources, credit cards, housing finance
- Personal finance management – tax implications, calculation of personal income tax

#### **Unit III: Consumer Problems and Consumer Education (Ch 16 Sawhney and Mital)**

**14**

- Types of consumer problems – products and service related
- Causes and solutions to consumer problems
- Consumer education- Meaning, needs, objectives and strategies
- Consumer Protection and movement



- Empowerment of consumer through consumer education
- Guidelines for wise buying practices

#### **Unit IV: Consumer Protection (Ch 3, 6 Khanna et al)**

**14**

- Consumer rights and responsibilities
- Consumer organizations – origin, functioning, role and types of organizations
- Consumer cooperatives – role, history and growth in India, PDS Kendriya Bhandars
- Basic legislative framework for consumer protection in India, Consumer Protection Act 1986 COPRA – coverage and limitations; Alternative redressal mechanisms, Mediation centres
- Standardization and quality control measures: ISI, FPO, AGMARK, ISO Certifications, Eco mark, Wool mark, Silk mark, Cotton mark, Handloom mark, BEE star labelling and others
- Buying aids- labels, packaging, advertising, buying guides

#### **RECOMMENDED READINGS:**

- Khanna S.R., Hanspal S., Kapoor S. & Awasthi H.K., 2007, Consumer Affairs, Universities Press India Pvt. Ltd.
- Sawhney, H.K. & Mital, M., 2007, Family Finance & Consumer Studies, Elite Publishing House Pvt. Ltd.
- Seetharaman, P. and Sethi, M., 2001, Consumerism: Strength and Tactics, New Delhi: CBS Publishers.

## **FAMILY FINANCE AND CONSUMER STUDIES**

### **PRACTICAL**

<b>Paper No.</b>	<b>: HSPP - 623</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

#### **OBJECTIVES**

1. To understand the concept of family income, expenditure pattern, markets and marketing strategies.
2. To critically analyze the saving and investment avenues.
3. To enable students to handle their personal finances.
4. To know about the legal system and alternative mechanisms of consumer redressal.

#### **CONTENT**

#### **PRACTICALS**

- |  |          |
|--|----------|
| 1. Comparative studies of labels on durables /non durables items/consumables/services.   | <b>1</b> |
| 2. Evaluation of advertisements in the print media- products, services and social ads.   | <b>2</b> |
| 3. Designing informative and attractive advertisements in categories stated above.   | <b>1</b> |
| 4. Brand comparisons of household items/consumer durables available in the market in terms of labels, packaging, advertising, price vs. quality, marketing strategies sales promotion etc. | <b>2</b> |
| 5. Survey of consumer problems   | <b>1</b> |
| 6. Analysis of services of financial institutions – banking / non-banking / private / others   | <b>1</b> |

7. Handling personal finances- evaluating investment options, saral form for tax return.	2
8. Profile of consumer organizations, consumer courts and other systems of redressal	1
9. Food adulteration tests	1

## APPAREL DESIGN AND CONSTRUCTION

### THEORY

<b>Paper No.</b>	<b>: HSPT - 643</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

### OBJECTIVES

1. To impart working knowledge of style reading, pattern development and garment construction.
2. To develop sensitivity towards selection of fabric and design for apparel.
3. To study the concept of fit.

### CONTENT

### PERIODS

<b>UNIT I: Introduction to sewing (Ch 1, 2, 3 Doongaji/ Ch 19 Vatsala)</b>	<b>4</b>
<ul style="list-style-type: none"> <li>• Tools and equipment for sewing: measuring, marking, cutting, pressing and other useful aids</li> <li>• Sewing machine- various parts and their functions, basic operations, common sewing problems &amp; remedies, care of machine, safety measures to be taken while sewing</li> </ul>	
<b>UNIT II: Seams and finishing of raw edges (Ch 3, 10 Stamper/ Ch 21 Vatsala)</b>	<b>3</b>
<ul style="list-style-type: none"> <li>• Types of seams- plain &amp; its finishing, flat, ridge, decorative</li> <li>• Additional seam techniques: clipping, notching, grading, trimming, easing, under stitching, stay stitching, mitering, trimming a corner</li> <li>• Crossway strips- importance &amp; application</li> <li>• Finishing of hem lines</li> </ul>	
<b>UNIT III: Introduction to pattern making (Ch 3, 4, 7, 9 Armstrong)</b>	<b>2</b>
<ul style="list-style-type: none"> <li>• Importance</li> <li>• Methods- drafts, flat pattern, draping</li> <li>• Rules of pattern making</li> </ul>	
<b>UNIT IV: Components of garments and development of drafts (Ch 3, 4, 5, 6, 7, 8, 9, 10, 11 Stamper)</b>	<b>18</b>
<ul style="list-style-type: none"> <li>• Fabric, seams, stitches, thread, shaping methods, dart equivalents, supporting material, sleeves, cuffs, necklines, collars, plackets, yokes, pockets, trims and accessories</li> </ul>	

- Body measurements- importance, body landmarks, precautions & procedure of taking measurements
- Drafting of a child's bodice, plain sleeve & A-line frock
- Adaptation of bodice & A-line frock to various designs of frocks- different necklines, yokes, flares, gathers & pleats , short bodice, elongated bodice
- Adaptation of child's sleeves to set-in (puff, leg-o-mutton), raglan & kimono (basic) sleeves
- Development of collars- peter pan- raised & flat, cape and sailors
- Drafting of adult's bodice, sleeve and skirt block

**UNIT V: Design aspects (Ch 11 Stamper)**

3

- Structural and applied design
- Garment silhouette and lengths, edge treatment
- Disposal of fullness: gathers, pleats, tucks, darts and dart tucks

**UNIT VI: Preparation of fabric for cutting, layouts (Ch 2 Carr and Latham/ Ch 23 Vatsala)**

7

- Fabric grain
- Preparatory steps-preshrinking, straightening & truing
- Layouts for patterns- general guidelines, basic layouts-lengthwise, partial lengthwise, crosswise, double fold, open, combination fold
- Pinning, marking, cutting
- Layout for special fabrics- unidirectional, bold & large prints, plaids, stripes & checks
- Fabric widths & calculation of material required

**UNIT VII: Selection of Apparel (Ch 2, 12 Stamper / Ch 1, 2, 3, 4, 5, 6, 7 Thompson) 11**

- Climate, occasion, occupation, fashion and figure
- Selection of suitable fabrics and apparel according to age (infants, toddlers, preschool and school going children, adolescents and elderly)
- Recognizing correct fit
- Factors affecting fit
- Fit problems and remedies

**RECOMMENDED READINGS**

- Amita, A. Stamper, Sue Humphries Stamp., Evaluating Apparel Quality, Fairchild publications, New York, 1986.
- Armstrong J, Pattern making for fashion design 14<sup>th</sup> edition) Pearson Education
- Thompson & Rea (1947), The Clothing for Children, John Wiley and sons, Inc., New York.
- Doongajis, Deshpandey, Basic Process & clothing construction, 1988.
- Carr, H., Latham, B., The Technology of Clothing Manufacture, 2<sup>nd</sup> Edition, Blackwell Science Publication.
- R. Vatsala (2003), Textbook of Textiles and Clothing, Indian Council of Agricultural Research

**APPAREL DESIGN AND CONSTRUCTION**

**PRACTICAL**

**Paper No. : HSPP - 643**  
**Maximum Marks : 50**

**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

## CONTENTS

## PRACTICALS

- |   |   |
|---|---|
| 1. Centralized plackets : even hem, wrap & projection, continuous wrap and lapped zipper                                | 1 |
| 2. Finishing of raw edges- shaped facing on a slit, bias facing & binding   | 2 |
| 3. Disposal of fullness – gathers, pleats, tucks and darts  | 1 |
| 4. Construction of sleeves and collars on a child’s bodice block  | 4 |
| • Plain and puff sleeve   |   |
| • Peter pan collar and mandarin collar  |   |
| 5. Develop style variations in frocks- yokes, short bodice, elongated bodice and A-line (with flares, gathers & pleats) | 2 |
| 6. Develop style variations in bodice by dart manipulation – single dart series and control seam                        | 1 |
| 7. Stitching a blouse   | 1 |

## EXTENSION MANAGEMENT

## THEORY

**Paper No** : HSPT - 653  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### OBJECTIVES

1. To understand the concept and scope of extension in national development.
2. To develop an understanding of principles and process of program design and management.
3. To make students aware of the concept and process of advocacy.

## CONTENT

## PERIODS

- |  |           |
|--|-----------|
| <b>Unit I: Extension (Ch 3, 4 Dahama and Bhatnagar / Ch 3 Singh)</b>   | <b>14</b> |
| • History and philosophy of Extension  |           |
| • Role of extension in development   |           |
| • Millennium Development Goals (MDG and extension)   |           |
| • Extension Methods and techniques.  |           |
| <b>Unit II: Programme Planning and Management (Ch 37, 38 Dahama &amp; Bhatnagar/ Ch 2, 3 Mikkelsen / Ch 1, 2, 3 Mukherjee)</b> | <b>18</b> |
| • Development programs at regional and national level  |           |
| • Program management – models and approaches   |           |
| • Participatory Learning and Action (PLA) – techniques and applications  |           |
| • Programme planning, implementation, monitoring and evaluation  |           |

**Unit III: Mobilizing Human Resource in Extension (Ch 4 Kumar and Hansra) 16**

- Diffusion and Adoption – adopter’s categories and their characteristics, role of change agents in adoption, socio-economic implications of innovation.
- Leadership Development – concept, types, roles, functions, identifying and utilizing local leadership.
- Promotion of group action through community organizations and community institutions

**RECOMMENDED READINGS**

- Dahama, O.P. and Bhatnagar, O.P., (2003), Education and Communication for Development, New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd.
- Kumar & Hansra, (1997), Extension Education, Concept Publishers, New Delhi
- Mikkelsen, Britha, (2002), Methods For Development Work and Research, New Delhi, Sage Publications
- Mukherjee, Neela, (1993), Participatory Rural Appraisal: Methodology and Applications, New Delhi, Concept Publishing Co.
- Singh A K, (2003) .Agriculture Extension: Impact and Assessment. Agrobios, Jodhpur, India

**EXTENSION MANAGEMENT**

**PRACTICAL**

**Paper No : HSPP-653**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

**OBJECTIVES**

1. To analyze the issues and concerns of specific communities.
2. To develop skills in the use of participatory approaches in programme management.
3. To evaluate different approaches used in development interventions.
4. To evaluate an advocacy campaign for social mobilization.

**CONTENT**

**PRACTICALS**

- Develop skills in conducting PLA techniques for extension programme management. 3
- Evaluate strategies being used by development agencies for implementation of development programmes 3
- Develop skills in planning and using small group methods in extension 3
- Design and evaluate an advocacy campaign 3

**PUBLIC NUTRITION AND DIETETICS -II**

**THEORY**

**Paper No. : HSPT - 615**  
**Maximum Marks : 100**  
**Credits : 4**

**Teaching Periods : 4 Theory + 1 Interactive Period /week**  
**Teaching Load : 48 Theory Periods+ 12 Interactive Periods/Semester**

## OBJECTIVES

This course will enable the students to:

1. Understand the process of communication for behaviour change.
2. Appreciate the significance of nutrition education and dietary counselling.
3. Learn about the national policies and intervention programs for overcoming malnutrition.
4. Understand the dietary management of some common disorders / diseases.
5. Gain knowledge on the use of computers in diet therapy.

<b>CONTENT</b>	<b>PERIODS</b>
<b>Unit I: Food behaviour (Ch 6.1 Wadhwa and Sharma)</b>	<b>5</b>
<ul style="list-style-type: none"> <li>• Food related behaviour – definition and concept</li> <li>• Overview of factors affecting food behaviour at population level</li> </ul>	
<b>Unit II: Communication for behaviour change (Ch 6.2 Wadhwa and Sharma)</b>	<b>7</b>
<ul style="list-style-type: none"> <li>• Concept, objectives, approaches and process</li> <li>• Food safety issues</li> </ul>	
<b>Unit III: Select policies and programs for prevention/ control of Nutritional Problems (Ch 7.2 Wadhwa and Sharma / Ch 10 Park)</b>	<b>6</b>
<ul style="list-style-type: none"> <li>• National Nutrition Policy</li> <li>• Integrated Child Development Services Scheme</li> <li>• Mid-day Meal Program</li> </ul>	
<b>Unit IV: Nutrition Care Process (Ch 18 Stacy)</b>	<b>7</b>
<ul style="list-style-type: none"> <li>• Assessment of patient needs based on anthropometry, clinical, biochemical and dietary data</li> <li>• Team approach in health care</li> <li>• Planning, implementation, evaluation and dietary counselling in nutrition care</li> <li>• Application of computers in health care delivery</li> </ul>	
<b>Unit V: Nutritional care for common degenerative diseases/ disorders (Ch 15, 16 Khanna et al / Ch 30, 55 Stacy / Ch 14.6 Joshi)</b>	<b>21</b>
Etiology, clinical features, diagnosis, nutritional management and dietary counselling	
<ul style="list-style-type: none"> <li>• Common metabolic disorders: Type 1 and Type 2 Diabetes mellitus</li> <li>• Cardiovascular Diseases: Hypertension; Hyperlipidemias; Atherosclerosis</li> <li>• Cancer: An overview of prevention and nutritional management</li> </ul>	
<b>Unit VI: Introduction to dietary management of food allergy and food Intolerance (Ch 14.8 Joshi)</b>	<b>2</b>

## RECOMMENDED READINGS

- Joshi SA (2010). Nutrition and Dietetics, 3<sup>rd</sup> Edition. Tata McGraw Hill Edu. Pvt Ltd.
- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (1997). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- Park K (2009). Park's Textbook of Preventive and Social Medicine, 20th Edition. Jabalpur, Banarsidas Bhanot.

- Stacy Nix (2009). William's Basic Nutrition and Diet Therapy, 13<sup>th</sup> Edition. Elsevier Mosby.
- Wadhwa A and Sharma S (2003). Nutrition in the Community- A Textbook. Elite Publishing Pvt Ltd, New Delhi.

## **PUBLIC NUTRITION AND DIETETICS-II**

### **PRACTICAL**

**Paper No. : HSPP-615**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

### **OBJECTIVES**

This course will equip the students to:

1. Plan and prepare diets for prevention / treatment of common degenerative disorders.
2. Prepare suitable diet counselling aid for degenerative disorders.
3. Identify key messages for health and nutrition promotion.
4. Observe a nutrition intervention program aimed to tackle food insecurity.

### **CONTENT**

### **PRACTICALS**

- |   |          |
|---|----------|
| 1. Planning and preparation of diets /dishes for patients suffering from:   | <b>5</b> |
| <ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Hypertension</li> <li>• Atherosclerosis, hyperlipoproteinemia and hyperlipidemias</li> </ul> |          |
| 2. Planning and preparation of a diet counselling aid for chronic degenerative disorders.   | <b>1</b> |
| 3. Planning and implementation of a nutrition education program for different age and socioeconomic groups in the community.                              | <b>3</b> |
| 4. Observation of MDM / ICDS program at the kitchen level and at the distribution level in schools / ICDS centres.  | <b>1</b> |
| 5. Study of nutrition labels.   | <b>1</b> |
| 6. Demonstration on detection of common adulterants in food.  | <b>1</b> |

### **RECOMMENDED READINGS**

- ICMR (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- ICMR (1998) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Seth V and Singh K (2007). Diet Planning through the Life Cycle Part II: Diet Therapy. A Practical Manual, 4<sup>th</sup> edition. Elite Publishing House Pvt. Ltd.

-----

# ENTREPRENEURSHIP AND ENTERPRISE MANAGEMENT

## THEORY

**Paper Number** : HSPT- 625  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### OBJECTIVES

1. To understand the meaning and concept of entrepreneurship development for women
2. To sensitize and orient them towards identifying entrepreneurial opportunities and market potential
3. To impart knowledge for setting up an enterprise and its management

### CONTENTS

### PERIODS

- |  |           |
|--|-----------|
| <b>Unit I: Entrepreneurship Development (Ch 1, 5 Taneja And Gupta)</b>   | <b>12</b> |
| <ul style="list-style-type: none"><li>• Entrepreneurship- concept, definition, need and significance of entrepreneurship development in India, entrepreneurship growth process, barriers, entrepreneurship education model.</li><li>• Entrepreneur-their characteristics, types, gender issues, role demands and challenges.</li><li>• Entrepreneurial Motivation.</li><li>• Challenges faced by Women Entrepreneurs</li><li>• Case profile of some successful entrepreneurs (repetition of the practical)</li></ul> |           |
| <b>Unit II: Enterprise Planning and Launching (Ch 1, 3 Gundry)</b>   | <b>12</b> |
| <ul style="list-style-type: none"><li>• Types of enterprises classification based on capital, product, location, ownership pattern and process</li><li>• Sensing business opportunities and assessing market potential; market research</li><li>• Selection and formulation of project plan: SWOT Analysis; Self / Enterprise (shifted to practical)</li><li>• Estimation and mobilization of resources</li><li>• Appraising of project and feasibility</li></ul>  |           |
| <b>Unit III: Enterprise Management (Ch 4, 5 Gundry)</b>  | <b>19</b> |
| <ul style="list-style-type: none"><li>• Managing Production<ul style="list-style-type: none"><li>○ Organizing Production; input-output cycle</li><li>○ Ensuring Quality</li></ul></li><li>• Managing Marketing<ul style="list-style-type: none"><li>○ Understanding markets and marketing</li><li>○ Functions of Marketing</li><li>○ 4Ps of Marketing(same as marketing mix)</li></ul></li></ul>   |           |



- Financial Management
  - Meaning of Finance
  - Types and Sources of Finance
  - Estimation of project cost
  - Profit Assessment

**Unit IV: Enterprise Networking (Ch 15 Taneja and Gupta)**

**5**

- Enterprise Resource Planning: Concept, Dynamics and Methods
- Role of institutions providing assistance, manpower, consultancy, financial marketing
- Institutions providing support – CII, KVIC, NIESBUD, Fair Trade Organizations, NGO’s, SME’s, FICCI, corporate- sector

**RECOMMENDED REFERENCES**

- Gundry Lisa K. & Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc
- Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company

**ENTREPRENEURSHIP AND ENTERPRISE MANAGEMENT**

**PRACTICAL**

**Paper Number : HSPP - 625**  
**Maximum Marks : 50**  
**Credits : 2**  
**Teaching Periods : 4 / week**  
**Teaching Load : 12 Practicals / semester (4 periods each)**

**OBJECTIVES**

- To identify one’s own strengths and weaknesses with respect to entrepreneurial characteristics and competencies.
- To develop appreciation for entrepreneurship as a career.
- To develop skills in launching and managing an enterprise.

**CONTENT**

**PRACTICALS**

- |   |   |
|---|---|
| 1. SWOT analysis with respect to entrepreneurial competencies.                  | 2 |
| 2. Achievement Motivation lab-development of entrepreneurial competencies.      | 4 |
| 3. Case profiling of successful entrepreneurs and enterprises.                  | 2 |
| 4. Survey of an institution facilitating entrepreneurship development in India. | 1 |
| 5. Preparation of business plan.  | 3 |

**CARE AND WELL-BEING ACROSS THE LIFE SPAN**

**THEORY**

<b>Paper no.</b>	<b>: HSPT - 635</b>
<b>Maximum Marks</b>	<b>: 100</b>
<b>Credits</b>	<b>: 4</b>
<b>Teaching Periods</b>	<b>: 4 Theory + 1 Interactive period / week</b>
<b>Teaching Load</b>	<b>: 48 Theory Periods + 12 Interactive periods / semester</b>

## OBJECTIVES

1. To understand the significance and role of care and well being in human development
2. To analyse the components and principles of care within the family unit
3. To explore the services and institutions that promote care and well-being

## CONTENTS

## PERIODS

<b>Unit I: Care and human development (Ch 1, 2, 3 Ghosh / Ch 2, 3, 4 Chelsea)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Concept and relevance</li> <li>• Growth, development and the role of care</li> <li>• Principles and components of care-giving within the family (early childhood, adolescence and the elderly)</li> <li>• Gender: care and care giving</li> <li>• Disability, chronic illness and care giving</li> </ul>	
<b>Unit II: Components of care –health, nutrition and nurturance (Ch 4, 5 Ghosh / Ch 7, 8 Chelsea)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Parenting and promotion of well-being</li> <li>• Schooling/ skill development and self worth</li> <li>• Marital issues</li> <li>• Aging and elderly</li> </ul>	
<b>UNIT III: Well-being, development and social contexts (Ch 5, 6, 9 Anand / Ch 7 Schaefer)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Concept of Well Being- Physical, socio-emotional, psychological and spiritual.</li> <li>• Notion of success and wellbeing</li> <li>• Well-being at different stages</li> <li>• Life crises and well-being</li> <li>• Perspectives on promoting well being during the life span</li> </ul>	
<b>Unit IV: Policies, programmes and services (Ch 14 Ghosh / Ch 8 Schaefer)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Nutritional and health services</li> <li>• School health services</li> <li>• Counselling services</li> <li>• Spiritual groups for well-being</li> </ul>	

## RECOMMENDED READINGS

- Anand, E. (1975). Everything a Woman needs to know about Pregnancy : New Delhi. Vikas Publishing House Pvt. Ltd.
- Chelsea, C., Fielder, D., Komilzoda, S. & Pathmanathan, I. ( 2009). Child health policy and programming for marginalized communities. New Delhi: UNICEF

- Ghosh, S. (1981). The Feeding & Care of Infant & Young Children ( 4th Ed ): New Delhi. Voluntary Health Association of India.
- Schaefer, W. (2000). Stress management ( India edition) ( 4<sup>th</sup> edition). Australia: Wadsworth Cengage Learning.

## **CARE AND WELL BEING ACROSS THE LIFE SPAN**

### **PRACTICAL**

**Paper no.** : HSPP - 635  
**Maximum Marks** : 50  
**Credits** : 2  
**Teaching Periods** : 4 / week  
**Teaching Load** : 12 Practicals / semester (4 periods each)

### **CONTENTS**

### **PRACTICALS**

1. Observation of contexts of children in need for care	3
2. Visits to Governmental and non-governmental programmes and services –ICDS, school health programmes, counseling services, programs for the elderly	4
3. Case Profile of an organization working for care services for young children/ youth/ elderly	2
4. Well- being assessment proformas	2
5. Participation in any spiritual /yoga/ healing courses	1

## **FASHION: DESIGN AND DEVELOPMENT**

### **THEORY**

**Paper No** : HSPT - 645  
**Maximum Marks** : 100  
**Credits** : 4  
**Teaching Periods** : 4 Theory + 1 Interactive period / week  
**Teaching Load** : 48 Theory Periods + 12 Interactive periods / semester

### **OBJECTIVES**

- To understand the basics of fashion design.
- To provide knowledge of the Indian and global fashion industry.

### **CONTENT**

### **PERIODS**

#### **UNIT I: Fashion study (Ch 1 Fringes)**

**6**

- Timeline of clothing of draped style of early civilization up to stitched style of 21<sup>st</sup> century

<ul style="list-style-type: none"> <li>• Indian costume- Vedic and Mughal</li> </ul>	
<b>UNIT II: Adoption of fashion (Ch 3 Fringes)</b>	<b>2</b>
<ul style="list-style-type: none"> <li>• Consumer groups- fashion leaders, followers</li> <li>• Adoption process- Trickle-down theory, bottom up theory &amp; trickle across theory</li> </ul>	
<b>UNIT III: Development of fashion details (Ch10, 11, 12, 13, 14, 15, 16, 17 Armstrong/ Ch 7 Tate)</b>	<b>10</b>
<ul style="list-style-type: none"> <li>• Necklines- high and low</li> <li>• Collars – classification, stand and fall, shawl- flat &amp; raised, shirt collar, peter-pan collar on deep open necklines</li> <li>• Sleeves and cuffs- cap, leg-o-mutton, shirt maker and bishop, pet al &amp; saddler</li> <li>• Skirts- high and low waist, gathered, gored, pleated, flared with &amp; without yokes</li> <li>• Pockets- applied, in-seam &amp; slashed</li> <li>• Plackets – centralized, asymmetric and double breasted</li> </ul>	
<b>UNIT IV: Fashion forecasting (Ch 4 Fringes/ Ch 1 Mc. Kelvey)</b>	<b>4</b>
<ul style="list-style-type: none"> <li>• Forecasting background</li> <li>• Forecasting industry</li> <li>• Process: Colour, inspiration, graphics and labelling, fabrication and silhouette, details, mood boards</li> </ul>	
<b>UNIT V: Designing a successful garment (Ch 2, 3, 4, 5, 6 Tate)</b>	<b>12</b>
<ul style="list-style-type: none"> <li>• Role of a designer</li> <li>• Facets of successful design, aesthetics</li> <li>• Organization of a line</li> <li>• Fabricating a line</li> <li>• Cost of a garment</li> </ul>	
<b>UNIT VI: Fashion centres and designers of the world (Ch 8 Fringes)</b>	<b>6</b>
<ul style="list-style-type: none"> <li>• France, Italy, UK, Japan, NY</li> <li>• India</li> </ul>	
<b>UNIT VII: Fashion design and retail (Ch 8, 9 Tate/ Ch 13 Fringes/ Ch 9 Jarnow)</b>	<b>8</b>
<ul style="list-style-type: none"> <li>• Children’s wear- selling seasons, fibers, trimmings, organizing, size categories</li> <li>• Men’s wear- current market trends, designing, merchandising categories</li> <li>• Types of retail organizations- <ul style="list-style-type: none"> <li>-specialty stores</li> <li>- department stores</li> <li>- mass merchants</li> <li>-boutiques and chain</li> </ul> </li> <li>• Non store retailing: mail-order, e-tailing</li> </ul>	

## RECOMMENDED READINGS

- Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York.
- Fringes, G.S. (1999), Fashion from Concept to Consumer, 6<sup>th</sup> edition, NJ, Prentice Hall.
- Jarnow, J. Dickerson Kitty G (1987), Inside the Fashion Business, New Jersey, Merrill, Prentice Hall.

- Mc. Kelvey, K., Muslow, J., Fashion Forecasting (2008) Wiley Blackwell
- Tate, S.L. and Edwards, M.S.(1982) The Complete Book of Fashion Design, New York, Harper & Row Publication.

## **FASHION: DESIGN AND DEVELOPMENT**

### **PRACTICAL**

**Paper No.** : **HSPP - 645**  
**Maximum Marks** : **50**  
**Credits** : **2**  
**Teaching Periods** : **4 / week**  
**Teaching Load** : **12 Practicals / semester (4 periods each)**

### **CONTENT**

### **PRACTICALS**

1. Technical drawing of fashion details: skirts, bodices, sleeves, necklines, collars, accessories.	2
2. Development of collars	2
<ul style="list-style-type: none"> <li>• Stand and fall and rolled</li> <li>• Shawl (Flat and raised)</li> </ul>	
3. Applied and in- seam pockets	1
4. Development of variations in sleeve	3
<ul style="list-style-type: none"> <li>• Set in sleeves- leg-o-mutton, shirt maker, pet al</li> <li>• Sleeve and bodice combination- saddler</li> </ul>	
5. Design variations in bodice through dart manipulation	2
6. Design variations in skirt on half scale templates	2

## **PUBLIC RELATIONS AND ADVERTISING**

### **THEORY**

**Paper No** : **HSPT - 655**  
**Maximum Marks** : **100**  
**Credits** : **4**  
**Teaching Periods** : **4 Theory + 1 Interactive period / week**  
**Teaching Load** : **48 Theory Periods + 12 Interactive periods / semester**

### **OBJECTIVES**

1. To develop understanding of the theory and processes of advertising.
2. To provide a perspective on the discipline of public relations.
3. To familiarize and equip with a range of communication skills related to advertising and public relations.

### **CONTENT**

### **PERIODS**

<b>Unit I: Advertising (Ch 1, 2, 3 Jethwani)</b>	<b>11</b>
<ul style="list-style-type: none"> <li>• Advertising- definition, types, origin and role</li> <li>• Types of advertisements and their impacts</li> <li>• Ethical and legal aspects in advertising</li> <li>• Apex bodies in advertising</li> </ul>	
<b>Unit II: Advertising and media (Ch 1 Hopkins)</b>	<b>13</b>
<ul style="list-style-type: none"> <li>• Audience segmentation</li> <li>• Media for Advertising</li> <li>• Media planning and advertising</li> <li>• Advertising Agencies: Organizational structure and functions</li> </ul>	
<b>Unit III: Public Relations (Ch 2, 3 Cutlip)</b>	<b>13</b>
<ul style="list-style-type: none"> <li>• Definition, origin and growth</li> <li>• Importance and development of PR in India</li> <li>• Relationship of PR with marketing, publicity and advertising</li> <li>• Role of public relations in corporate image building</li> </ul>	
<b>Unit IV: PR Tools and Techniques (Ch 6 Cutlip)</b>	<b>11</b>
<ul style="list-style-type: none"> <li>• Public Relations tools and techniques</li> <li>• Functions and management of Public Relation organizations</li> <li>• Apex bodies in Public Relations</li> </ul>	

### **RECOMMENDED READINGS**

- Cutlip and Centre (1982). Effective Public Relation: Prentice Hall
- Hopkins, Claude C., My Life in Advertising and Scientific Advertising, Reprint Edition, NTC Trade, 1986
- Jethwani, Verma, Sarkar(1994) Public Relations: Concept, Strategies, Tools: New Delhi: Sterling

## **PUBLIC RELATIONS AND ADVERTISING**

### **PRACTICAL**

<b>Paper No</b>	<b>: HSPP - 655</b>
<b>Maximum Marks</b>	<b>: 50</b>
<b>Credits</b>	<b>: 2</b>
<b>Teaching Periods</b>	<b>: 4 / week</b>
<b>Teaching Load</b>	<b>: 12 Practicals / semester (4 periods each)</b>

### **OBJECTIVES**

1. To develop an understanding of the fields of advertising and public relations
2. To enable the students to use advertising as a tool for promotion of products, services and ideas.
3. To develop effective skills in public relations for organization's image building.

### **CONTENT**

### **PRACTICALS**

- |  |          |
|--|----------|
| • Analyzing advertisements in different media. | <b>3</b> |
| • Developing advertisements for print media.   | <b>5</b> |

- Analyzing public relations tools and techniques in selected organizations. 4