

# **MAHATMA GANDHI UNIVERSITY**

**PRIYADARSHINI HILLS,**

**KOTTAYAM ñ 686 560**



**UG Programme**

**Choice Based Credit Semester System**

**(MGU-CBCSS-UG)**

**Revised Scheme & Syllabi**

**For**

**BSc. FAMILY AND COMMUNITY SCIENCE**

**(HOME SCIENCE)**

**(From 2012 admission onwards)**

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## PREFACE

### **B.Sc. FAMILY AND COMMUNITY SCIENCE PROGRAMME**

Family and Community Science (Home Science) offers a broad-based course that gives students exposure to "real life lessons" and skills to give them confidence to face the world as informed citizens. Today's world demands flexibility and response to change for which many are not prepared. Home Science course is designed to train the learner to meet these changes with confidence. It promotes individual character development, increases one's professional skills, develops insights into home and family living, and prepares its students to enter a wide range of career options. As a profession, Home Science applies the findings of the physical, biological, and social sciences in improving the quality and standards of individual and family life.

Family and Community Science (Home Science) comprises of five branches and are as follows:

1.	Foods, Nutrition and Dietetics
2.	Child Development/Human Development and Family Studies
3.	Home Management/ Family Resource Management
4.	Clothing and textiles
5.	Home Science Extension Education

The subject of family and Community Science offers a wide range of subjects at the UG level and hence it forms the basis for a variety of courses after graduation. During the course of the U G programme, the students would get ample time and opportunities to decide on their course of study for post graduation.

### Options of higher education

#### Masters Degree in

- Food Science & Nutrition
- Human Development/Child Development
- Family Resource Management
- Food Service Management & Dietetics
- Food Technology
- Textiles & Clothing
- Hospital Administration (MHA)
- Business Administration (MBA)
- Human Resource Management (MHRM)
- Social work (MSW)
- Women's Studies
- Guidance & Counselling
- Extension Education
- Journalism & Mass Communication

#### PG Diploma in

- Clinical Nutrition & Dietetics
- Interior /Landscape Designing
- Fashion Designing
- Clinical Child Development
- Early Childhood Care & Education
- Computer Aided Textile Designing
- Consumer Guidance & Protection

The scope of Family and Community Science (Home Science) is not limited to the activities within the home but has a wider perspective that forms the basis of challenging professions in various fields. The following is a list of career a person can opt for after Post Graduation.

## Career Options

### Technical Research & Development

- Scientists
- Food Quality Controllers
- Research Coordinators/Project Officers/Assistants of health & Nutritional Programmes, Welfare Programmes of government/NGOs, agencies of National & International repute-ICMR, ICAR, NIPCCD, CFTRI, UNICEF, WHO.

### Production

Managers/Supervisors in garment/Food Industries, Production units of hotels

### Education & Administration

- Teaching faculty in Colleges & Schools
- Administrators
- Special Educators
- Remedial Teachers in Rehabilitation Centres
- Teacher Trainers
- Extension Officers.

### Product Design & Development

- Fashion Designers
- Interior /Land Scape Designers
- Textile Designers.
- Product Developers.

### Marketing and Sales

- Apparel Merchandisers
- Sales Promotion Personnel of Food Products, Medical Supplements, Educational Materials, Home appliances.

### Guidance and Counselling

Counsellors in Schools/Colleges and Child Guidance Clinics, De-addiction and Child Care Centres, Family Courts.

## Service Jobs

- Dietitians in Hospitals
- Diet Consultants in Hotels, Industrial Canteens, Fitness Centers and geriatric Clinics, Health Resorts
- House keeping Personnel
- Consumer Awareness Campaigners
- Front Office Managers.

## Entrepreneurship Ventures

- Food Business
- Garment Manufacturing
- Early Childhood Care and Education
- Consultancy Services.

### **Duration**

Three years (Six Semesters) full time graduate course.

### **Eligibility**

Candidates shall be required to have passed the plus two or equivalent examination or an examination recognized by the University as equivalent thereto.

## UG PROGRAMME IN FAMILY AND COMMUNITY SCIENCE

The UG programme in **FAMILY AND COMMUNITY SCIENCE(Home Science)** includes (a) **Common Courses**, (b) **Core Courses**, (c) **Complementary Courses**, (d) **Open Courses** and (e) **Project**. No course shall carry more than 4 credits. The student shall select any **Choice Based Course** offered by the Department which **offers the core courses**, depending on the availability of teachers and infrastructure facilities, in the institution. **Open course** will be offered in any subject and the student shall have the option to do courses offered by other Departments in the fifth semester

### PROGRAMME STRUCTURE AND CREDIT

**TOTAL CREDITS-120**

**Semester I**

**Total Credits 20**

No	Course Title	Hrs/ Week	Credits
1	Common Course -English - 1	5	4
2	Common Course -English - 2	4	3
3	Common Course 3-Second Language – 1	4	4
4	Core <b>Theory - I Methodology of Home Science and Food Science</b>	2	2
5	Core <b>Practical -1 Methodology of Home Science and Food Science</b>	2	1
6	1st Complementary Course- Chemistry I	2	2
7	1 <sup>st</sup> Complementary Course -1 Chemistry Practical I	2	1
8	2 <sup>nd</sup> Complementary Course -Zoology I	2	2
9	2 <sup>nd</sup> Complementary Course Practical- Zoology I	2	1
	Total	25 hrs	20

**Semester 2****Total Credits 20**

No	Course Title	Hrs/ Week	Credits
1	Common Course 4- English 3	5	4
2	Common Course 5- English 4	4	3
3	Common Course 6- Second Language -2	4	4
4	Core <b>Theory - 2 -Human Physiology and Microbiology</b>	2	2
5	Core <b>Practical - 2- Human Physiology and Microbiology</b>	2	1
6	1 <sup>st</sup> Complementary Course Chemistry II	2	2
7	1 <sup>st</sup> Complementary Course Chemistry Practical II	2	1
8	2 <sup>nd</sup> Complementary Course -Zoology II	2	2
9	2 <sup>nd</sup> Complementary Course Practical -Zoology II	2	1
	Total	25 hrs	20

**Semester 3****Total Credits 20**

No	Course Title	Hrs/ Week	Credits
1	Common Course 7- English 5	5	4
2	Common Course 8- Second Language 3	5	4
3	Core <b>Theory - 3 - Human development and Family Interactions</b>	3	3
4	Core <b>Practical -3 - Human development and Family Interactions</b>	2	1
5	1 <sup>st</sup> Complementary Course - Chemistry III	3	3
6	1 <sup>st</sup> Complementary Course Practical -Chemistry III	2	1
7	2 <sup>nd</sup> Complementary Course -Zoology III	3	3
8	2 <sup>nd</sup> Complementary Course Practical -Zoology III	2	1
	Total	25 hrs	20



**Semester 4****Total Credits 20**

No	Course Title	Hrs/Week	Credits
1	Common Course -9 English -6	5	4
2	Common Course -10 Second language 4	5	4
3	Core <b>Theory - 4- General Psychology</b>	3	3
4	Core <b>Practical - 4- General Psychology</b>	2	1
5	1 <sup>st</sup> Complementary Course – Chemistry 4	3	3
6	1 <sup>st</sup> Complementary Course - Chem. Practical-4.	2	1
7	2 <sup>nd</sup> Complementary Course - Zoology -4	3	3
8	2 <sup>nd</sup> Complementary Course- Practical.-Zoology -4	2	1
	Total	25 hrs	20

**Semester 5****Total Credits 20**

No	Course Title	Hrs/Week	Credits
1	Core <b>Theory 5- Interior Decoration</b> <b>Practical -5</b>	3 3	3 1
2	Core <b>Theory 6- Human Nutrition and Biochemistry</b>  <b>Practical -6</b>	3  2	3  1
3	Core <b>Theory- 7 Textile Science</b> <b>Practical -7</b>	3 2	3 1
4	Core <b>Theory 8- Dynamics of Extension</b> <b>Practical -8</b>	3 2	3 1
5	Open Course (For other streams) Elective 1 – Interior Decoration and Related arts Elective 2 –Life Skill Strategies and Techniques. Elective 3 – Nutrition for wellness Elective 4-Self Empowerment Skills.	4	4
	Total	25 hrs	20

**Semester 6****Total Credits 20**

<b>No</b>	<b>Course Title</b>	<b>Hrs/ Week</b>	<b>Credit s</b>
1	<b>Core Course -9- Family Resource Management Practical</b>	3 2	3 1
2	<b>Core Course – 10 Clinical Nutrition and Dietetics Practical-10</b>	3 3	3 1
3	<b>Core Course- 11 Fashion Designing and Apparel Production Practical-11</b>	3 3	3 1
4	<b>Core Course -12 Mass Communication and Journalism Practical-12</b>	3 2	3 1
6	<b>Core Course Choice based (Electives)</b> Elective I – Introduction to Industrial Apparel Manufacturing Techniques. Elective 2 –Food Quality Assurance. Elective 3- Early Childhood Care and Intervention Elective 4-Surface Ornamentation Techniques. Elective-5 –Women studies	3	3
7	Project work	nil	1
	Total	25 hrs	20

## SCHEME: CORE COURSE

Course code	Course Title	Hours/ week	Number of credits	Total Credits	Total hours/ semester
<b>SEMESTER I</b>					
HS1BO1U	Methodology of Home Science and Food Science	2	2	3	72
HS1BO1U(P)	Practical	2	1		
<b>SEMESTER II</b>					
HS2BO2U	Human Physiology and Micro Biology	2	2	3	72
HS2BO2U(P)	Practical	2	1		
<b>SEMESTER III</b>					
HS3BO3U	Human Development and Family Interactions	3	3	4	90
HS3BO3U(P)	Practical	2	1		
<b>SEMESTER IV</b>					
HS4BO4U	General Psychology	3	3	4	90
HS4BO4U(P)	Practical	2	1		
<b>SEMESTER V</b>					
HS5BO5U	Interior Decoration	3	3	4	90
HS5BO5U(P)	Practical	3	1		
HS5BO6U	Human Nutrition and Bio Chemistry	3	3	4	90
HS5BO6UP	Practical	2	1		
HS5BO7U	Textile Science	3	3	4	90
HS5BO7U(P)	Practical	2	1		
HS5BO8U	Dynamics of Extension	3	3	4	90
HS5BO8U(P)	Practical	2	1		

SEMESTER VI					
HS6BO9U	Family Resource Management	3	3	4	90
HS6BO9U(P)	Practical	2	1		
HS6BO10U	Clinical Nutrition & Dietetics	3	3	4	90
HS6BO10U(P)	Practical	3	1		
HS6BO11U	Fashion Designing & Apparel Production	3	3	4	
HS6BO11U(P)	Practical	3	1		
HS6BO12U	Mass Communication and Journalism	3	3	4	90
HS6BO12U(P)	Practical	2	1		
HS6BO13U	Choice based course**	3	3	3	54
	Project	nil	1	1	

\*Open courses-1.Interior Decoration and Related Arts 2 .Life Skill Strategies and Techniques. 3. Nutrition for wellness. 4. Self empowerment Skills.

\*\*Choice Based Courses-1.Introduction to Industrial Apparel Manufacturing Techniques. 2. Food Quality Assurance 3 .Early Childhood Care and Intervention. 4. Surface Ornamentation Techniques. 5. Women Studies.

## Course coding

Every course in the programme is coded according to the following criteria.

1. The first letter plus second letter from the programme. Family &Community Science (Home Science) ie., HS
2. One digit to indicate the semester. ie., HS1 (1<sup>st</sup> semester)
3. One letter from the type of courses such as, **A** for common course, **B** for core course, **C** for Complementary course, **D** for Open course.
4. Two digits to indicate the course number of that semester. ie., **HS1BO1 Family and Community Science(Home Science) , 1<sup>st</sup> semester, Core course, course number is 01)**

5. The letter U to indicate for Under Graduate Programme.

i.e., **HS1BO1U -Family and Community Science (Home Science) 1<sup>st</sup> semester, Core course, course number 01, U for UG Programme)**

6. The letter **(P)** denotes practical

## **EXAMINATIONS**

The evaluation of each course shall contain two parts such as Internal or In-Semester Assessment (IA) and External or End-Semester Assessment (EA). The internal grade awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of end semester examination. The evaluation of all components is to be published and is to be acknowledged by the candidate. All documents of internal assessments are to be kept in the institution for 2 years and shall be made available for verification by the university. The responsibility of evaluating the internal assessment is vested on the teacher(s) who teach the course.

There will be University Examinations at the end of each semester for both theory and Practical with duration of 3 hrs. Project evaluation and Viva-voce will be conducted at the end of the programme only. The ratio between internal and external examinations shall be 1:3.

## **EVALUATION AND GRADING**

The internal and external examinations shall be evaluated using Direct Grading system based on a 5- point scale as given below.

<b>Letter Grade</b>	<b>Performance</b>	<b>Grade point (G)</b>	<b>Grade Range</b>
A	Excellent	4	3.5 to 4.00
B	Very Good	3	2.5 to 3.49
C	Good	2	1.5 to 2.49
D	Average	1	0.5 to 1.49
E	Poor	0	0.00 to 0.49

The components of the internal (IA) and external evaluation (EA) for theory and practical and their weights are as below:

## THEORY

**IA =Total weight=5**

**EA -Total weight-25**

Components.	Pattern of question paper																																																								
<p><b>a. Attendance*</b>- weight =1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Attendance</th> <th style="text-align: center;">Grade</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">&gt; 90%</td> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">&gt;85 and &lt; 90</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">&gt; 80 and &lt; 85</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">&gt; 75and &lt; 80</td> <td style="text-align: center;">D</td> </tr> <tr> <td style="text-align: center;">&lt; 75</td> <td style="text-align: center;">E</td> </tr> </tbody> </table> <p><b>b. Assignment</b> - Weight=1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Components</th> <th style="text-align: center;">Weight</th> </tr> </thead> <tbody> <tr> <td>Punctuality</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Introduction</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Content</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Conclusion</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Reference</td> <td style="text-align: center;">1</td> </tr> <tr> <td>General get up</td> <td style="text-align: center;">1</td> </tr> </tbody> </table> <p>One assignment as an internal component for every course. The topic for the assignment shall be allotted within 6<sup>th</sup> week of instruction.</p> <p><b>c. Seminar</b>- weight=1 Expected to train the student in self-study, collection of relevant matter from the books and internet resources, editing, document writing, typing and presentation.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Component</th> <th style="text-align: center;">Weight</th> </tr> </thead> <tbody> <tr> <td>a. Punctuality</td> <td style="text-align: center;">1</td> </tr> <tr> <td>b. Topic &amp; content</td> <td style="text-align: center;">2</td> </tr> <tr> <td>c. Presentation</td> <td style="text-align: center;">3</td> </tr> <tr> <td>d. Response to questions</td> <td style="text-align: center;">1</td> </tr> </tbody> </table> <p><b>d. Tests</b>- weight-2 Weight of Best two test papers.</p>	Attendance	Grade	> 90%	A	>85 and < 90	B	> 80 and < 85	C	> 75and < 80	D	< 75	E	Components	Weight	Punctuality	1	Introduction	1	Content	2	Conclusion	1	Reference	1	General get up	1	Component	Weight	a. Punctuality	1	b. Topic & content	2	c. Presentation	3	d. Response to questions	1	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Part</th> <th style="text-align: center;">Type</th> <th style="text-align: center;">Weight</th> <th style="text-align: center;">To Answer</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">16 Objective type questions of 4 bunches</td> <td style="text-align: center;">1 for each bunch</td> <td style="text-align: center;">All questions</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">Short answer type</td> <td style="text-align: center;">1 each</td> <td style="text-align: center;">5 out of 8</td> </tr> <tr> <td style="text-align: center;">C</td> <td style="text-align: center;">Short essay type questions</td> <td style="text-align: center;">2 each</td> <td style="text-align: center;">4 out of 6</td> </tr> <tr> <td style="text-align: center;">D</td> <td style="text-align: center;">Essay Type questions</td> <td style="text-align: center;">4 each</td> <td style="text-align: center;">2 out of 3</td> </tr> </tbody> </table> <p>*Total weight=4+5+8+8=25 *Ensure that questions covering all skills are set (Knowledge acquired, Standard application of knowledge, ability to synthesize knowledge ) *Questions to cover the entire syllabus. *Conducted at the end of every semester and will be of 3 hrs duration.</p>	Part	Type	Weight	To Answer	A	16 Objective type questions of 4 bunches	1 for each bunch	All questions	B	Short answer type	1 each	5 out of 8	C	Short essay type questions	2 each	4 out of 6	D	Essay Type questions	4 each	2 out of 3
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D	Essay Type questions	4 each	2 out of 3																																																						

**\*Attendance:**

The attendance of students for each course shall be another component of internal assessment with weight one. The minimum requirement of aggregate attendance during a semester for appearing in the end semester examination shall be 75%.Condonation of shortage of attendance to a maximum of 10 days in a semester subject to a maximum of two times during the whole period of the graduate programme may be granted by the University.

If a student represents his/her institution, University, State or Nation in sports, NCC, NSS or Cultural or any other officially sponsored activities such as college union/ University union activities, he/she shall be eligible to claim the attendance for the actual number of days participated, subject to a maximum of 10 days in a semester based on the specific recommendations of the Head of the department and Principal of the college concerned.

**PRACTICAL****IA -Total weight=5****EA-Total weight=15**

<b>Components</b>	<b>Weight</b>	<b>Components</b>	<b>Weight</b>
		<b>a. Practical</b>	
a. Attendance	1	Each examination board can specify the components of practical and assign the weight according to the area of specialisation based on the model questions .	<b>12</b>
b. Lab involvement	1		
c. Written/Lab Test	1		
d. Record	1	<b>b.Record</b>	<b>2</b>
e. Viva voce/Quiz	1	<b>c. Viva Voce</b>	<b>1</b>
		Knowledge of subject Communication Skill.	

# The external examination of practical shall be conducted by the university at the end of each semester of three hours duration.

# It can be done by one external and one internal examiner during even semesters and two internal examiners in odd semesters.

## PROJECT

**IA -Total Weight=5**

**EA -Total Weight=15**

Compon ents	Weight	Components	Weight
<b>1. Punctuality</b>	<b>1</b>	<b>a. Valuation of project</b> <b>1. Title</b> (Clarity, brevity)	<b>1</b>
<b>2. Report</b>	<b>2</b>	<b>2. Introduction</b> ( Relevance, applicability, aim & objectives in general)	<b>1</b>
<b>3. Presentation</b>	<b>1</b>	<b>3. Review of Literature</b> (Relevance, recent literature/Related studies done in the field)	<b>2</b>
<b>4. Viva</b>	<b>1</b>	<b>4. Methodology</b> ( research design, Tool-appropriateness ,preparation, Sample-size, data analysis)	<b>3</b>
		<b>5. Results &amp; Discussion</b> (Presentation, Tables, method of analysis, interpretation of results)	<b>1</b>
		<b>6. Summary &amp; Conclusion</b> (Statement of problem, procedure, Findings, conclusions, Recommendations ) (in brief)	<b>1</b>
		<b>7. Bibliography/References</b> Techniques of writing(consistent Format-standard pattern, accuracy of reference reporting(text of the project Vs bibliography)	<b>1</b>
		<b>8. General Get-up</b> Absence of mistakes(typographical errors, grammar, omission of sentences, pagination, style & clarity)	<b>3</b>
		<b>9. Viva-Voce</b> Aspects knowledge of the topic - 2 communication skill - 1	

\*Project work shall be completed working outside the teaching hours.

\*It shall be carried out under the supervision of a teacher in the concerned department.

\*The project report should not exceed more than 25 pages.

\*The project certified by the supervising teacher should be submitted during the external practical examination at the end of sixth semester.

\*The external evaluation of the project work is followed by Viva-Voce and shall be done by one external and one internal examiner.



## EXAMINATION SCHEME: CORE COURSE

Course code	Course Title	Hours	WEIGHT		RATIO
			INTERNAL	EXTERNAL	
<b>SEMESTER I</b>					
HS1BO1U	Methodology of Home Science and Food Science	3	5	25	1:3
HS1BO1U(P)	Practical	3	5	15	
<b>SEMESTER II</b>					
HS2BO2U	Human Physiology and Micro Biology	3	5	25	1:3
HS2BO2U(P)	Practical	3	5	15	
<b>SEMESTER III</b>					
HS3BO3U	Human Development and Family Interactions	3	5	25	1:3
HS3BO3U(P)	Practical	3	5	15	
<b>SEMESTER IV</b>					
HS4BO4U	General Psychology	3	5	25	1:3
HS4BO4U(P)	Practical	3	5	15	
<b>SEMESTER V</b>					
HS5BO5U	Interior Decoration	3	5	25	1:3
HS5BO5U(P)	Practical	3	5	15	
HS5BO6U	Human Nutrition and Bio Chemistry	3	5	25	1:3
HS5BO6U(P)	Practical	3	5	15	
HS5BO7U	Textile Science	3	5	25	1;3
HS5BO7U(P)	Practical	3	5	15	
HS5BO8U	Dynamics of Extension	3	5	25	1:3
HS5BO8U(P)	Practical	3	5	15	
HS5DO1U	Open Course*	3	5	25	1:3

**SEMESTER VI**

HS6BO9U	Family Resource Management	3	5	25	1:3
HS6BO9U(P)	Practical	3	5	15	
HS6BO10U	Clinical Nutrition and Dietetics	3	5	25	1:3
HS6BO10U(P)	Practical	3	5	15	
HS6BO11U	Fashion Designing	3	5	25	1:3
HS6BO11U(P)	Practical	3	5	15	
HS6BO12U	Mass Communication and Journalism	3	5	25	1:3
HS6BO12U(P)	Practical	3	5	15	
HS6BO13U	Choice based course**	3	5	25	1:3
	Project	-	5	15	1:3

## SEMESTER I

### METHODOLOGY OF HOME SCIENCE AND FOOD SCIENCE

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**Course Code: HS1BO1U**

**Teaching hours: 2hrs/week (Hrs./Sem.36)**

CORE  
THEORY- 1

**Credit: 4**

#### **Objectives:**

- To familiarize with basic areas of Home Science
- To understand the basic methodology of research, principles and techniques
- To understand the composition, chemistry of foods and their applications in food preparations.

#### **Methodology of Home Science**

##### **Module I: Home Science – A Multidisciplinary Approach** (2 hrs)

Concept and Scope of Home Science

Areas of Home Science – Human Development, Family Resource Management, Nutrition and Dietetics, Textile Science and Fashion Designing and Extension Education.

##### **Module 2: Thrust Areas of Research** (10 hrs)

Definition, Importance, Research Trends in Home Science

Research Methods – Need for research and types (case study, experimentation, survey, observation)

Tools of data collection (Rating scale, Questionnaire, Interview schedule)

Sampling techniques – definition, random sampling, - simple random sampling, systematic random sampling, non random sampling, -probability sampling (purposive, stratified, convenience, snowball sampling)

Tabulation – definition, parts of a table, presentation (diagram, bar, pie)

Components of a project report

#### **Related experience**

Development of an interview schedule/questionnaire related to any area of Home Science.

#### **Core Readings:**

- Gupta S.P(2007), Statistical Methods, Sulthan Chand and Sons, New Delhi
- Yadla V. and Jasrai S(2005), Reference Book for UGC National Eligibility test in Home Science, Kalyani Publishing , Ludhiana.
- Khan J.A(2007), Research Methodolgy, Methods and Techniques, New Age International, New Delhi.

- Premlatha, M(2006), Textbook of Home Science, Kalyani Publishers, Ludhiana, 2<sup>nd</sup> Edition.
- Chandra, A., Shah, A. and Joshi U(1995) Fundamentals of Teaching Home Science, Sterling Publishers Pvt. Ltd., New Delhi.

## **Food Science**

### **Module 3: Introduction to Food Science**

(2 hrs)

Food as a source of nutrients, functions of foods, food groups(basic five – ICMR), food preparation – objectives and methods. Genetically Modified Foods, organic foods- basic concepts

### **Module 4 : Study of macronutrients**

#### **Carbohydrates**

(5 hrs)

Definition, composition, classification, starch - structure of starch granules, effect of cooking, gelatinisation, factors affecting, basic concepts of gelation, retrogradation, dextrinisation. Sugar cookery and its applications. Carbohydrates in food preparation.

#### **Proteins**

(5 hrs)

Structure, classification based on function(complete, partially complete, incomplete), denaturation, food proteins- non traditional proteins- single cell(yeast), leaf proteins (spirulina), textured vegetable protein(soya).

#### **Lipids**

(5 hrs)

Lipids in foods(visible and invisible), fatty acids(saturated, unsaturated, essential), rancidity- types, factors leading to rancidity, prevention, hydrogenation, applications of lipids in food preparations.

### **Module 5: Studies of Foods**

#### **1. Cereals**

(3 hrs)

Structure, composition and nutritive value, gluten formation, role of cereals in cookery, common cereals and millets in India, role of cereals in cookery.

#### **2. Pulses**

(3 hrs)

Nutritive value and composition, germination, fermentation, advantages, anti nutritional factors(trypsin inhibitors, lathyrism). Important pulses in india.

#### **3. Milk and milk products**

(3 hrs)

Composition and nutritive value, pasteurisation, homogenisation, advantages. milk products (whey proteins, skim milk, evaporated , condensed, dry milk, khoa, icecream, toned milk, flavoured milk, fermented milk, butter, cheese, curd).

- 4. Egg** (3 hrs)  
Structure, composition and nutritive value, deterioration in egg quality, evaluation of egg quality, egg white foam, factors affecting, culinary role of eggs designer eggs.
- 5. Meat** (2 hrs)  
Structure, composition and nutritive value, classes of meat and products.
- 6. Fish** (2 hrs)  
Classification, types, composition and nutritive value, fish spoilage and preservation, fish products.
- 7. Vegetables and fruits** (4 hrs)  
Classification, composition and nutritive value, pigments, flavour components, organic acids and enzymes, effect of cooking on pigments, changes in fruits during ripening, enzymatic and non-enzymatic browning, methods of prevention, anti-oxidant role.
- 8. Spices** (2 hrs)  
Types, functions, culinary role
- 9. Food Preservation** (3 hrs)  
Food spoilage, principles and methods of food preservation (low temperature, high temperature, high osmotic pressure, irradiation, dehydration, high concentration of sugar and salt)

#### **Core Readings**

- Srilakshmi B (2007), Food Science, New Age International(P) Ltd, New Delhi.
- Benion M (1995) Introductory Foods, 10<sup>th</sup> Ed, Prentice Hall, USA
- Swaminathan M (1998), Handbook of Food Science and Experimental Foods
- Chandrasekhar U(2002), Food Science and its Applications in Indian Cookery, Phoenix Publishing House, New Delhi
- Manay N.S and Shadaksharaswamy M, Foods, Facts and Principles, New Age International, New Delhi.
- Potter, N.M(1996), Food Science, 5<sup>th</sup> Ed, CBS Publishers, New Delhi.
- Peckham, G.C(1994), Foundations of food Preparations, McMillan, London
- Roday, S(2007), Food Science and Nutrition, Oxford University, New Delhi.
- Gopalan C, Ramasastri, B.V and Balasubramanian S (2004) Nutritive Value of Indian Foods, NIN, Hyderabad

## Methodology of Home Science and Food Science - Practical

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**Course Code: HS1BO1U (P)**

**Teaching hours: 2hrs/week**

**(Hrs./Sem.36 )**

**Credit: 1**

### Course Outline

1. Determination of taste threshold for sweet, salt, sour and bitter
2. Factors influencing the stability of egg white foam
3. Stages of sugar cookery
4. Gelatinization temperatures of various types of starches
5. Effect of cooking on vegetable pigments
6. Enzymatic and Non-enzymatic browning, Methods to prevent browning in fruits
7. Food preservation techniques (jams, squashes, pickles)

A record of practical should be maintained

## SEMESTER II

### HUMAN PHYSIOLOGY AND MICROBIOLOGY

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**Course Code: HS2BO2U**

**Teaching hours: 2 hrs/week (Hrs./Sem.36 )**

**Credit: 2**

### Objectives:

- To understand the integrated functions of the various systems of the human body.
- To understand the economic importance of microorganisms.
- To understand the principles of various methods used in the prevention and control of micro-organisms.

CORE  
PRACTICAL-  
1

CORE  
THEORY- 2

- To study the food standards and role of various agencies in maintaining quality control

## Course Outline

### HUMAN PHYSIOLOGY

**Module 1:** (2 hours)

Definition of physiology, Structure and functions of a cell, cell division, tissues, organs

**Module 2: Digestive System** (2 hours)

Structure of digestive tract, Digestion and absorption of carbohydrates, fats and proteins.

**Module 3: Respiratory System** (3 hours)

Organs of respiratory system, Mechanism of respiration, gaseous exchange in lungs and tissues, pulmonary volumes and capacities.

**Module 4: Blood** (4 hours)

Composition and Functions of Blood, Plasma Proteins, Haemoglobin, haematopoiesis, coagulation of blood, Blood groups, Erythroblastosis foetalis.

**Module 5: Cardiovascular System.** (4 hours)

Structure of Heart, Special conducting tissues of the heart, properties of cardiac muscles, Cardiac cycle, Systemic and Pulmonary circulation, heart rate, heart sounds, blood pressure.

**Module 6: Excretory System** (3 hours)

Structure and function of Kidney, Nephron, Mechanism of Urine formation, Micturition.

### Core Readings:

- Jain, A.K., (2003), Textbook of Physiology, Volume I, Avichal Publishing Company, New Delhi.
- Vidya Rattan., (2004), Handbook of Human Physiology, 7th edition, Jaypee Brothers Medical Publishers (p) Ltd, New Delhi.
- Ross and Wilson, (2006), Anatomy and Physiology in Health and Illness, 10th edition, Elsevier limited, London.

### Advanced References:

Guyton: Medical Physiology

C.C. Chatterjee: Human Physiology, Vol I and II.

### MICROBIOLOGY

**Module 7: Basic concepts of Microbiology** (3 hours)

Classification of microorganisms, important microorganisms- Structure and economic importance of microorganism-bacteria, moulds (Rhizopus nigricans, Yeast, virus (any animal virus))

**Module 8: Sterilization and Disinfection**

(2 hours)

Definition and methods.

**Module 9: Culture media and Culture Techniques**

(2 hours)

Factors affecting the growth of micro organisms, Culture media and culture techniques, isolation and identification, Gram staining.

**Module 10: Infection**

(4 hours)

Sources of microorganisms, Transmission of infection, bacterial infections in man- typhoid, Pneumonia. Viral infections – Hepatitis, Aids.

**Module 11: Resistance and Immunity**

(2 hours)

Natural defences of the body—primary and secondary defence mechanisms. Immunity- types, immunization followed for various diseases.

**Module 12: Food Microbiology**

(3 hours)

Contamination of food, Factors affecting food spoilage, food poisoning-bacterial and viral- Salmonella food poisoning, Staphylococcal food poisoning, Botulism and viral gastroenteritis.

**Module 13: Food Safety and regulations**

(2 hours)

Importance of food safety and factors affecting food safety. Food Standards (PFA, FPO, BIS, Agmark, Consumer Protection Act), HACCP-Food Quality Assurance System. Food adulteration- definition, common adulterants- Metanil yellow, Rhodamine, chalk powder etc

**Core Readings:**

- Joshua A.K., (1994), Microbiology, Popular book Depot Publishers.
- Anathanarayan, R and Panicker C.K.J, Text book of Microbiology, 8th edition 2009 Universities Press (India) Pvt. Ltd., New Delhi.
- James.M.Jay (1986) Modern Food Microbiology, 3rd edition, Van Nostrand, New York.
- Frazier W.C and Westhoff D.C (2008), Food Microbiology, 1st edition, CBS Pub.

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**HUMAN PHYSIOLOGY AND MICROBIOLOGY-PRACTICAL**

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**Course Code: HS2BO2U (P)****CORE  
PRACTICAL-2****Teaching hours: 2hrs/week (Hrs./Sem.36)****Credit: 1****I**

1. Determination of Rh group



2. Determination of Blood group
3. Measurement of blood pressure
4. Estimation of Haemoglobin

## II

1. Preparation of wine and curd(economic importance of microorganisms)
2. Identification of microorganisms by gram staining.
3. Detection of metanil yellow in Turmeric
4. Detection of Rhodamine B in red chilly ( whole or powdered)
5. Detection of sugar in honey
6. Detection of vanaspathi in ghee/oil.

(A record of the entire practical should be maintained)

## SEMESTER 111

### HUMAN DEVELOPMENT AND FAMILY INTERACTIONS

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**Course Code: HS3BO3U**

**Teaching hours: 3hrs/week (Per Sem 54 )**

**Credit: 3**

**CORE  
THEORY - 3**

#### **Objectives:**

- To impart basic knowledge on the principles and pattern of growth and development in children from conception to old age.
- To create awareness on the various factors that stimulates growth and development.
- To orient students on the current issues in Human Development.
- To expose students to the various aspects of adolescents development.
- To help students develop an awareness and concern for Challenged Children, their needs and problems.
- To create an awareness on the important aspects of population Dynamics.

## **Course outline**

### **Module 1: Introduction to Human Development**

Child Development- Significance and scope  
Methods of child study- Anthropometry, Observation, Interview, Questionnaire, Case study, Projective techniques Psychological tests, Sociometry, Longitudinal and cross sectional approach.  
Growth and development- Definition, Principles, Stages, Areas, factors influencing development Heredity and environment interaction.  
Needs of children

### **Module 2: Prenatal development**

Prenatal development – Conception, stages factors influencing Complications/ hazards during pregnancy  
Prenatal care, child birth, At risk babies, Baby friendly hospitals

### **Module 3: Neonate**

Neonate-Physical characteristics, abilities, adjustments, Apgar test  
Care of the new born, Immunization

### **Module 4: Development during childhood and adolescence years**

Infancy, Babyhood, early childhood, late childhood and adolescence physical, motor, Intellectual, emotional, social, language, moral and religious development during above stages. Factors influencing

### **Module 5: Early childhood care and education**

Preschool; education- Objectives and types  
Play- Importance, types, selection of toys  
Discipline- Essentials techniques and its effect on children  
Habit formation- definition and principles  
Behaviour problems- definition, causes methods of handling

### **Module 6: Children with special needs**

Challenged children- Definition, General classification, General causes and prevention.

### **Module 7: Issues of ageing**

Demographic profile, needs and problems of the elderly  
Care of the aged

### **Module 8: Crisis in the family and contemporary issues affecting family**

Infidelity, desertion, divorce, alcoholism, death, suicide, disabilities, financial crisis and its effect on family. Need for guidance and counseling.

Urbanization and globalization, maternal employment, single lone parenthood, reconstituted families, Influence of electronic media

### **Module 9: Population education**

Definition, problems of overpopulation  
Responsible parenthood  
Methods of family planning  
Sex education

## Core Readings

- Berk, L E (2000) Child Development (8<sup>th</sup> edition) PHI learning Pvt ltd, New Delhi
- Devdas ,R and Jaya ,N (2005) A text book on child development
- Hurlock E.B (2008) Developmental Psychology- A life-span approach 5<sup>th</sup> edn
- Marshall J and Stuart S (2001) Child development, GCSE Home economics for OCR .
- Santrock, J.W. (2010). Child Development: An Introduction (12th edition International Edition). New York: McGraw Hill
- Shaffer, D.R, and Kipp, K (2007). Developmental Psychology: Childhood and Adolescence (7th edition). Australia: Thomson Wadsworth.
- Suriakanthi A (1997) Child development - An Introduction 3<sup>rd</sup> edn

## HUMAN DEVELOPMENT AND FAMILY INTERACTIONS-PRACTICAL

**Course Code: HS3BO3U (P)**

**Teaching hours: 2hrs/week (Per Sem 36)**

**Credit: 1**

**CORE  
PRACTICAL -  
3**

### Practical (To be recorded)

1. Observation and reporting of various developments in a preschool child- Physical motor intellectual emotional and social developments.

( 12 hrs)

2.Visit to any one of the following places- Baby friendly Hospital / Anganvadi / SOS village / Orphanage /Home for the aged / Institutions for children with special needs. (3 hrs)

3. Recording the height and weight of preschool children using a growth chart.

(2 hrs)

4. Preparation of an art/ craft activity for preschool children (4 hrs)

5. Critically evaluate the suitability of any one toy available in the market

(3 hrs)

### Related Experience (Not to be recorded)

1. Discuss the common problems of adolescents (2 hrs)

2. Make a list of toys/ gifts/ CDs and DVDs/Video games for children in a shop (2 hrs)

3. Analyze the disciplinary technique used in one's home and its effect on one's behavior. ( 2 hrs)

4. Prepare charts on :-  
Stages of development  
Areas of development  
Immunization schedule  
Changes in body size (0 -3 years)  
Motor milestones ( 4 hrs)

## General Psychology

---

**Course Code: HS4BO4U**

**Teaching hours: 3hrs/week (Per Sem 54)**

**Credit: 3**

**Objectives:**

- To understand the physiological basis of human behaviours.
- To study the processes involved in perception and motivation.
- To understand the manifestations of abnormal behaviour patterns and the therapies prescribed.

### **Module 1: Psychology**

Definition, major subfields of psychology

### **Module 2: Biological basis of behaviour**

Nervous system – Basic units, Organization, Brain, major parts, association areas, Hemispheric specialization,  
Endocrine system, Genetic influences on behavior.

### **Module 3: Sensation, Attention and Perception**

Traditional Senses – vision, Hearing, Smell, Taste and Touch Attention – Importance, Factors influencing, Attention span Perceptual development – Space, Depth, Extra sensory Perception Use of Perception, Perceptual Constancy, Perceptual organization, Errors in perception.

### **Module 4: Learning and Conditioning**

Classical and Instrumental Conditioning, Observational Learning Cognitive learning

### **Module 5: Motivation and Emotion**

Motives – Definition, functions, types Maslow's theory of motivation Definition and nature of emotion

**CORE  
THEORY -  
4**

## Module 6: Memory

Sensory, short term and long term memory Forgetting- curve of forgetting, reasons for forgetting Memory techniques

## Module 7: Personality

Personality – definition, Determinants of personality, Types of personality – Introvert, extrovert, Type A. Self concept & self esteem.

### Core Readings

- Dennis Coon & John O. Mitterer (2008) Psychology - a Journey International Student Edition, Thomson & Wadsworth Thomson Education, 10 Davis Drive, Belmont, CA 94002 – 3098, USA. Higher
- L. Dodge Fernald & Peter S. Fernald, 5<sup>th</sup> Edition (2007)
- Munn's Introduction to Psychology, A.I.T.B.S. Publishers & Distributors (Regd.) J-5/6 Krishnan Nagar, New Delhi – 110 051.
- Edward E. Smith, Susan Nolen (2003) Introduction to Psychology (14<sup>th</sup> Edition)– Hoeksema, Barbara Fredrickson Geoffrey R. Lottus, Wadsworth, Cengage Learning India Pvt. Ltd. Alps Building, 1<sup>st</sup> Floor, 56-Janpath, New Delhi – 110 001.
- Shaffer, D.R, and Kipp, K (2007). Developmental Psychology: Childhood and Adolescence (7<sup>th</sup> edition). Australia: Thomson Wadsworth.
- Santrock J.W. (2005) Psychology, Tata-McGraw Hill ed, New Delhi.
- Mangal SK. Advanced educational Psychology (2004) Prentice-Hall Of India Pvt. Limited, 01-

## GENERAL PSYCHOLOGY -PRACTICAL

Course Code: HS4BO4U (P)

Teaching hours: 2hrs/week (Per Sem 36)

Credit: 1

CORE  
PRACTICAL  
- 4

1. Illustrate a few perceptual illusions and write a brief report on illusions.
2. Select a suitable intelligence test and administer to a class of adolescents, score and evaluate.
3. Illustrate the Hierarchy of Needs according to Maslow. Write a brief explanation of Maslow's theory.

4. Apply what you have learned about memory to your academic studies/explain the methods that help people to remember: audio, visual, mnemonic and repetition, note-taking.
5. Select any one Personality test/Projective technique and administer, score and evaluate the test.
6. Administer a suitable test on self-esteem/ self-concept/self-motivation score and evaluate the test

(A record of the entire practical should be made)

## Semester V

### INTERIOR DECORATION

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**Course Code: HS5BO5U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

<b>CORE THEORY - 5</b>
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#### Objectives:

To enable the students:

- To use and understand the elements and principles of Design
- To develop basic skills for a career option in Interior Design.
- To gain the basic knowledge of furniture arrangement and furnishing the residential space

#### **Unit I: Art in daily living** (3 hours)

Introduction to Interior Design, Importance of good taste, Concept and objectives of interior decoration.

#### **Unit 2: Design** (9 hours)

Definition, Types of design, Characteristics and sources of design ; Elements of design-line, shape, texture, colour, pattern, light and space ; Principles of design- proportion, balance, rhythm, emphasis, harmony.

#### **Unit 3: Colour** (9 hours)

Prang colour system, Qualities of colour, Colour harmonies and schemes; use and effects of various colours

#### **Unit 4: Lighting** (6 hours)

Importance of home lighting, types of lighting- natural and artificial - Importance of Natural Lighting for healthy environment ; types of lamps and lighting fixtures for artificial lighting ; Physical and Psychological aspects of lighting, illusion.

#### **Unit 5: Furniture and Furnishing** (9 hours)

Furniture requirement for various rooms, guidelines for selection and arrangement of furniture, Classification and selection of soft furnishings, window treatments - curtain styles, selection and care of rugs and carpets.

**Unit 6: Accessories**

(6 hours)

Classification and their role in interiors, flower arrangement-principles, different styles, and basic shapes, drying techniques and dry flower arrangement, indoor gardening and bonsai.

**Unit 7 : Interior Space Organisation**

(6 hours)

Space requirement for various activities in various rooms; Size, layout, finishes, furniture, furnishings, accessories, lighting colour and storage for living, dining and bed rooms, Principles of space planning; Kitchen- types of kitchen, modular kitchen, working areas and work triangle.

**Unit 8 : External Space Organisation**

(6 hours)

Objectives and principles of landscape gardening, Types-formal, informal; Styles Garden components, routine duties in gardening

**Core Readings:**

- Anna .H. Ruth. – Home Furnishing
- Andes Sally – Enjoy Flower Arranging
- Craig and Rush- Homes With Character
- Goldstein. H & Goldstein V. – Art in Everyday Life
- Faulkner. R. & Faulkner.S- Inside Today's Home.
- Supriya K.B.- Landscape gardening and designing with plants.

**INTERIOR DECORATION -PRACTICAL****Course Code: HS5BO5U (P)****CORE  
PRACTICAL  
5****Teaching hours: 3hrs/week (Per sem: 54)****Credit: 1****Course Outline****Unit 1. Design**

(8 hours)

Application of various types of design, elements of design and principles of designs; Application of motif in a design suitable for furnishing and accessories.

**Unit 2. Colours**

(6 hours)

Preparation of colour charts and application of colour schemes in a design/ room.

**Unit 3. Flower Arrangement**

(8 hours)

Demonstration of basic shapes in flower arrangement, Drying techniques and dry flower arrangement, Artificial flower making and arrangement

**Unit 4. Curtain Styles**

(4 hours)

Illustration of various curtain styles.

**Unit 5. Evaluation of Interiors**

(4 hours)

Living room, dining room, bed room, bath room, kitchen etc. (Any 2 rooms)

**Unit 6. Creative arts**

(6 hours)

Creative arts – decorative and functional art, creation of art objects.

(A record of the entire practical should be maintained)

# HUMAN NUTRITION AND BIOCHEMISTRY

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**Course Code: HS5BO6U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY-  
6**

## Objectives

- To obtain an insight into the chemistry of major nutrients and physiologically important compounds
- To understand the role of nutrition in different stages of life cycle
- To enable the students to plan menus in accordance with basic concepts for nutrition

## Course Outline

### Module I: Nutritional Biochemistry

#### Unit I. Introduction to Nutrition Science

The Indian Nutrition Scenario, Food Security Issues, Future challenges for nutrition research

#### Unit 2. Recommended Dietary Allowances

Definition, Factors affecting RDA, RDA for different nutrients, Indian reference man and woman

#### Unit 3. Human Energy Requirements

Definition of energy requirements, factors influencing food intake, components of energy expenditure. Measurement of BMR, factors affecting BMR, thermic effect of food and energy expended in physical activity. Methods of estimating energy expenditure, direct, indirect calorimetry, factorial estimation, DLW technique, Energy requirements.

#### Unit 4. Macronutrients and their metabolism

- Carbohydrates-** classification, functions, metabolism, regulation of blood glucose concentration, types of dietary fibre, physiological and metabolic effects of dietary fibre and potential health benefits, Glycemic index
- Proteins** – Classification of proteins and amino acids, functions, metabolism of protein, protein turnover, methods of evaluating protein quality, improvement of quality of protein in the diet. Requirements
- Lipids** – Composition, structure, function, classification of fats and fatty acids, essential fatty acids, trans fatty acids, fat metabolism, requirements, choice of cooking medium in the context of n-3, n-6 fatty acid ratio in Indian diets.

#### Unit 5. Water

Functions, distributions and compartments of body water. Factors influencing water distribution. Regulation of water balance. Requirements of water. Disturbances in balance, Dehydration, Odema.

#### Unit 6. Fat soluble vitamins A, D, E and K

Fat soluble vitamins- An overview, food sources, functions, deficiency and requirements



## **Unit 7. Water soluble vitamins**

An Overview, food sources, functions, deficiency, requirements

## **Unit 8. Minerals**

- a) **Macrominerals** – General functions, Functions, food sources, deficiency and requirements of calcium, phosphorus, sodium, potassium.
- b) **Microminerals** – An introduction, factors affecting absorption of minerals, functions, food sources, deficiency and requirements of iron, iodine, fluorine and zinc.

## **Module 2: Principles of Human Nutrition**

### **Unit 9. Nutrition through Lifecycle**

- a) Basic five food groups, Balanced diet, food guide pyramid, dietary guidelines for Indians

#### **b) Nutrition in Infancy**

Growth and development, Nutritional requirement, breast feeding, weaning and supplementary foods

#### **c) Nutrition in Preschool Age**

Physiological development and food intake, development of food habits, diet plan

#### **d) Nutrition in Adolescence**

Growth and development, nutritional requirement, factors influencing dietary pattern of the adolescent

#### **e) Nutrition in Pregnancy**

Physiological changes during pregnancy, importance of nutrition in pregnancy, diet for the pregnant mother, complications in pregnancy- gestational diabetes, toxemia, infections, effect of maternal malnutrition on foetus

#### **f) Nutrition in Lactation**

Nutritional requirements, human milk composition and importance, lactogogues, diet planning.

#### **g) Nutrition in Old Age**

Changes during old age, nutritional requirements, diet planning.

### **Core Readings**

- Srilakshmi, B, Nutrition Science, 3<sup>rd</sup> edn, 2008, New Age International (p) Ltd. Publishers, New Delhi.
- Bamji M.S., Krishnaswamy, K., and Brahmam G.N.V., Textbook of Human Nutrition, 3<sup>rd</sup> edn. 2009, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
- Park, K., Park's Textbook of Preventive and Social Medicine, 18<sup>th</sup> edn 2005, M/s Banarsidas Bhanot Publishers, Jabalpur, India.
- Swaminathan, M, Principles of Nutrition and Dietetics, 2001, The Bangalore Printing and Pub, Co, Ltd., Bangalore.
- C. Gopalan, B.V. Ramasastri and S.C. Balasubramanian (2007) Nutritive value of Indian Foods. NIN, ICMR Hyderabad 500 007

- Nutrient Requirements and Recommended Dietary Allowances for Indians – I.C.M.R.Publication 1999.

## **HUMAN NUTRITION AND BIOCHEMISTRY-PRACTICAL**

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**Course Code: HS5BO6U (P)**

**Teaching hours: 2hrs/week (Per sem: 36)**

**Credit: 1**

**CORE  
PRACTICAL-  
6**

### **Course Outline**

#### **I. Food Analysis**

1. Qualitative tests for carbohydrates, protein, calcium, phosphorus and iron
2. Quantitative tests for
  - a. Lactose in milk
  - b. Vitamin C in food stuffs
  - c. Calcium in foods

#### **II. Planning, preparing and serving normal diets for**

1. Infants
2. Preschool age
3. School going age
4. Adolescence
5. Adult/Labourer
6. Pregnancy
7. Lactation
8. Old age

## **TEXTILE SCIENCE**

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**Course Code: HS5BO7U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY-  
7**

### **Objectives**

- To gain knowledge about Textile fibres and their uses.
- To develop an understanding about various kinds of traditional and modern fabrics, their structure and the utility.

- To impart knowledge about Textile dyeing and printing.
- To develop skill in understanding textiles available in the market.

### Course Outline

#### Module1: Study of Fibres (8 hrs)

Definition, classification of textile fibres, properties and uses of Textile Fibres: - Cotton, Linen, Wool, Silk, Rayon, Nylon, and Polyester.  
Methods of identification of textile fibres.

#### Module 2: Study of Yarns (12hrs)

Definition, Processes of making Fibre in to yarn (cotton and woolen systems): - Mechanical (Ring and Open End spinning) and chemical.

Classification of yarn: - type, count, twist, number of parts, novelty yarns, textured yarn and bi-component yarn.

#### Module3: Fabric Structure (14 hrs)

Weaving: - Preparation of yarns for weaving, loom- parts and its operations, Modern shuttle less looms- air jet and projectile loom.

Weaves:- Basic weaves- plain, twill, satin and its variations. Fancy weaves- pile, dobby, jacquard, leno, clip spot, lappet, double cloth, and crepe.

Characteristics of woven fabrics: Yarns-warp and weft, grain, thread count, balance and selvages.

Other methods of making fabrics:-knitting, felting, braiding, netting, lace making,and bonding.

#### Module4: Dyeing and Printing (8 hrs)

Dyes and dyeing:- classification of dyes- natural, artificial-acid, basic, direct, sulphur, vat naphthol, disperse and mordents.

Stages of dyeing - stock, yarn, piece, cross, and union.

Printing:-Direct-block, roller and screen, discharge, resist- tie and dyeing and batik.

#### Module5: Fabric Finishes (8 hrs)

Definition, purpose, classification and types-singeing, scouring, bleaching, sanforizing, calendaring, tentering, sizing, weighting, brushing, napping, crepe and crinkled effect, crease resistance, functional finishes-Stain resistant& antimicrobial .

#### Module6: Modern Textiles (4hrs)

New trends in Textiles:-a brief introduction to spandex,geo-textiles, nano fabrics, medicinal fabrics and eco- friendly textiles-organic cotton, jute, bamboo fibre.

#### Core Readings:

- Corbman.B.P (2005). Fibre to Fabric, International student's edition, Singapore
- Mc. Graw Hills book co:

- Kadolf. S.J. (2008) Textiles, Anne Langford, Prentice Hall.
- Gokarneshan.U. (2005) Fabric Structure and Design, New Age International Publishers.
- Well's. K (2002) Fabric Dyeing And Printing, Conran Octopus.
- Smith J.L. (2006) Textile Processing, Abhishek Publications, Chandigarh.
- Wingate (1978) Textile Science and their selection, Prentice Hall.
- Dantiyagi.S. (2008) Fundamentals of Textiles And Their care, Orient Longman.

## TEXTILE SCIENCE -PRACTICAL

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**Course Code: HS5BO7U (P)**

**CORE  
PRACTICAL- 7**

**Teaching hours: 2 hrs/week (Per sem: 36)**

**Credit: 1**

### Course Outline

1. Collection of different fibres (Cotton, Silk, Polyester, Nylon, wool and rayon)  
Testing of fibers: - Visual Inspection, Burning and Microscopic (10 hrs)
2. Fabric structure: Basic weaves- Collect samples for all the Basic weaves and their variations. Fancy weaves-Collect samples for (Pile, Dobby, Jacquard, Leno, Clip spot, Lappet and Double cloth) (10 hrs)
3. Thread count: - Collect samples for low medium and high count fabric. (4 hrs)
4. Prepare samples for Block, Batik and Tie & Dye (any two variations) (6 hrs)
5. Visit to Mills / Textile Shops. (6 hrs)

A record of the entire practical should be maintained.

# DYNAMICS OF EXTENSION

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**Course Code: HS5BO8U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY-  
8**

## **Objectives**

To enable the students to

- Understand the widening concept of extension
- Appreciate the role of extension, especially home science extension in community development.
- Orient students to the socio cultural and economic environment of rural, urban and tribal communities.
- Develop skill in planning, implementing and evaluating an extension programme.

## **Course outline**

### **Module1: Extension**

(8hours)

Meaning and objectives of extension in India  
Concept of extension educational process.  
Role of Extension worker.  
Qualities of an extension worker.

### **Module2:Community Development**

(15hours)

Meaning and objectives.  
Special features of rural, urban and tribal communities in India.  
Role of extension in community development with special emphasis to home science extension.  
Role of community organizations (panchayats, cooperatives and schools) in community development.  
Community development programmes for women and children in rural areas.-DWCRA, ICDS and Indira Mahila yojana

### **Module3: Leadership**

(7hours )

Concept and definitions, types of community leaders-Professional leader and lay leaders- autocratic, democratic and lassiez-faire leaders  
Methods of identifying community leaders.  
Leadership for community development.

### **Module 4 : Learning and teaching in extension**

(12hours)

Criteria for effective extension teaching.  
Steps in extension teaching.  
Extension teaching methods (methods of community contact)-Individual, group and mass methods

Individual method-personal visits, letters, discussions.

Group method-meetings, discussions, demonstrations, folk songs, drama, role play, seminar, field trips, exhibitions.

Mass method-Print and electronic media.

Modern methods-Tele conferencing, tele text, net working, satellite communication.

**Module 5.: Audio-visual aids**

(8hours)

Meaning.

Classification-audio, visual and audio-visual aids.

Cone of experience.

Selection and use.

**Module 6; Programme planning in extension**

(4hours)

Objectives, principles, steps involved in extension programme planning.

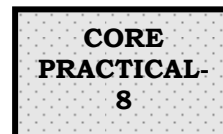
**DYNAMICS OF EXTENSION -PRACTICAL**

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**Course Code: HS5B08U (P)**

**Teaching hours: 2hrs/week (Per sem: 36)**

**Credit: 1**



**Course Outline**

**1 Extension**

(8hours)

Interview an extension worker to find out his/her role.

**2. Community Development**

(8 hours)

Conduct a survey to find out the role of any one community organization in community development.

**3. Learning and Teaching in Extension**

(10hours)

1. Collection and evaluation of audio visual aids

2. Preparation and use of visual aids (leaflet, pamphlet, chart and poster)

**4 .Programme planning in Extension**

(10 hours)

Planning, implementing and evaluating an extension programme. Related to home science

(All the topics should be related to Family and Community Science. A record of the entire practical should be maintained.)

### **Core Readings:**

- Reddy, A. (1987).Extension Education.Sree Lakshmi press,Andra Pradesh.
- Dahama,O.P. and Bhatnagar,O.P.(1988).Education and Communication for development.Oxford and IBH Publishing Co.Pvt.Ltd,New Delhi.
- Supe, A.N. (1983).An Introduction to Extension Education. Oxford IBH Publishing Company
- Devadas, Rajammal, P. (1980): Text book of Home Science,NCERT,New Delhi.
  
- The Indian Journal of Extension Education,The Indian Society of Extension Education,Division of Agricultural Extension,IARI., New Delhi-110 012

## **OPEN COURSE (For students of other programme )**

### **INTERIOR DECORATION AND RELATED ARTS**

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**OPEN  
COURSE-1**

**Course Code: HS5DO1U1**

**Teaching hours: 4hrs/week (Per sem: 72)**

**Credit: 4**

Interior decoration is one area of specialization which focuses attention on the functional and aesthetic aspects of residences, commercial establishments and work spaces. This subject has grown so much in scope and career and is attracting students for pursuing a lifelong career.

### **Objectives**

To enable students to-

- Learn to appreciate art
- Understand elements and principles of art and design
- Develop skill in creating designs and making art objects
- Gain knowledge in principles of planning different residential spaces
- Develop skills in selection of furnishings fabrics, art objects, accessories
- Understand the principles of furniture arrangement and lighting.

## Course Outline

1. Concept of interior decoration-introduction to foundation of art, importance of good taste in interior decoration  
2 hrs
2. Design-definition and types: structural and decorative  
3 hrs
3. Elements of design-line form, shape, texture, space pattern, light. 6 hrs
4. Principles of design-proportion, balance, harmony, emphasis, rhythm  
8 hrs
5. Colour-Importance of colour in interiors, Prang colour system, colour harmonies, application of colour.  
8 hrs
6. Housing-Family's housing needs, factors influencing selection and purchase of site, reading house plans, principles of planning a house.  
6 hrs
7. Illumination-Importance of lighting for interiors, Types of lighting-natural and artificial, design of fixtures, arrangement and lighting for various purposes 6 hrs
8. Furniture- Selection and arrangement of furniture, types-dual purpose, built in, furniture requirements for various rooms.  
5 hrs
9. Soft furnishings-Selection, classification, curtain styles, hanging of curtains-pelmets, swags, valences and their effect, planning curtain styles for different types of windows.  
6 hrs
10. Accessories- Types and their role in interiors. 2 hrs
11. Indoor gardening-Types and suitability of plants, care  
4 hrs
12. Flower arrangement-Different styles, principles of flower arrangement, basic shapes.  
6 hrs
13. Surface ornamentation-Basic hand stitches-classification, decorative stitches fabric painting  
10 hrs

## Core Readings

- Anna H Rutt- Home furnishing, John Wiley Eastern Pvt. Ltd New York, 1961
- Faulkner.R and Faulkner.S.- Inside Today's Home, Holt Rinehart and Winston Inc , New York. 1974.
- Goldstein .H. and Goldstein .V. Art in Everyday Life<, Macmillan Company, New York, 1976
- Craig H.T. and Rush.C.D.- Homes with character, Doc. Heath and company Boston 1962



- Premavathy S and Parveen P. Interior design and Decoration, CBS publishers, New delhi,2010
- Premlatha Mulick- text Book of Home Science, Kalyani Publishers, Ludhiana.
- Sally. A. –Enjoy flower arranging, Faber and faber, 24 Runnel square, London.

## LIFE SKILL STRATEGIES AND TECHNIQUES

**Course Code: HS5DO1U2**

**OPEN  
COURSE-2**

**Teaching hours: 4hrs/week (Per sem: 72)**

**Credit: 4**

### Objectives:

- To empower young people to effectively meet the challenges of everyday life
- To enable learners to acquire knowledge and to develop attitudes and skills which lead to healthy behaviour patterns
- To lay the foundation for a responsible lifestyle, sound relationships and safe habits

### Module-1:Communication and Interpersonal Relationships

- Verbal and Non-verbal Communication
- Active Listening
- Negotiation and assertiveness
- Advocacy skills (12 hours)

### Module 2: Adolescent Health and Nutrition

- Physiological Aspects of growth and development during adolescence
- Nutrient needs and recommended dietary intakes
- Problems of adolescent nutrition-Obesity, Anorexia Nervosa, Bulimia, Binge eating disorder, under nutrition.
- Food guide pyramid and dietary guidelines for adolescents
- Changing trends in \food habits-Fast foods, junk foods, eating healthy campaign. (12 hours)

### Module 3: Enhancing Personality Through Clothing and Grooming

- Essentials in good grooming
- Expressing individuality through costume selection
- Design elements of good costume
- Selection of costumes for various occasions and wardrobe smartness. (12 hours)

### Module4: Personal and Community Resource Management

- Time Management for adolescents- Significance and techniques
- Work simplification for energy management
- Income management through supplementation and savings

- Environmental pollution-causes and consequences
  - Waste management techniques
  - Rain water harvesting
  - Role of individuals in conserving environmental resources
- (12 hours)

**Module5: Career Enhancement**

- Goal setting
  - Job Application process
  - Interview and Group discussion
  - Presentationskills
- (12 hours)

**Module6: Transition from Adolescence to Responsible Adulthood**

- Deterrents to Adolescent Health: Substance abuse, Teenage pregnancy, STD,HIV,AIDS
- Pre-requisites for sound marital relationship
- Managing feelings and coping with stress

(12 hours)

**Core Readings:**

- Varghese, M. A, Ogale, N. N and Srinivasan, K. Home Management (2001). New Age International (P) Ltd. New Delhi.
- Nickel, P and Dorsey, J. M. 1997. management in family living. Wiley Eastern Ltd.
- Nambiar, R. K. Text book of Environmental Studies. SCITECH Publication, New Delhi.
- Newman, H and Newman,R. Development through life. US. Wadsworth Publishing company.
- Sigelman, C. K and Rider, E. A. Life Span Human Development. US. Thomas Wadsworth Publishing Company.
- Krause, M. V and Mahan. (2005). Food Nutrition and Diet Therapy. WS Saunders Co.,Philadelphia.
- Srilakshmi, B. (2010) Dietetics. New Age International (P) Ltd, Chennai

**NUTRITION FOR WELLNESS**

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**Course Code: HS5DO1U3**

**Teaching hours: 4hrs/week (Per sem: 72)**

**Credit: 4**

**Objectives**

To enable students to:

**OPEN  
COURSE-3**

- Understand the relationship between nutrition and health
- Modify diets in order to promote health and reduce the risk of deficiency and chronic diseases
- Assess the nutritional status of individuals in different stages of life.

## Course Outline

### **Module1: Introduction to Nutrition:** (6 hours)

Introduction, Classification of foods (based on origin, chemical composition predominant function, nutritive value, ICMR Food Groups) Relation of food and health, food and its functions, Digestion, absorption and utilization of food.

### **Module2: Food Choices and Nourishment** (18 hours)

Nutrients and their function: Proteins, fats, carbohydrates, Energy, Vitamins, Minerals and Trace element:-sources, functions, Recommended dietary allowances, deficiency, prevention and treatment

### **Module3: Non Nutrient Compounds of Foods** (4 hours)

Anti nutritional factors, Trypsin inhibitors, phytates, Tannins, Oxalates, goitrogens, other toxic agents in food, other xenobiotics and dietary fibre.

### **Module4: Planning a healthy diet** (18 hours)

Factors affecting meal planning, balanced diet, steps in planning balanced diet, Life cycle nutrition :Nutritional requirements and planning diets during pregnancy, lactation ,Infancy, preschool ,school age, adolescents, adults and old age.

### **Module5: Modified Diets** (16 hours)

Introduction- Purpose of diet therapy, classification of modified diets, Diets for selected disorders: Diabetes Mellitus, Typhoid fever, cardiovascular diseases- Atherosclerosis, hypertension; Peptic ulcer, Cirrhosis of liver, glomerulonephritis.

### **Module6: Assessment of Nutritional Status:** (4hours)

The methods of assessment of nutritional status

Direct Methods:- - Anthropometry, Biochemical changes,

Clinical examination of signs, Dietary Analysis

Indirect Methods:- Vital health statistics

### **Module 7: Weight Management: (Obesity and Underweight)**

Introduction, aetiology, assessment, principles of dietary management, dietary guidelines

(4 hours)

## **Module 8: Functional foods and its role.**

## **Module9: Phyto chemicals, sources, benefits and its function**

(2 hours)

### **Core Readings:**

- Insel P, Turner E.R and Ross D, Discovering Nutrition, American Dietetic Association, Jones and Bartlett Publishers, London, 2003
- Smolin L.A and Grosvenor M.B, Nutrition Science and its Applications, Second edition, Saunders College Publishing, New York, 1997
- Park K, Park`s Textbook of Preventive and Social Medicine, 20th Edition, Banarsidas Bhanot Publishers, Jabalpur, India, 2009
- Joshi S.A, Nutrition and Dietetics, third Edition, Tata McGraw Hill Education Pvt.Ltd, New Delhi, 2010.
- Srilakshmi B, Dietetics , New Age International (p) Ltd, Publishers, New Delhi, 2010
- Gopalan C, Ramasastry, B.V and Balasubramanian S.C, Nutritive value of Indian Foods, NIN, Hyderabad 2007
- Sreelakshmi B. Nutrition Science , New Age International (p) Ltd, Publishers, New Delhi, 2010.

## **SELF EMPOWERMENT SKILLS**

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**Course Code: HS5DO1U4**

**Teaching hours: 4hrs/week (Per sem: 72)**

**Credits- 4**

**OPEN  
COURSE-4**

### **Objectives:-**

- TO develop Pleasing Personalities and to make them efficient in life.
- To develop Resource Management skills.
- To develop effective communicative skills.
- To enhance self empowerment
- To mould students as sociable persons
- To transform students graceful to the family & society.

## Course outline

### Module 1; Personality Development

( 10 hrs)

1. Definition, Determinants
2. Values to cherish
3. Steps to build Positive self esteem
4. Tips to develop a positive personality

### Module 2: Resource Management skills.

(10 hrs)

1. Resources – definition, Types
2. Management- definition, Steps in management process, Decision making
3. Time management- Time Schedule, Tools in Time management
4. Money Management – Steps in making Budget . Record keeping.
5. Energy management – Types of fatigue, Causes of fatigue, Work simplification.

### Module 3: Communication Skills.

(12 hrs)

1. Intelligent Listening
2. Effective speaking
3. Impressive writing skills- letters, note taking.
4. Presentation skills – Making word file in computer, preparation of OHP & Power Point Slides
5. Facing Interviews, Participating in group discussions.
6. Importance of interpersonal skills in relationships (Husband- Wife, Parent –Child, Teacher – student & sibling relationships).

### Module 4: Learning Skills

(10 hrs)

1. Intelligence – definition, areas of intelligence
2. Types of learning
3. Memory techniques
4. Scientific learning
5. Tips for writing examinations

### Module 5: Social skills.

(10 hrs)

1. Different social skills
2. Steps in fostering right attitudes
3. Qualities that make a person successful.

### Module 6: Family life skills.

(10 hrs)

1. Marriage – definition, Areas of Marital adjustment. Factors influencing .
2. Parenting skills
3. Reproductive health – diet , personal hygiene.
4. Stress management
5. Life skills for psycho – social development

## Module 7: Aesthetic & Income generating skills.

(10 hrs)

1. Interior decoration- Types, Elements & principles of design , colour combinations
2. Flower Arrangement
3. Meal planning, food preservation
4. Waste management , Wealth from waste

### Core Readings:-

- Mitter, S. & Aggarwal ,S.C. (2002). How to develop Your Personality & Potentialities. Sultan Chand & sons , New Delhi
- Khera Shiv (2002). You Can Win .Macmillan Pub. New Delhi.

## Semester V1

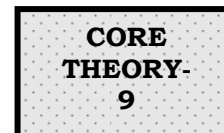
## FAMILY RESOURCE MANAGEMENT

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**Course Code: HS6BO9U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**



### Objectives:

Help the learners

- To understand the principles of management and their application in the family context
- To acquire scientific skills in the management of resources
- To recognize the significance of resource management to enhance the quality of life of family and society.

### Course Outline

#### **Module I: Introduction to management (9 hours)**

Management basics – Theory of Management, steps involved in management, decision making – resolving conflicts, concepts of management – values, goals and standards, family characteristics influencing management – life cycle stages, types and composition of family, qualities of a good manager.

#### **Module 2: Family Resources (3hours)**

Meaning and classification, characteristics of resources, factors influencing resource management, means to optimize satisfaction in resource management.

#### **Module 3: Management of time (6 hours)** Time as

resource, significance of time management, tools and aids in time management, time schedule – preparation and evaluation.

#### **Module 4: Management of energy (6 hours )**

Energy as resource, significance of energy management, energy requirements for various household activities, work curve. Fatigue – classification and causative factors and

alleviating techniques, work simplification – meaning and techniques, Mundell’s classes of changes, Study of labour saving equipments - principle, use and care of the equipments such as cookers, mixers and grinders, refrigerator, microwave oven, washing machine and dish washers.

**Module 5: Management of Money**

**(9 hours)**

Family income as a resource – Types of income, income profiles ; Family expenditure – family budget – types of budget, steps in making family budget, Engel’s laws of consumption ; Financial records – types, purpose and advantages ; Savings and investments – meaning, saving institutions and schemes, supplementing family income, family credit – types, sources, use and misuse.

**Module 6: Management of household fuel and energy**

**(9 hours)**

Household fuels, classification – solid, liquid, gas, electricity and solar energy, familiarization with renewable energy devices (solar devices and biogas). Energy conservation – importance, devices/ techniques for conservation of energy.

**Module 7: Waste management**

**(6 hours)**

Types of domestic wastes, principles of waste management, 3 Rs of waste management, waste minimization, disposal of wastes, recycling of wastes and reuse of wastes.

**Module 8: Consumer education**

**(6 hours)**

Consumer education – meaning, consumer problems, rights and responsibilities of a consumer, consumer aids, consumer redressal procedure and better buying practices.

**Core Readings:**

- Nicklle. P. Dorsey, J. M, Management in family living, Sterling Publishers, New Delhi
- Gross I.M. and Grandall.D, Management for modern families.
- M.A.Varghese, N.Ogale, Home management.
- M.A. Varghese, Household Equipment Manual, S.N.D.T Women’s University.
- Premlata Mullick - Text book of Home science, Kalyani Publishers, Ludhiana.

**FAMILY RESOURCE MANAGEMENT -PRACTICAL**

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**Course Code: HS6BO9U(P)**

**Teaching hours: 2hrs/week (Per sem: 36)**

**Credit: 1**

**CORE  
PRACTICAL  
9**

**Course Outline**

**I: Management of time**

**(4 hours)**

Preparation of time plan for college girl/homemaker and its evaluation.

**II: Work study**

**(8 hours)**

Determination of working height in vertical and horizontal planes, study of anthropometry and furniture sizes.

**III: Management of money** (4 hours)  
Study of expenditure pattern of your family and preparation of a model family budget/  
budget suitable for various categories

**IV: Waste Management** (6 hours)  
Study of waste management practices in your house/locality ; Development an object  
from household waste materials.

**V: Consumer Education** (4 hours)  
Development and evaluation of labels and advertisements for consumer products,  
Preparation of a consumer complaint for any consumer product.

**VI: Event Management** (10 hours)  
Planning, organizing, implementing and evaluating a group activity (Party/Exhibition/  
tour)

Or

Residence stay for a week incorporating principles of management.

(A record of the entire practical should be maintained)

## CLINICAL NUTRITION AND DIETETICS

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**Course Code: HS6BO10U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY-  
10**

### **Objectives:**

- To impart knowledge in the field of clinical nutrition
- Be able to make appropriate dietary modifications for various disease conditions based on the pathophysiology
- To develop capacity and aptitude for taking up dietetics as a profession
- Understand the consequences of nutritional problems in the society and have awareness on community nutrition based programmes.

### **Course Outline**

**Module 1: Introduction to Dietetics and Types of Diets** (6hours)

Meaning and scope of dietetics, Role of Dietitian, Nutrition care process (NCP),



Types of dietary adaptations for therapeutic needs.

Types of Diets – Normal / General, soft and liquid diets

Mode of feeding – Oral , Enteral and Parenteral feeding

**Module2:Nutritional Management of infections and fevers** (4hours)

Classification and etiology of fever / Infection

Medical Nutrition therapy in: Typhoid, Tuberculosis, HIV/AIDS

**Module 3: Nutrition, Diet and Cancer** (4hours)

Stages in the development of cancer, etiological risk factors for cancer - Dietary and non-dietary factors, Genetic factors, Environmental factors; Nutritional requirements for cancer patients, dietary management in cancer

**Module 4: Nutritional Management of Diabetes Mellitus** (4hours)

Prevalence, classification and etiology of diabetes mellitus, symptoms, diagnosis and complications .Management of Diabetes:-Dietary management – Glycemic Index, beneficial effects of some foods, supportive therapy, prevention.

**Module 5: Nutrition and Coronary Heart Diseases (CHD)** (6hours)

Common disorders and complications of CHD, Prevalence, etiology and symptoms, Dietary management, Prevention of CHD.

**Atherosclerosis**-Phases, Etiology, Symptoms, Complications, Nutritional Management

**Hypertension**- Classification of BP, Hypertension - stages, etiology,dietary management, DASH diet

**Module 6: Gastro Intestinal Disorders** (4hours)

Etiology, symptoms and dietary Management of :Peptic ulcer, Constipation, Diarrhoea

**Module 7: Liver Diseases** (4hours)

Etiology, symptoms and dietary Management of: Hepatitis, Cirrhosis, Hepatic Coma

**Module 8:Nutritional Management of Renal Disorders** (4hours)

Common Renal Diseases, General Principals of dietary Management in Renal diseases, Etiology, Clinical symptoms and Dietary Management of Acute and chronic Nephritis, Nephrotic Syndrome

**Module 9: Nutritional care in weight Management** (4hours)

Weight imbalance, prevalence and classification; Guidelines for calculating ideal body weight. Etiology, Clinical manifestations, consequences and Dietary Management of Obesity, Underweight

**Module 10: Nutritional Problems of the Community** (8hours)

Prevalence, causes, consequences prevention and control of

- Protein Energy Malnutrition (PEM)

- Vitamin A deficiency
- Iodine Deficiency Disorders
- Iron Deficiency Anemia

**Core Readings:**

- Whitney,E.N, Cataldo, C.B.,and Rolfes,S.R.(2002), Understanding Normal and Clinical Nutrition, Sixth Edn.Thomson Learning Inc.USA.
- Srilakshmi (2009) Dietetics IVth Edition , New age International (P) Ltd, Publishers, New Delhi
- Clinical Nutrition (2005) Blackwell Science Service, Nutrition Society UK.
- Public Health nutrition (2005), Edited by Nutrition society, Black well Science Service U.K.
- Bamji,M.S.,Krishnaswamy,K and Brahman(Eds.)(2009), Text book of Human Nutrition Third Edition Oxford & IBH publishing Co.Pvt.Ltd., New Delhi.
- L. Kathleen Mahan and Sylvia Escott- Stump, Krause’s Food Nutrition and Diet therapy, 11th Edition, 2005, Saunders, USA.
- Subhangini. A. Joshy (2010), Nutrition and dietetics, Third edition. Tata Mc. Graw. Hill Education Pvt.Ltd, New Delhi
- Paul Insel, Elaine Turner, Don Ross (2004) Nutrition second edition American Dietetic Association, Jones and Barlett publishers, London

**CLINICAL NUTRITION AND DIETETICS -PRACTICAL**

**Course Code: HS6BO10U (P)**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 1**

**Course Outline**

1. Calculation of BMI using height-weight measurements
2. Preparation of Therapeutic Recipes (4 Hours)
  - Types of Therapeutic Diet (2 hours)
    - Normal
    - Soft

**CORE PRACTICAL- 10**

Fluid – Full Fluid and Clear Fluid Diets

3. Diet plan for

(26 Hours)

Fevers)

- Cancer- breast cancer
- Diabetes Mellitus
- CHD
- Peptic Ulcer
- Hepatitis
- Cirrhosis
- Nephritis
- Obesity
- Under weight
- PEM
- Iron Deficiency Anaemia

4. Visit to a feeding programme / Diet clinic.

(4 Hours)

(A record of the entire practical should be maintained)

## **FASHION DESIGNING AND APPAREL PRODUCTION**

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**Course Code: HS6BO11U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY -  
11**

### **Objectives:**

- To gain knowledge in fundamentals of fashion designing.
- To get practical experience in apparel illustration.
- To impart knowledge in apparel production, marketing and merchandising.
- To enable the students to develop skills in pattern making and garment construction.

## Course Outline:

### Module1: Fashion Introduction and interpretation

( 24 hrs)

Fashion:-Definition, terminologies- style, fad, classic, fashion trend, haute couture, fashion life cycle, fashion forecasting and present day fashion.

Principles and factors influencing Fashion.

Elements and principles of design as applied to apparel designing.

Garment designing: - factors considered, basic shapes, the proportion of figures-  
Basic

8- head theory, unusual figures (problems and remedies) - for tall figure, short figure,  
stout figure, thin figure.

### Module2: Introduction to Body measurements and pattern making

(10 hrs)

Body measurements:-Importance and methods of taking body measurements.

Pattern making: - Methods of pattern making-Drafting

Pattern Alteration- lengthening and shortening bodice block and skirt,  
sleeve variations- puff and  $\frac{3}{4}$  sleeve.

### Module3: Garment Construction

(12 hrs)

Tools and equipments used for garment construction.

Sewing machine-parts, functions, care, maintenance common problems, reasons and remedies,

Steps in preparing fabric for construction, layouts, marking, cutting, stitching and finishing of garments.

### Module4: Apparel marketing and merchandising.

(8 hrs)

Marketing- definition, marketing mix- 4 P's (product, promotion, prices and place.)

Merchandising- definition, role and responsibilities of merchandiser—brief outline of various departments in an apparel industry, retail outlet and visual merchandising.

### Core Readings;

- Armstrong, H. J (1997) Pattern making for Fashion Design, Harper& Row publication
- Mary Mathews (1998) Practical Clothing Construction, Part II, Bhattaram's Reprographics (p Ltd, Chennai.
- Riter. J. (1998) Hand book for Fashion Designing, Best Drafting Techniques, Mital publication.
- Cooklin .G.!(1988) Introduction to Clothing Manufacture, Blackwell Science, New Delhi
- Ireland P.J. (2007) New fashion Figure Templates, Anova Books Co. Ltd, London

- Mullick .P.(2002) Garment Construction Skills, Kalyani Publishers, New Delhi.
- Sumathy, G.H (2002) Elements of fashion and Apparel Design New Age International (p) Ltd, New Delhi
- Narang. M(2007). Fashion Technology Hand Book, Asia Pacey Business Press, New Delhi
- Ireland P.J.(2004) Fashion Design Drawing and Presentation Kyodo printing co. Ltd., Singapore.
- Zarapkar K.R.(2008) Zarapkar System of Cutting, Navaneet Publications India Ltd., Gujarat.
- Dickerson. K.G ((2009) Inside the fashion Business.

## **FASHION DESIGNING AND APPAREL PRODUCTION -PRACTICAL**

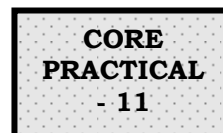
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**Course Code: HS6BO11U (P)**

**Teaching hours: 3 hrs/week (Per sem: 54)**

**Credit: 1**

### **Course Outline**



#### **1. Fashion Illustration and Sketching**

Development of 8-head croquie. Sketching Of child frock and salwar kameez or churidar kurtha using croquies or figure templates (two styles) **8 hrs**

#### **2. Basic Construction Processes.**

Hand Stitches – Basting-, overcasting, hemming.

Embroideries- Decorative stitches (min 5 no)

Seams and seam finishes: Plain seam- French seam, flat fell seam, top stitched seam, and piped seam, seam finishes – double stitched seam finish .

Fullness: gathers- gathering by hand, gathering by machine, gathering by elastic,

Pleats-knife, box, and inverted -pin tuck,darts-standard dart and double pointed dart.

Plackets: one piece placket and two piece placket.

Bias and its applications- joining of bias pieces – bias facing, bias

binding, shaped facing.

Hems- narrow machine stitched hem, stitched and turned hem,

Fasteners- button and button hole, press button, hooks and eyes,

Preparation of Paper pattern: Prepare paper pattern for child's frock, churidhar/salwar and kameez.

12 hrs

Construction of garments: child's frock with any collar and any type of sleeve.

16 hrs

A record of the entire practical should be maintained.

## **MASS COMMUNICATION AND JOURNALISM**

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**Course Code: HS6BO12U**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

**CORE  
THEORY -  
12**

### **Objectives:**

To enable the students to

- Understand the concept, scope and significance of mass communication and its techniques.
- Sensitize students towards identifying materials and methods for effective communication.
- Familiarize undergraduate students with media studies by affording them an exposure to contemporary media and to provide an opportunity for them to pursue their areas of interest.

### **Module1: Communication**

10hours

Definition, Functions, elements and process of communication

Four levels of communication- Intrapersonal, inter personal level, Group level and communication with mass audiences.

Functions of mass communication and its relevance to society.

### **Module2: Modes of mass communication**

18 hours

A. Print media- news paper, books, magazines, leaflets and pamphlets.

Characteristics and use.

B. Electronic media-Radio, television, video, films, computer based technologies-e-mail, internet, blogs, message boards (Basic or electronic), pod casts, video sharing, mobiles.

Characteristics and use

Role of information technology in communication (internet, video conferencing, e-mail etc.)

C. Out door mass media-exhibitions, fairs, street drama

Characteristics and use.

D. Folk media (Traditional)-puppet show, folk songs, folk dances, drama etc.

Characteristics and use

E. Advertising and public relations-concepts and its role in modern society.

**Module3: Writing for the media.**

12 hours

Fundamentals of good writing.

Principles of writing news article for a news paper and other print media.

Script writing for TV and radio programme and its presentation.

Techniques for preparation of effective advertisements.

**Module4: Public speech**

5 hours

Understanding the audience

Planning and preparation of public speech

Presentation of public speech

**Module5: Journalism**

9 hours

Definitions, functions, principles and importance.

Kinds of journalism-print (news paper and periodicals)

Electronic (radio and television)

Online (web journalism)

Film journalism

Photo journalism

Characteristics and use.

**Core Readings**

- Mody, Bella (1991): Designing messages for development Communication, New Delhi, Sage Publications.
- Kuppaswamy, B (1989): Communication and Social Development in India, Bombay, Media Promoters and publishers Private Ltd.
- Dahama, O.P. and Bhatnagar, O.P (1988): Education and Communication for Development, New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd.
- Pamar, Sryam (1976): Traditional folk media in India, New Delhi, Geka books.

- MMehta,D.S.(1992)Mass Communication and Journalism in India, New Delhi, Allied Publishers.
- RRayulu,C.S(1993):Media and Communication Management,Bombay,Himalaya Publishing.
- AAhuja.B.N,The Theory and Practice of Journalism.
- DDuglas Parker, Basic public speaking,2<sup>nd</sup> edition. The roadmap to confident communication.
- MMahavir Mohnot,Art of speaking in public.
- Journal of Educational Research and Extension,Sri Ramakrishna Mission Vidyalaya College of Education,Coimbatore,Tamil Nadu,India.

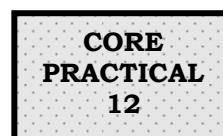
## MASS COM MUNICATION AND JOURNALISM -PRACTICAL

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**Course Code: HS6BO12U (P)**

**Teaching hours: 2hrs/week (Per sem: 36)**

**Credit: 1**



### Course Outline:

#### 1. Modes of Mass Communication (20 hours)

(All topics should be related to Family and Community Science)

1. Create an e-mail id and send a message through e-mail.
2. Create a message board. (Basic or electronic)
3. Write a report of an exhibition /fairs/street drama you observed.
4. Select a theme based on the content of home science and write a folk song.
5. Prepare an advertisement to be published in a news paper.

#### 11 .Writing for The Media (10hours)

1. Write a news article for a news paper
2. Write a script for a Radio programme.
3. Write a script for a TV programme.

#### 111. Public Speech (6hours)

Select a topic, prepare and present a speech.

A record of the entire practical should be maintained.



## CHOICE BASED COURSES (ELECTIVE)

### INTRODUCTION TO INDUSTRIAL APPAREL MANUFACTURING TECHNIQUES

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**Course Code: HS6BO13U1**

**ELECTIVE-1**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

#### Objectives

- To understand the need and importance of apparel manufacturing techniques in industries.
- To study the processes involved in apparel manufacturing techniques in industries.
- To understand the importance of bulk production and reduction in production waste
- To study various techniques to maximize production with minimum investment

#### Module 1: Pattern Engineering

Introduction (6 hrs)  
Pattern alteration-methods and need  
Grading - Principles of Grading – Types of grading- Pattern layouts-open-closed-marshedhen.

#### Module 2: Marker and other preparations for cutting bulk in apparel industry

(6 hrs)  
Planning, Drawing and Reproduction of the Marker-Marker planning-Methods of marker planning-

#### Module 3 : Spreading and cutting (10hrs)

Definition, Function and Scope of cutting. Types of Spreads, Spreading Equipments and Tools-Spreading methods-Fabric packages.

#### Module 4: Garment assembly (10 hrs)

Industrial sewing machines: types, uses and working-straight stitch-button hole-button sewing- over locking.  
Stitches: Definition, stitch classes, factors to be considered in the selection of stitches.  
Seams: Definition, Types of seams, seam quality, seam performance, factors to be considered in the selection of seam, seam finishes, seam defects  
Sewing Thread: Types, construction, sewing thread quality, sewing thread packages.  
Sewing machine needles: Types, uses, selection  
Other methods of assembling the garment-fusing-welding etc

**Module 5: Garment finishing and packing**

( 4 hrs)

Garmentfinishing-accessories-decoration-Ironing-pressing-folding-packing-equipments and method

**Core Readings**

- Harold Carr and Barbara latham, The Technology of Clothing Manufacture, Om Book Service, 2006
- Laing R.M., and Webster J, Stitches & Seams, The Textile Institute, India, 1998.
- Gerry Cooklin, Master Patterns and Grading for Men's Outsize, Blackwell Scientific Publications 1992.
- Gillian Holman - Pattern Cutting Made Easy, Blackwell Scientific Publications 1997. ISBN: 0- 7134 – 8093- 9.
- Natalie Bray, More Dress Pattern Designing, Blackwell Scientific Publications .1986 ISBN: 0-632-1883-

**Related Experience:**

1. Pattern alteration and Grading- grading of pattern in different sizes using different grading techniques
2. Final pattern, Marker making and spreading and Pattern lay (Any one garment)
3. Study of Cutting Techniques and machineries used in garment Industries (Round knife-straight knife-band knife-notcher-driller)
4. Garment assembly-study on machines, stitches in singer, usha and juki machine and seams for different Purposes {Lock stitch-(manual, industrial) over locking (stitches-type 301, 504)seams, class-2 welt seam-lapped fell seam(class-6-edge neatening. (6 hrs)
5. Garment finishing (surface embellishments(appliqué work-sequence-beading), ironing, folding and packing of shirt and trouser/salwar/churidar with top/sari/T-shirt/baba suits or any 2 garments in garment industries.
6. Visit to a garment unit.

# FOOD QUALITY ASSURANCE

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**Course Code: HS6BO13U2**

**Teaching hours: 3hrs/week (Per sem:54 )**

**Credit: 3**

**ELECTIVE  
THEORY-2**

## **Objectives:-**

The course will enable the students to:

- know the importance of quality assurance in food industries
- know the various tests and standards for quality assessment and food safety
- Know various tests used to detect food adulterants
- Be familiar with the fundamentals that should be considered for successful quality control programme developments in food safety and quality systems

## **Course Outline**

### **Module 1:Introduction to quality assurance and food safety assurance**

(6 hours)

current concepts of quality control Food quality, Quality control- parameters followed in quality control, important considerations, principles of quality control

### **Module 2: Food safety:**

(20 hours)

#### **1. Food Sanitation and Hygiene-**

- Water- potable water, sources of contamination, treatment of water
- Food – Food handling and the sources of contamination
- Practical rules for food sanitation

#### **2. Food additives:**

Definition, Need for food additives, classification, Intentional additives, incidental additives

### **Module 3: Food Toxins/Contamination of food**

Main Groups of Food Toxins – prevention/control

- Classification of toxic chemicals in foods-

A. Natural toxicants in foods – (i) Toxic amino acids , (ii) Toxic alkaloids, (iii) Cyanogenic glycosides, (iv) Trypsin inhibitors, (v) Haemagglutinins, (vi) Flatulence factors

B. Natural toxicants entering through contaminants:- (i) Plant origin, (ii) Microbial Origin, (iii) Biological origin

C. Chemical toxicants of external origin;- (i) Toxic metals, (ii) Residues of pesticides and

Agrochemicals, (iii) Contamination from processing practices, (iv) Contamination from packaging materials (v) Accidental contaminants , (vi) Contaminants from Environment.

### **3. Food borne diseases /illness : Causes, symptoms and control**

**HACCP** - Principles

4. **Food borne infections**:- (i) Bacterial Diseases- Typhoid fever, Salmonellosis

(ii) Viral diseases:- Viral hepatitis, Gastroenteritis and

(iii) Infections due to parasites;- Taeniasis, Amoebiasis

### **Module 4:-Food Laws and Food standards:**

(6 hours)

(i) International food laws and standards:- Codex Alimentarius, Food, Drug and Cosmetic Act

(ii) Indian Food laws and standards: - (a) Compulsory standards-Prevention of Food Adulteration Act, 1954 (PFA), Essential commodities Act, 1954 – brief listing of the Control Orders under this Act Viz. The Fruit Products Order, 1955(FPO), Meat Products Control Order, 1973, Milk and Milk Products Order, 1992, Solvent extracted

oils, De-1 oiled meal and Edible Flour Control Order 1967 and Vegetables Products Control Order, 1976; and Standards on weights and measures (Packaged Commodities) Rules, 1977.

(b) Voluntary Standards- Bureau of Indian Standards (BIS) ,The Agricultural Products (Grading and marking) Act, 1937

**Module5: Food Adulteration and Labelling: - (4 hours)**

Common Adulterants, Effects of Food Adulteration, simple tests to detect adulterants in foods, prevention of food adulteration, Nutritional Labelling.

**Related Experiences**

1. Introduction to laboratory equipment and apparatus.
2. Testing the water quality for the following parameters:
  - (i) Colour
  - (ii) odour
  - (iii) Taste
  - (iv) P<sup>H</sup>
3. Survey your neighboring areas and find out the commonly used class I and class II food additives
4. Detect the common adulterants found in the following food samples using simple physical and simple laboratory chemical tests:
  - (i) Chilli Powder,
  - (ii) Coffee powder
  - (iii) Ghee
  - (IV) pepper corns
  - (v) pulses (split and dehusked)
  - (vi) Turmeric powder
  - (vii) Milk and butter
  - (viii) Honey
5. Find out the acidity and sugar content in Jam/squash and compare with FPO specifications

**Core Readings**

- Kalia M. (2002), Food Analysis and Quality Control, Kalyani Publishers, New Delhi.

- Frazier, W.C. and Westhoff, D.C., (2008), Food Microbiology, Fourth Edn., Tata McGraw-Hill Publishing Co.Ltd, New Delhi
- Joshi, S.A. (2010), Nutrition and Dietetics, Third Edn, Tata McGraw-Hill Publishing Co.Ltd, New Delhi
- Potter, N.N and Hotchkiss, J.H., (1996), Food Science, Fifth Edn, CBS Publishers, New Delhi.
- Mudambi, S.R and Rajagopal, M.V. (2001), Fundamentals of Foods and Nutrition, New Age International Publishers, New Delhi
- Srilakshmi B. (2008), Food Science, New Age International Publishers, New Delhi
- Marwaha, K (2007), Food Hygiene, Gene-Tech Books, New Delhi.
- Journal of Food Science and Technology, Association of Food Scientists and Technologists CFTRI, Mysore.

## **EARLY CHILDHOOD CARE AND INTERVENTION**

**Course Code: HS6BO13U3**

**ELECTIVE  
THEORY-3**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

### **Objectives:-**

- To know about the developmental milestones
- To Equip them to identify the developmental delay
- To aware about the tools & techniques for developmental assessment
- To become aware about the early stimulation programmes
- To equip them to deal with challenged children

### **Course Outline**

**Module 1: Developmental milestones** (3 hrs).

1. Definition,
2. Different developmental milestones of children from 0 to 6 year

**Module 2 : Developmental delay**

1. Definition ,

2. Risk factors – types.
3. Child development & Home environment ( 2 hrs).

**Module 3: Developmental assessment** ( 7 hrs).

1. Definition, purpose of assessment.
2. Assessment below two years.
3. Tools & techniques used for assessment- TDSC, DASII, DDST, DOC,
4. Neurological evaluation,
5. Assessment of visual & hearing impairment

**Module 4: Early Developmental Stimulation** ( 8 hrs).

1. Definition, aims, importance,
2. Role of parents.
3. Newborn stimulation in NICU & at Home.
4. Sensory training, early stimulation programmes,
5. Early intervention for the developmental delay.

**Module 5: Pre- School programme** (6 hrs)

1. Definition, principles of programme planning ,
2. Short & long term planning. Daily programme .
3. Pre – school organisation- physical arrangement, equipment needed, maintenance of records , pre school personnel, home – school relationships.

**Module 6: Intervention programmes for Children with challenges** (10 hrs).

1. Visual & Hearing Impairment- Signs & Symptoms, Intervention programmes
2. Characteristics, identification & intervention programmes for the Gifted, Learning disabled, Autistic & Attention Deficit Hyperactivity Disorder (ADHD) children-

**Related Experience**

1. Observation of milestones in a child ( 0 to 6 Yrs ) and the identification of developmental status.
2. Visit to a centre for developmental assessment OR to a Centre to know about the Intervention programmes for Gifted/ Learning disabled/ Autistic / ADHD children ( Any One)
3. Organisation of an awareness programme for the community / parents/ Adolescents on any related topic.
4. Prepare visual aids on a related topic for the parents having children from 0 to 6 years.
5. Prepare a Case study report of a Gifted/ Learning disabled/ Autistic /ADHD child. (Any One).

## Core Readings

- Guide book- mother & child protection card , Ministry of Human Resource Development, Govt. of India.
- Hurlock (2008), Developmental psychology - 4<sup>th</sup> Ed.
- Hurlock (2004) , Personality development
- M.K. C. Nair (2004) , Module on early stimulation.
- Marshall & stuart (2001), Child development.
- Suriakanthi ,A (2009) , Child development - 4<sup>th</sup> ed.

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## SURFACE ORNAMENTATION TECHNIQUES

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Course Code: HS6BO13U4

ELECTIVE  
THEORY-4

Teaching hours: 3hrs/week (Per sem: 54)

Credit: 3

### Objectives

- To teach the variations of basic hand embroidery techniques, surface designing and other ornamentation techniques.
- To introduce them to various traditional embroidery techniques of India.

### Module1: Embroidery

2 Hours

-Embroidery tools and techniques, embroidery threads and their classification, selection of threads, needle and cloth, tracing techniques, ironing and finishing of embroidered articles.

### Module2: BasicHandEmbroidery:-

5 Hours

Two variations of running stitch, back stitch, stem stitch, chain stitch ,lazy daisy stitch, buttonhole stitch, feather stitch, herringbone stitch, knot stitch, satin stitch and cross stitch.

### Module3:TraditionalEmbroidery

10 Hours

- Origin, application & colours. Kantha, Chikan, Kasuti, Zardosi (Four variations), Kutch and Mirror work (Two variations).



**Module4: Special embellishment techniques:**

8 Hours

Ribbon work (2methods), Applique (2 methods), quilting (2 methods), Patch work (2 methods) Smocking - Chinese smocking (2 methods), honey comb, gathered with embroidery, Fabric painting (4 methods), hand, Stencil- dabbing and spraying.

**Module5:Dyeingandprinting**

4 Hours

Advanced tie and dye techniques, batik and block printing. (2methods each)

**Module6: Trimmings and decorations**

7 Hours

Laces, tassels, tucks (4methods), show buttons, eyelet and cord, bead work, cut work and crocheting.

**Related Experiences**

- Basic Hand Embroidery:-Prepare samples for running stitch, back stitch, stem stitch, chain stitch ,lazy daisy stitch, buttonhole stitch, feather stitch, herringbone stitch, knot stitch, satin stitch and cross stitch. (Two variations each )
- Traditional Embroidery- Prepare samples for Kantha, Chikan, Kasuti, Zardosi (Four variations), Kutch and Mirror work (Two variations).
- Special embellishment techniques:-Prepare samples for Ribbon work (2methods), Applique (2 methods), quilting (2 methods), Patch work (2 methods) Smocking - Chinese smocking (2 methods), honey comb, gathered with embroidery, Fabric painting (4 methods), hand, Stencil- dabbing and spraying.
- Dyeing and printing:-Prepare samples for advanced tie and dye techniques, batik and block printing. (2methods each)
- Trimmings and decorations:-Prepare samples for tassels, tucks (4methods), eyelet and cord, bead work, cut work and crocheting.

**Core Readings:**

- Richard M Proctor/Jennifer F Lew, 1998, Surface design for fabric, University of Washington Press.

- Art of embroidery : History of style and technique,1995, Lanto Synge, Woodridge
- Helen M, David & Charles, The Timeless Embroidery, 1986.
- Readers Digest, Complete guide to Sewing, 1993, Pleasant ville-Nu Gail L,Search Press Ltd.
- Barbara .S, Creative Art of Embroidery,1998 Lundon, Numbly Pub.group Ltd.
- Shailaja N, Traditional Ebroideries of India.,2001 Mumbai APH Publishin

## WOMEN'S STUDIES

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**Course Code: HS6BO13U5**

**ELECTIVE  
THEORY-5**

**Teaching hours: 3hrs/week (Per sem: 54)**

**Credit: 3**

### Objectives

- To create awareness among the students about the status of women in India.
- To sensitize the students about the problems /disparities/issues concerning women.
- To make the students acquainted with the laws pertaining to women and the services available to them.
- To motivate students to work for the betterment of women.

### **Module I: Meaning and significance of women's studies**

Women's rights.

### **Module 2: Demographic profile of women with reference to (4 hrs)**

Health, education, employment, socio-economic and political aspects.

### **Module 3: Special issues and problems concerning women (10 hrs)**

Infanticide, foeticide, dowry, domestic violence, sexual harassment, gender discrimination, child marriage and media projection.

**Module 4: Women in distress**

(8 hrs)

Problems of single, widowed, divorced women. Unmarried mothers. Problems confronting elderly women

**Module 5: Women and law**

(5 hrs)

Need for legal literacy for women.

Laws pertaining to marriage, divorce, dowry, succession and property inheritance, sexual harassment, domestic violence and abortion.

**Module 6: National efforts for women empowerment**

(6 hrs )

National policy on women

Role of National and State commissions for women.

Women Empowerment and the Role of Women Self Help Groups.

**Related Experience**

1. Undertake a visit to any one institution that caters to women in distress and prepare a report.

**Core Readings**

- Women and Sustainable Development: an international dimension
- Krishna Ahooja-Patel, Ashish Publishing House, New Delhi.1995.
- Introducing Women's Studies Feminist theory and Practice, Edited by Diane Richardson and Victoria Robinson, Macmillan, 1993
- Empowerment of Women (in 3 volumes) Editor-Prof Meenakshi Malhotra, Isha Books, Delhi.
- Issues on empowerment of Women. Utpal Kumar De and Bhola Nath Ghosh, Mohit Publication, New Delhi, 2004
- 50 Key Concepts in Gender Studies Jane Pilcher and Imelda Whelehan, Sage Publications, Delhi 2004
- Dimensions of Women Exploitation Editor-Meenakshi Malhotra, Isha Books, Delhi. 2004
- Women in law and Politics Edited by Raj Kumar Pruthi, Rameshwari Devi, Romila Pruthi, Mangal Deep Publications, Jaipur, India 2001
- Status of Indian Women Crisis and Conflict in Gender Issues-Volume 2, Edited by Uma Shankar Jha,

- Arathi Mehta, Latika Menon, Kanishka Publishers, Distributors, New Delhi, 1998
- Women, Environment and Health Dhanalaxmi Dash, Mangal Deep Publications, Jaipur. 2005
- The Status Of Women in India –from Anyiquity to Modernity Edited by Manjari Biswas (Bhaumik), Abhijeet Publications, New Delhi, 2010.

### **Journals**

1. Social Welfare, Central Social Welfare Board, Qutb Institutional Area, New Delhi.
2. Yojana, published by Ministry of Information and Broadcasting, Yojana Bhavan, New Delhi
3. Indian Journal of Gender Studies, copyright of Centre for Women's Development Studies, New Delhi, Sage Publications, New Delhi.
4. Indian Journal of Social Development-an international journal  
Serial Publication, New Delhi editor-Vijay Kumar.S

**MODEL QUESTION PAPERS**

**SEMESTER I**

**METHODOLOGY OF HOME SCIENCE AND FOOD SCIENCE**

**Course Code: HS1BO1U**

**Time: 3 hours**

**Maximum Weightage: 25**

**PART A**

***Objective type questions, weightage 1 for each bunch of 4 questions***

**I. Choose the correct answer**

1. Conversion of starch to simpler molecules by the effect of heat is-
  - a) Gelatinisation
  - b) Retrogradation
  - c) Dextrinisation
  - d) Hydrogenation
2. Proteins are made up of
  - a) Polysaacharides
  - b) Aminoacids
  - c) Fatty acids
  - d) Monosaacharides
3. Complex, heat induced browning reaction is-
  - a) Maillard reaction
  - b) Crystallisation
  - c) Caramelisation
  - d) Inversion
4. The process of addition of hydrogen to the unsaturated carbon bond of fats-
  - a) Hydrolysis
  - b) Rancidity
  - c) Hydrogenation
  - d) Acidity

**II. Fill up the following:-**

5. \_\_\_\_\_ is an example of textured vegetable protein
6. The major protein in egg yolk is \_\_\_\_\_.
7. Hydration and swelling of starch is \_\_\_\_\_
8. \_\_\_\_\_ is the limiting amino acid in rice.

**III. State whether true or false.**

9. The pigment present in potato is lycopene
10. Caramelisation is a property of fruits
11. A source of collecting primary data is from books.
12. The food group system has three groups.

**IV. Name the following:**

13. The protein formed in dough
14. The stiffness on death of an animal

15. The enzyme causing browning in cut fruits  
16. Representatives of population in research (4 x 1 = 4)

### **PART B**

**Short answer type questions, weightage 1 each.**

**Answer any 5 of the following**

17. Give an account of major pigments in fruits and vegetables  
18. Briefly explain the nutritional significance of fish  
19. Differentiate between GM foods and organic foods  
20. Write a brief note on ICMR food groups  
21. Give an account of the anti nutritional factors present in pulses.  
22. Explain the terms questionnaire and interview schedule  
23. Brief on the major areas of study in Home Science  
24. Define Pasteurisation (5 x 1 =5)

### **PART C**

**Short essay type questions, weight 2 each.**

**Answer any 4 each within one page**

25. Write a brief note on rancidity of fats  
26. What are the types of processed milk  
27. Give a note on stages of sugar cookery  
28. Enumerate advantages of observation method  
29. Explain the structure of meat  
30. Explain gelatinization and factors affecting it (4 x 2 =8)

### **PART D**

**Essay type questions, weightage 4 each.**

**Answer any 2 each within three pages**

31. Explain the classification based on function of proteins. Add a note on non traditional proteins, single cell proteins and textured vegetable protein.  
32. Explain major types of research methods.  
33. Explain the principles and methods of any 4 types of food preservation techniques. (2 x 4 =8)

## SEMESTER 11

### HUMAN PHYSIOLOGY AND MICROBIOLOGY

**Course Code: HS2BO2U**

Time: Three Hours

Maximum Weight: 25

#### Part A (Objective Type Questions)

**Answer all questions**

**Weight of 1 each bunch**

I. Choose the correct answer:

1. Innate immunity is the type:

- |                    |                       |
|--------------------|-----------------------|
| a) Genetic         | b) Long term immunity |
| c) Active immunity | c) Passive immunity   |

2. A person may be allergic to various factors in the atmosphere. This form of hypersensitivity is known as:-

- |                     |                       |
|---------------------|-----------------------|
| a) Berum sickness   | b) atopy              |
| c) genetic disorder | d) contact dermatitis |

3. The outer most covering of the brain is called.

- |                |                    |
|----------------|--------------------|
| a) Dura matter | b) Arachnoid mater |
| c) Pia mater   | d) Pericardium     |

4. Emphysema is a condition due to :

- |                       |                    |
|-----------------------|--------------------|
| a) Cigarette smoking  | b) Drug addiction  |
| c) Liquor consumption | d) Hyperthyroidism |

II. Fill up the following:-

5. The destruction of the microorganism by the use of chemicals is known as

6. A common allergen

7. The secretion of the liver is known as

8. \_\_\_\_\_ supply blood to the heart wall.

III. Name the following:-

9. The micro-organism that helps in the ripening of cheese.

10. Name one food item which bears the identification mark of AGMARK

11. The functional unit of nervous system.
12. The excess oxygen carrying pigment in .

IV. Match the following.-

- |                      |                 |
|----------------------|-----------------|
| 13. Bacteria         | - Semilunar     |
| 14. Pulmonary valves | - Schizomycetes |
| 15. Food infection   | - Ductless      |
| 16. Endocrine gland  | - Typhoid       |

(4x1=4)

**Part B (Short Answer Type Question)**

*Answer any five questions .weightage 1each*

17. List the factors responsible for food spoilage.
18. Differentiate between Exotoxin and Endotoxin.
19. Enumerate the characteristics of a cultural media.
20. Write a note on bactriophages.
21. List the functions of circulatory system.
22. State the importance of bile in the process of digestion.
23. Discuss the endocrine regulation of urine formation.
24. Define the term Respiration.

(5x1=5)

**Part C (Short Essay Type Questions)**

*Answer any four each with in one page .Weightage 2 each*

25. Define sterilization .What are the different methods of sterilization?
26. Describe the role of Consumer Protection Act in safeguarding the public health.
27. What are the different methods of preventing salmonella food poisoning?
28. Describe the structure of mammalian heart.
29. Explain the functions of epithelial tissue.
30. What are the functions of liver?

(4x2=8)

**Part D (Essay Type questions)**

*Answer any **two** within three pages.weightage 4 each.*

31. Explain the food poisoning and food infection. Describe the method to prevent food borne infections
32. Explain the process of digestion in man.
33. With the help of a neat diagram explain the parts of human brain.

(2x4=8)



**SEMESTER 111**

**HUMAN DEVELOPMENT AND FAMILY INTERACTIONS**

**Course Code: HS3BO3U**

**Part A**

Time 3 hours

Maximum weightage – 25

***Objective type questions, weightage 1 for each bunch of 4 questions***

**I. Choose the correct answer from the given choices.**

- 1) A method to study the popularity of the child
  - a) Case study
  - b) Observation
  - c) Sociometry
  - d) Interview
  
- 2) Need for approval
  - a) psycho-social need
  - b) intellectual need
  - c) biological need
  - d) egoistic need
  
- 3) Stage of Intellectual development from 2 to 7 years
  - a) sensori-motor period
  - b) pre-operational period
  - c) concrete operation period
  - d) formal operational period
  
- 4) Once own native constitution
  - a) heredity
  - b) environment
  - c) discipline
  - d) habit

**2. Fill in the blanks**

- 5) The qualitative changes occurring in a child is called .....
- 6) ..... is the period from 6 to 12 years.
- 7) A new born child is called .....
- 8) A child who deviates positively from normal is called .....

**3. Name the following:**

- 9) Legal separation of Marriage.
- 10) The founder of Montessori system of Education
- 11) The attachment of newly formed cell to the uterine wall.
- 12) Type of play where the child is playing alone.

**4. State whether the following statements are True or False.**

- 13) Development is not predictable
- 14) Toxemia is the absence of toxins in the blood.
- 15) Tubular pregnancy is a hazard during pregnancy
- 16) Sucking thumb is a behaviour problem.

**Part – B**

***Short answer type questions, weightage 1 each.  
Answer any 5 of the following***

- 17) What are the adjustments of a new born child?
- 18) What is amniocentesis?
- 19) List any four crisis in today's family?
- 20) Explain the moral development of a preschooler?
- 21) Give four values of play?
- 22) What is observation?
- 23) Define Counselling?
- 24) What do you mean by responsible parenthood?

**Part – C**

***Short essay type questions, weight 2 each.  
Answer any 4 each within one page***

- 25) Bring out the problems of today's adolescents
- 26) Explain pre-operational stage?
- 27) Briefly explain the language development of an infant?
- 28) How are children with special needs classified?



- 4) The endocrine gland that most influences the activities of other glands is the
- |              |            |
|--------------|------------|
| a) pituitary | b) adrenal |
| c) pineal    | d) thyroid |

**2. Fill in the blanks**

- 5) Psychology is the.....of.....and mental processes.
- 6) Three major divisions of the brain are the brainstem or.....  
the.....and the .....
- 7) Negative reinforcement.....responding.
- 8) The highest level of achievement according to Maslow is.....

**3. Name the following:**

- 9) The light sensitive layer of cells at the back of the eye.
- 10) Recovering information from storage in memory.
- 11) The father of Psychology.
- 12) Internal processes that initiate, sustain and direct activities.

**4. State whether the following statements are True or False.**

- 13) Far sightedness (hyperopia) is the difficulty in seeing nearby objects.
- 14) The pituitary is directed by the thalamus.
- 15) An undesirable response can be suppressed by associating it with aversive stimuli.
- 16) Perception is not affected by expectations, motives or emotions.

**Part – B**

***Short answer type questions, weightage 1 each.  
Answer any 5 of the following***

- 17) What is sensory memory?
- 18) Which are the four lobes of the cerebral cortex ?
- 19) Where is the adrenal gland located ? List any 3 functions of the adrenal gland.
- 20) Name any four visual problems.
- 21) Define Motivation?
- 22) List any four memory techniques.

- 23) Explain the curve of forgetting?
- 24) What are the uses of Perception?

**Part – C**

***Short essay type questions, weight 2 each.  
Answer any 4 each within one page***

- 25) Explain classical conditioning citing Pavlovian experiment?
- 26) Explain what is meant by short term and long term memory?
- 27) Explain the structure of a neuron with the help of a diagram?
- 28) Define Attention span and what are the factors affecting attention?
- 29) What are emotions? Explain the nature of Emotions?
- 30) Explain the perceptual constancies?

**Part – D**

***Essay type questions, weightage 4 each.  
Answer any 2 each within three pages***

- 31) Describe Maslow's theory of motivation?
- 32) What is Personlity? What are the different types of Personality?
- 33) Briefly explain the traditional senses?

## SEMESTER V

### INTERIOR DECORATION

**Course Code: HS5BO5U**

Time-3 hrs

Maximum Weightage-25

#### Part A

**Objective type questions, weightage 1 for each bunch of 4 questions**

#### I. Choose the correct answer from the given choices

1. ----- refers to the lightness or darkness of a colour.  
( Hue, Value, Intensity )
2. Japanese flower arrangement is commonly known as.  
( Ikebana, Moribana, Hogarth )
3. ----- principle of interior decoration is known as “ law of relation ship”  
( Proportion, Harmony, Balance )
4. ----- is the tactile surface quality of an object.  
( Texture, Emphasis, Rhythm )

#### II. Fill in the blanks:

5. The 3 centres of activity in a kitchen joined together to form -----
6. Combination of green and red is known as----- colour harmony.
7. The art of growing plants in shallow containers is known as-----
8. ----- refers to the brightness/ dullness of colour.

#### III. True / False:

9. Emphasis is the principle of design which helps to create a centre of interest in any arrangement. ( True / False )
10. Freeze drying is a technique of drying flowers. ( True / False )
11. Blue and green are called warm colours. ( True / False )
12. Line is the basic element of design. ( True / False )

IV. Match the following:

- 13. Soe - Man
- 14. Hikae - Flower arrangement
- 15. Bonsai - Earth
- 16. Ikebana - Growing plants

**Part B**

***Short answer type questions, weightage 1 each.  
Answer any 5 of the following***

- 17. Work triangle.
- 18. Bonsai.
- 19. Enumerate the guidelines for selecting furniture.
- 20. Primary colours.
- 21. Define flower arrangement
- 22. What are accessories?
- 23. Give notes on decorative designs
- 24. What is indoor gardening?

**Part C**

***Short essay type questions, weight 2 each.  
Answer any 4 each within one page***

- 25. Explain the different working areas in a kitchen.
- 26. Write the styles in gardening.
- 27. Qualities of colour.
- 28. Explain the factors considered while selecting soft furnishings.
- 29. Explain the harmony of related colours.
- 30. Write a note on principle of rhythm in decoration.

**Part D**

***Essay type questions, weightage 4 each.  
Answer any 2 each within three pages***

- 31. Explain the different styles and shapes in flower arrangement.
- 32. Write on the different curtain styles?
- 33. Write an essay on different flower drying techniques?

# HUMAN NUTRITION AND BIOCHEMISTRY

Course Code: HS5BO6U

Time: Three Hours  
Weight: 25

Maximum

## PART A

Answer **all** questions.

Each bunch of **four** questions carries a weight of 1.

I. Fill up the following:-

1. Calcium requirement during lactation is \_\_\_\_\_.
2. Sunlight is a good source of \_\_\_\_\_.
3. Fish is a good source of \_\_\_\_\_ fatty acids.
4. Type of diabetes that occurs in pregnant women \_\_\_\_\_.

II. Name the following:-

5. Excessive intake of fluorine.
6. Rise in blood sugar as a result of intake of foods.
7. The condition due to the deficiency of riboflavin.
8. Condition in which water is retained in the body.

III. Choose the most appropriate word:

9. An antioxidant nutrient :

- |              |              |
|--------------|--------------|
| a. Vitamin A | b. Vitamin B |
| c. Vitamin C | d. Vitamin D |

10. Of the following an essential amino acid is:

- |            |              |
|------------|--------------|
| a. Leucine | b. Alanine   |
| c. Serine  | d. Histidine |

11. In the case of athletes the hyponatremia is associated with :

- |                         |                            |
|-------------------------|----------------------------|
| a. Sodium loss in sweat | b. potassium loss in sweat |
| b. Water loss           | d. Alcohol formation.      |

12. Goitre can result due to the deficiency of :

- |            |           |
|------------|-----------|
| a. Calcium | b. Iodine |
| c. Protein | d. Zinc   |

IV. Match the following:-

- |               |   |               |
|---------------|---|---------------|
| 13. Lathyrism | - | Thiamine      |
| 14. Histones  | - | Water balance |
| 15. Beri-beri | - | Pulses        |
| 16. Oedema    | - | Protein       |

(4×1=4)



### **PART B (Short Answer Type)**

**Answer any five. Each carries a weightage of one.**

17. What is Glycemic Index?
18. State the functions of Vitamin D.
19. Explain rancidity of fat.
20. How are proteins classified?
21. Write down the symptoms of pellagra.
22. What are the physiological changes that take place in old age?
23. Enlist the basic food groups.
24. What are the factors affecting RDA?

(5×1=5)

### **PART C (Short Essay Type)**

**Answer any four. Each carries a weightage of two.**

25. Explain specific dynamic action of food.
26. What are the uses and types of dietary fibre?
27. Discuss the Indian Nutrition scenario.
28. Explain BMR. State the factors influencing BMR.
29. Write down the principles involved in meal planning.
30. Suggest a balanced packed lunch for a pre-school child and comment on its nutritional adequacy.

(4×2=8)

### **PART D (Essay)**

**Answer any two. Each carries a weightage of four.**

31. Discuss iron under:
  - a. Function;
  - b. Recommended allowances;
  - c. Sources;
  - d. Deficiency.
32. Emphasise on the importance of enhanced nutritive requirement during pregnancy. Plan a day's menu for a pregnant woman and evaluate its nutritive adequacy.

(2×4=8)

## TEXTILE SCIENCE

**Course Code: HS5BO7U**

Time –3 hrs

Max weightage-25

### Part A

**Objective type questions, weightage 1 for each bunch of 4 questions**

**I. Choose the correct answer from the given choices**

1. Animal fibres are known as

(A). Protein fiber. (B) Synthetic fiber. (C) Cellulosic fiber.

2. The spiral arrangement of the yarn is

(A) Grain. (B) Count. (C) Twist

3. The following weave structure has the lowest float length.

(A) Twill. (B) Plain. (C) Satin.

4. Which one is resist print among following?

(A) Block. (B) Batik. (C) Discharge

**2. Fill in the blanks:**

5. Fancy yarns are famous for -----.

6. The horizontal loops are called----- in knitting.

7. Direct dye is primarily used on -----fibres.

8. Thousands of the filaments are grouped to form a thick rope called-----

9. Asbestos is a pliable fiber. (True / false).

10. Viscose rayon is made by wet spinning (True / false).

11. Single yarn is the product of first twisting operation. (True / false).

12. Cotton is strong when it is wet. (True / false).

IV. Match the following:

- |                      |   |             |
|----------------------|---|-------------|
| 13. Silk             | - | Cord yarns. |
| 14. Discharge prints | - | Dobby       |
| 15. Fancy weaves     | - | Degumming.  |
| 16. Simple yarn      | - | Roller.     |

**Part B**

**Short answer type questions, weightage 1 each.  
Answer any 5 of the following**

17. Name the stages of dyeing.
18. Write briefly on different types of selvages.
19. List out the major operations in weaving.
20. What is balance of cloth?
21. Give notes on bonding.
22. Write notes on textured yarn.
23. Differentiate staple from filament fibre.
24. Give an account on eco-friendly textiles.

**Part C**

**Short essay type questions, weight 2 each.  
Answer any 4 each within one page**

25. State the physical properties of silk?
26. Give the classification of yarns?
27. Explain pile weave.
28. What is calendaring.
29. Give an account on natural dyes.
30. Write briefly on Knitting

## Part D

**Essay type questions, weightage 4 each.  
Answer any 2 each within three pages**

31. Explain basic weaves with the help of illustration?
32. Write an essay on different printing techniques?
33. What are finishes? Write on basic finishes given to cotton fabrics?

## DYNAMICS OF EXTENSION

**Course Code: HS5BO8U**

Time –3 hrs

Max weightage-25

## Part A

**Objective type questions, weightage 1 for each bunch of 4 questions**

### I. Choose the correct answer from the given choices

1. For bringing attitudinal changes in adults, the most suitable method is  
(a) Group meetings (b) Role play (c) Home visits (d) Method demonstrations.
  2. A method to identify community leader.  
(a) Interview (b) Written test (c) Group discussion (d) Lottery method.
  3. A community organization for economic development  
(a) Panchayat (b) School (c) Co-operatives (d) Youth clubs.
  4. A programme which give priority to the development of children below 6 years.  
(a) DWCRA (b) ICDS (c) Indira mahila yojana (d) IRDP
2. Fill in the blanks.
1. -----is an out of school system of education.
  2. The process of comparing the results of activities with the original objective is-----

3. -----has the responsibility of speaking for the group.
4. An instructional device in which the message can be heard as well as seen is known as -----.

3. Name the following.

1. A single printed sheet of paper of small size, containing preliminary information relating to a topic.
2. An experience which is the unabridged version of life itself.
3. Community which is in close and direct relationship to nature.
4. A Plan of work arranged chronologically.

4. Match the Following.

- |   |                                     |
|---|-------------------------------------|
| 1. Group motivator                                  | (a) Group method                    |
| 2. Organisation for community development           | (b) Quality of an extension worker. |
| 3. Ideas of different people can be pooled together | (c) Visual aid.                     |
| 4. Flip chart                                       | (d) Panchayats                      |

### **Part B**

**Short answer type questions, weightage 1 each.  
Answer any 5 of the following**

1. What are the steps in extension teaching?
2. Why motivation is important in an extension work?
3. What is the significance of DWCRAs as a programme for development of women and children?
4. What do you understand by the term brain-storming? Elaborate its significance.
5. Differentiate between Flash cards and Flannel graphs.
6. Write a note on the cone of experience.

7. Analysis of the situation is necessary before deciding the objectives. Why?
8. What is the role of Home Science extension in community development?

### **Part C**

***Short essay type questions, weight 2 each.  
Answer any 4 each within one page***

1. What are the qualities required for an extension worker?
2. Discuss the points to be remembered while making a home visit in extension.
3. What are the different types of community leaders?
4. Enumerate the role of schools in community development.
5. Explain the significance of satellite communication.
6. What are the principles involved in programme planning?

### **Part D**

***Essay type questions, weightage 4 each.  
Answer any 2 each within three pages***

1. How will you conduct an Extension programme in a community?
2. Discuss briefly the various methods of approaching people.
3. What are the characteristics and problems of urban communities in India?

**OPEN COURSE**

**INTERIOR DECORATION AND RELATED ARTS  
HS5DO1U1**

**Time: 3 hours**

**Maximum Weightage: 25**

**PART A**

**Objective type questions, weightage 1 for each bunch of 4 questions**

**Choose the correct answer**

1. A state of equality in any composition or arrangement.  
(a)Harmony (b) Rhythm (c) Unity (d) Balance
2. The beginning point of any design  
(a)Form (b) Shape (d) Line (d) Pattern
3. Attribute which recognize and describe a colour.  
(a) Dimension (b) Hue (c)Intensity (d)Quality
4. Short curtains that hang in layers to cover portion of a window  
(a) Valences (b) Cafe curtains (c) Swags (D) Ruffles

**Fill in the blanks**

5. Equidistant colours in the prang's colour chart are called-----
6. A ----- represents the tension that exists between two points.
7. \_\_\_\_\_ is an inherent visual property of all forms.
8. \_\_\_\_\_ evenly illuminates the horizontal surface below.

**Name the following**

9. Doing unconsciously' the right thing at the right time in the right way.
10. Surface enrichment of a structural design
11. Man made expression of something beautiful.
12. A wall to wall floor covering.

**Say whether the following statements are True or False**

13. Green is a primary colour.
14. Mirrors are used as accessories in interiors.
15. Rhythm refers to the unity of expression in a design
16. A line is used to divide space and create movement.

**(4 x 1 =4)**

**Part- B**

**Short answer type question weightage 1 each  
Answer any 5 of the following**

17. Mention the objectives of interior decoration.
18. List down some of the accessories for modern interiors.
19. What are the different types of lighting?

20. What is a design? What are the different types?
21. Write notes on value of a colour.
22. Give an account on gathered valence.
23. Explain the different types of triangular flower arrangement.
24. Briefly explain dual purpose furniture. (5 x 1 = 5)

**Part-C**

**Short essay type questions. weightage 2 each  
Answer any four, each with in one page**

25. What is the importance of good taste in interior decoration?
26. Give an account of basic hand stitches.
27. What all factors will you consider while selecting and arranging furniture for your drawing room?
28. How can you bring about unity in a design?
29. Give an account of different types of light fixtures.
30. How will select plants for indoor gardening? (4 x 2 =8)

**Part-D**

**Essay type questions, Weightage 4 each  
Answer any two questions ;each with in three pages**

31. What are factors to be considered while planning a house? Give an account of the different symbols used in drawing house plans.
32. Enumerate the various art principles with suitable illustrations
33. Illustrate different curtain styles. Suggest a curtain style for an adolescent girl's bedroom.

(2 x 4 = 8)

**LIFE SKILL STRATEGIES AND TECHNIQUES**

**HS5DO1U2**

**Time: 3 hours**

**Maximum Weightage: 25**

**Section A**

**Objective type questions, weightage 1 for each bunch of 4 questions**

**1. Fill in the blanks**

1. The prevalence of anaemia is detected by -----in the blood.
2. Sound becomes hazardous noise pollution at decibels above-----.
3. Onset of menstruation is called-----.
4. The study of the environment is termed -----.

**2. Name the following**

5. An enzymatic byproduct of vermicomposting.
6. Condition resulting from imbalance between energy intake and expenditure.
7. Inability to perform or continue work due to previous exertion.



8. Scientist who classified the five levels of change influencing character of work.

**3. Choose the correct answer from the given choices**

9. The best method of managing organic waste is by

a. composting b. burning c. incineration d. sanitary land fill

10. A plan for spending and saving within a given income for a definite period is called

a. balance sheet b. budget c. ledger d. record keeping

11. Bioavailability of iron in the diet of adolescents can be enhanced if the following nutrient is added along with an iron rich source

a. vitamin C b. sodium c. calcium d. fat

12. The psychologist who referred to adolescence as 'a period of storm and stress '

a. Stanley Hall b. Havighurst c. Piaget d. Abraham Maslow

**State whether the following statements are True or False**

13. An example of a sexually transmitted disease is HIV

14. Anorexia nervosa in adolescents is characterized by self induced starvation

15. CFC can lead to ozone depletion

16. The feeling of satisfaction which a person derives after the use of goods and services is his real income

**Section B**

Answer any 5 questions

Each answer carries a weightage of 1

(5x1 =5)

17. Define the 3 R's of waste management.

18. List any four dietary guidelines for an adolescent with the help of a food guide pyramid.

19. List any four common characteristics of resources.

20. What are the essential components of a communication system

21. How can the principle of harmony be achieved in individual clothing? Give 4 examples

22. What are the steps in decision making?

23. List any four symptoms of stress.

24. Briefly explain any four crises that affect the family.

**Section C**

Answer any 4 questions

Each answer carries a weightage of 2

(4x2= 8)

25. Comment on the significance of rain water harvesting at household level

26. Write four adverse effects of substance abuse on adolescent health

27. List any four developmental tasks of adolescents

28. Elaborate on the types of income and suggest three ways through which it can be supplemented

29. Justify the increased nutritional requirements during adolescents

30. Discuss anorexia nervosa and bulimia with specific reference to adolescents

### Section D

Answer any two questions  
Each answer carries a weightage of 4  
(2x4= 8)

31. Explain the physiological aspects of growth and development during adolescence.
32. Briefly explain four positive and four negative influences of media on adolescents.
33. List any four rights of consumers. Write short notes on:
  - i. ISI
  - ii. Agmark
  - iii. FPO
  - iv. Ecomark

### HS5DOIU3 - NUTRITION FOR WELLNESS

Time: 3 hours

Maximum Weightage: 25

#### PART A

*Objective type questions, weightage 1 for each bunch of 4 questions*

#### I. Choose the correct answer

1. Which vitamin is essential for proper iron absorption?
  - a) Vit A
  - b) Vit C
  - c) Vit D
  - d) Vit B
2. Total energy contributed by 10g of fat
  - a) 10 Kcal
  - b) 19 Kcal
  - c) 90 Kcal
  - d) 100 Kcal
3. The micronutrient in colostrum that promotes normal growth and brain development
  - a) Iron
  - b) Iodine
  - c) Zinc
  - d) Chlorine
4. The daily Protein requirement for a pregnant woman is:
  - a) 45 g
  - b) 50g
  - c) 60g
  - d) 65g

#### II. Fill up the following:-

5. \_\_\_\_\_ present in fishes reduces the risk of Cardio Vascular Diseases.
6. Excessive consumption of Kesari dhal causes \_\_\_\_\_.
7. The causative organism for tuberculosis is \_\_\_\_\_
8. \_\_\_\_\_ is the limiting amino acid in rice.

#### III. State whether true or false.

9. Adolescence is a period of rapid growth and development.
10. Health is a condition of mere absence of diseases.
11. The digestion of polysaccharides begins in the mouth.
12. Vitamin C is not an antioxidant.

**IV. Match the following:-**

- |              |             |             |
|--------------|-------------|-------------|
| 13. Beriberi | Obesity     |             |
| 14. Garlic   | Sucrose     |             |
| 15. BMI      | Thiamine    |             |
| 16. Sugar    | Cholesterol | (4 x 1 = 4) |

**PART B**

**Short answer type questions, weightage 1 each.**

**Answer any 5 of the following**

17. Give an account of the symptoms of glomerulo nephritis.
18. Briefly explain body weight as a tool for anthropometric assessment.
19. Differentiate between gynecoid and android obesity.
20. Write a brief note on ICMR food groups and its importance in effective menu planning.
21. Give an account of the anti nutritional factors present in pulses.
22. Differentiate between bulimia nervosa and anorexia nervosa.
23. Explain the role of protein in our body and its sources.
24. What is a balanced diet and explain its importance. (5 x 1 =5)

**PART C**

**Short essay type questions, weight 2 each.**

**Answer any 4 each within one page**

25. Write a brief note on digestion of carbohydrates.
26. What are the dietary modifications required during old age?
27. Discuss the causes and preventive measures of anaemia.
28. Explain the importance of diet therapy in hyper tension
29. Explain the direct methods of assessment of nutritional status.
30. Explain the role of functional foods (4 x 2 =8)

**PART D**

**Essay type questions, weightage 4 each.**

**Answer any 2 each within three pages**

31. Write an essay on the causes, symptoms and dietary modifications needed in the management of diabetes mellitus.
32. Explain the nutritional requirements and plan a day's menu for an adolescent girl.
33. Write on the sources, functions, RDA, deficiency, prevention and treatment of vitaminA.

(2 x 4 =8)

## HS5DOIU4 - SELF EMPOWERMENT SKILLS

**Time: 3 hours**

**Maximum Weightage: 25**

### **PART A**

**Objective type questions, weightage 1 for each bunch of 4 questions**

**Choose the correct answer from the given choices.**

- 1) Self respect is an  
a) Attitude to self                      b) Attitude to life  
c) Attitude to others                  d) Attitude to work
- 2) Voice cultivation comes in  
a) Effective speaking    b) Intelligent listening  
c) Facing interview      d) Friendliness
- 3) Judgment is a  
a) Social skill                      b) Language skill  
c) Intellectual skill                  d) life skill
- 4) Be Enthusiastic is a step to attain  
a) Success                          b) Self esteem  
c) Right attitude                      d) Positive personality

### **Fill in the blanks**

- 5) The ability to respond to a need.....
- 6) ..... is the hallmark of a genuine person
- 7) The ability to recall is called .....
- 8) ..... is as important as getting

### **Name the following:**

- 9) The foundation of success
- 10) People with good values, character, integrity and positive values.
- 11) Sum total of person's values, beliefs and personality
- 12) The biggest hurdle in building a positive relationship.

### **State whether the following statements are True or False.**

- 13) A winner makes commitments
- 14) Rhythm is an element of design
- 15) Orange is a primary colour
- 16) Turn Scars in to stars is a step to build positive self esteem.                      (4 x 1 =4)

**Part – B**  
**Short answer type questions, weightage 1 each.**  
**Answer any 5 of the following**

- 17) Name any four areas of marital adjustment
- 18) Write four contrast colour harmonies
- 19) Name four types of flower arrangement
- 20) Name four social skills.
- 21) Mention four techniques of food preservation
- 22) List four memory techniques.
- 23) List four Steps in management process
- 24) Write four causes for fatigue?

(5 x 1 =5)

**Part – C**  
**Short essay type questions, weight 2 each.**  
**Answer any 4 each within one page**

- 25) Principles in meal planning
- 26) Bring out the values to cherish in life.
- 27) Different techniques in stress management.
- 28) Qualities of a successful person
- 29) Explain the different types of resources with examples
- 30) Steps in budget making.

(4 x 2 =8)

**Part – D**  
**Essay type questions, weightage 4 each.**  
**Answer any 2 each within three pages**

- 31) Describe different work simplification methods
- 32) Explain how you can make wealth from waste
- 33) Tips to build a positive personality

(2 x 4 =8)

\*\*\*\*\*

## SEMETER VI

### FAMILY RESOURCE MANAGEMENT HS6B09U

Time: 3 hrs

Max. Weightage: 25

#### Part A

#### **Objective type questions, weightage 1 for each bunch of 4 questions**

Fill up the following:-

1. A typical work curve is described as -----.
2. -----is the computation of the assets and indebtness of a firm.
3. -----is the commonsense approach to make work easier.
4. The worth attached to object, idea or condition-----.
- II. Name the following.
5. Tools for attaining family goals?
6. Agency responsible for issuing ISI mark?
7. The scientist who suggested changes in work process for its effectiveness?
8. Discontent, restlessness, desire to quit are the signs of this?
- III. Choose the correct answer.
9. FPO stands for -----  
(A) Fruit Products Order (B) Food Products Order (C) Fruit Processing Organization (D) Fruit Products Organization
10. According to Engel's law of consumption, as the income increases the proportion of Income spend on food:-  
(A) Decreases (B) Increases (C) Increase or Decrease (D) Remains constant
11. Commodities and facilities which are available to the family without the use of money:-  
(A) Real income (B) Family income (C) Psychic income (D) Real direct income
12. The complete review of a plan of action  
(A) Organizing (B) Evaluation (C) Planning (D) Implementation
- IV. Match the Following.
13. Resources -Time
14. Crux of management - Knowledge of peak loads
15. Human resource - Decision making
16. Time management – Limited (4x1=4)

#### Part B

*Short answer type questions. Weight age 1 each. Answer any 5 of the following.*

17. Time norm and time cost.
18. What is decision making?
19. Mention different ways of account keeping.
20. Define work simplification.
21. Enlist the various stages and sub stages of family life cycle
22. Which are the major phases of controlling during management process?
23. What do you mean by family income?

24. Mention different saving schemes for a middle class family.

(5x1=5)

### Part C

**Short essay type questions, Weight age 2 each. Answer any 4 within one page**

25. Give an account of family records.

26. What are the characteristics of resources?

27. How will you make a successful decision?

28. Suggests different techniques to avoid fatigue.

29. Discuss the problems faced by consumer in today's world.

30. What are your suggestions for environment friendly domestic waste disposal?

(4x2=8)

### Part D

**Essay type question, weight age 4 each. Answer any two each within three pages.**

31. Define management. Discuss the steps involved in the process of Management.

32. Discuss the various classes of change which can be adopted by a homemaker for the scientific management of energy.

33. What is family budget? What are the factors which affect family expenditure, and discuss the steps considered while making a family budget?

(2x4=8)

## CLINICAL NUTRITION AND DIETETICS

### HS6BO10U

Time : 3 hrs

Max weightage-25

### Section A

**Objective type questions, weightage 1 for each bunch of 4 questions**

#### I. Choose the correct answer:

1. The form of blood cholesterol associated with an increased risk of atherosclerosis is:

(A) triglycerides ( B) Chylomicrons(C)LDL cholesterol(D) HDL cholesterol

2. Type I Diabetes Mellitus that occurs due to the insufficient production of

• Glucagon (B) Insulin (C) Aldosterone (D) Cortisol

3. Goiter is a deficiency disease of

• Iodine (B) Selenium (C)Manganese (D) Zinc

4. Pallor of skin is a symptom of deficiency of:

(A) Iron (B) Thiamine (C) Calcium (D) Niacin

#### II. Fill in the blanks:

34. -----is the causative organism of tuberculosis

35. The normal systolic pressure of an adult male is -----

36. -----is a ranking of foods based on the postprandial blood glucose response.  
37. ----- is the chief cause of ulcer.

### III. Match the following

9. Typhoid - Oedema  
10. Alcoholism - Peyer's patches  
11. Kwashiorkor - Vitamin A deficiency  
12. Night blindness - Liver cirrhosis

### IV. True or False

13. A high protein diet is advised in dietary management of glomerulo nephritis  
14. The lack of adequate fibre in the diet is a cause of constipation  
15. High Density Lipoproteins are otherwise called bad cholesterol  
16. Dietary protein is restricted in persons with high blood urea and oliguria.

**(4x1=4)**

### Part B

Short answer type questions, weight 1 each.

Answer any 5 of the following

17. List out the clinical symptoms of Iron deficiency Anaemia  
18. What is an HIV infection?  
19. Brief on total parenteral nutrition  
20. What are the risk factors of cancer?  
21. Write a brief note on peptic ulcer  
22. Enumerate the clinical manifestations of Vitamin A deficiency  
23. Define malnutrition and state its consequences.  
24. What is the role of a dietician in the community?

**(5x1=5)**

### Part C

**Short essay type questions, weight 2 each**

**Answer any 4 each within one page**

25. Explain the different types of Routine Hospital Diets?  
26. Brief on the dietary management of tuberculosis  
27. Give a brief account of common renal disorders?  
28. Write on the causes of protein energy malnutrition.  
29. Explain the phases in the occurrence of liver cirrhosis?  
30. State the nutritional requirements for cancer patients

**(4x2=8)**



## Part D

**Essay type questions, weight 4 each.**

**Answer any two each within three pages**

31. Write an essay describing the symptoms and management of type II Diabetes Mellitus
32. Plan a day's meal for a patient suffering from cardiovascular disease and comment on the diet therapy.
33. Enumerate the possible risk factors and complications of obesity and overweight.

**(2x4=8)**

## FASHION DESIGNING AND APPAREL PRODUCTION

**HS6BO11U**

Time: 3 hrs

Max weightage-25

### Part A

**Objective type questions, weightage 1 for each bunch of 4 questions**

Objective type questions. Weight 1 for each bunch

- I. Choose the correct answer from the brackets
  1. Cool colours are for-----  
(a. summer, b.winter, c.spring,d. autumn)
  2. The cost of the product at the introduction of a new style is-----  
(a. Medium, b high.c. low, d. very high)
  3. ----- is the embellishment of any material with design done by needle work.  
(a. Printing, b.chintz, c.embroidery, d. knotting)
  4. ----- is a method of placing the pattern on fabric in the most economical manner to minimize the length of fabric.  
(a.marking,b. lay out,c. finishing,d.drafting)
- II. Fill in the blanks.
  5. French seam is suitable for-----
  6. A decorative and functional feature on the neckline of a garment that encircles the neck is-----
  7. Shape, form or the overall outline of any dress is called-----.
  8. Look feel and esthetic appeal of any material is-----.
- III. Match the following.
  9. Fashion - short life
  10. Fad - 'Facere'
  11. Classic - a look
  12. Style - extended life
- IV. True or false
  13. Vertical lines make a short person look tall.

14. Warm and bright colours makes things look larger in size.
15. Making the pattern on paper using actual measurement is called drafting.
16. Organdy is suitable for stitching garments for stout person.

(4x1=4)

### Part B

**Short answer type questions. Weight 1 each. Answer any 5 out of the following.**

17. Write a note on fashion forecasting.
18. Enumerate the role of a merchandiser.
19. Give the guidelines for taking body measurements.
20. List out the points to be remembered while designing garments for a thin person.
21. Write on fashion trends.
22. What is rhythm?
23. List out the marking tools used in garment construction.
24. Give an account on different pattern layouts.

(5x1=5)

### Part C

**Short essay type questions, weight 2 each Answer any 4 each within one page**

25. Describe Fashion cycle.
26. Give the guidelines for taking body measurements.
27. Write on present fashion trends in Kerala.
28. Briefly explain the parts of a sewing machine.
29. Write the steps in preparing fabric for garment construction.
30. What is marketing? Write about the 4P's in marketing.

(4x2=8)

### Part D

**Essay type questions, weight 4 each. Answer any two each within three pages**

31. What is line? Discuss its types, functions and characteristics in apparel designing.
32. Write an essay on social, cultural and economic factors affecting fashion.
33. Discuss 8 head theory with illustration.

(2x4=8)

## MASS COMMUNICATION AND JOURNALISM

HS6BO12U

Time –3 hrs

Max weightage-25

### Part A

**Objective type questions, weightage 1 for each bunch of 4 questions**

I.Fill up the following.

1. -----is the process by which messages are transferred from a source to receiver.

2. A ----- audience is characterized by many differences among individuals.
3. -----is the network of networks.
4. Journalists working on the internet has been referred to as-----

II.Name the following.

5. A creative task that has to be tailor made for each communication function.
6. A systematic display of models,specimens,charts etc.in a sequence around a theme to create awareness and interest
7. The ABC's of good writing.
8. A journalism that covers many aspects of human athletic competition.

III.Choose the correct answer.

9. Communicates with an aggregate of small number of people.  
(a)Individual method (b) Group method (c) Mass method
10. Physical bridges between the sender and the receiver of the message.  
(a) Treatment (b) Audience (c) channel (d) Audience response.
11. A single printed sheet of paper of big size folded twice or thrice.  
(a) Leaf let (b) Folder (c) Pamphlet (d) Bulletin.
12. When you conclude a speech you should  
(a) Reiterate your main ideas (b) relate the topic to the audience.  
(c) Leave with something memorable (d)all the above.

IV.Match the Following.

- |   |   |                           |
|---|---|---------------------------|
| 13. Written material of current interest        | - | relate the subject matter |
| 14. To arouse the audience interest personally  | - | Journalism                |
| 15. Communication model                         | - | transition.               |
| 16. Statement connecting one thought to another | - | SMCR (4x1=4)              |

### Part B

**Short answer type questions. Weightage 1 each. Answer any 5 out of the following.**

17. What do you understand by the term communication?
18. Differentiate between e-mail and blogs.

19. Write briefly on the significance of video conferencing.
20. How will you write a short news article in a news paper?
21. Factors to be considered while presenting a public speech.
22. Write a short note on the different kinds of journalism.
23. Understanding the audience is very important before giving a public speech. Why?
24. What is editing? (5x1=5)

### **Part C**

***Short essay type questions, Weightage 2 each.  
Answer any 4 each within one page***

25. List the advantages and limitations of mass communication.
26. What are the principles of script writing for radio?
27. What are the characteristics of photo journalism?
28. Why a story board, a significant element in advertisement script writing?
29. Write briefly on pod cast.
30. What is the role of folk media in communication? (4x2=8)

### **Part D**

***Essay type questions, weightage 4 each.  
Answer any two each within three pages.***

31. Discuss the elements of communication in relation to teaching learning process.
32. Explain the role of information technology in communication.
33. What are the techniques involved in the preparation of effective advertisements? (2x4=8)

## ELECTIVES

### HS6BO13U1 - INTRODUCTION TO INDUSTRIAL APPAREL MANUFACTURING TECHNIQUES

**Time: 3 Hours**

**Weightage :25**

#### Section-A

Answer all questions

I) Choose the correct answer

- Which among the following provides functional protection and/or aesthetic appeal.  
a)Packaging b) cutting c) pattern making d) ironing
- The individual part of a garment that is shaped by hard paper is :  
a) Sample b) pattern c) grading d) marker
- The process by which the fabrics can cut as per marker dimension with the help of knife:  
a) Finishing b) designing c) Cutting d) none
- Trim edge machine is known as:  
a)Bar tack b) Over lock c) button sewer d) lock stitch

II. Fill up the following:

- The naps of alternating piles face towards the opposite ends of the ply is -----.
- Slack spread is due to ----- in spreading
- Design one way spread is used on----- fabrics.
- Static electricity is formed due to -----.

III. State whether True or False:

- Removal of projecting fibres reduces the hairiness of the spun thread.

10. The surface characteristics of the spun thread ensures a good “lock’ of the thread in the stitch configuration.

11. The denier system is used for multi filament sewing threads

12. The feed- dog pushes the bottom layer forward.

IV. Match the following:

- |                    |   |                  |
|--------------------|---|------------------|
| 13. Edge finishing | - | Sewing thread    |
| 14. Button         | - | Ply              |
| 15. Nap eitherway  | - | Button stitching |
| 16. Yarn           | - | Overlock         |

(4x1=4)

#### Part B

**Short answer type questions, weight 1 each.**

- What is pressing?
- Advantages of die cutter?
- What is the use of a drill machine?

20. What are welded seams?
21. What is a cord?
22. What are the marking points to be indicated on pattern?
23. What is nap one way?
24. List any 4 items needed for drafting. (5×1=5)

### **Part C**

**Short essay type questions, weight 2 each**  
**Answer any 4 each within one page**

25. What are the functions of an overlocking machine?
26. What faults to be inspected during the process of ironing and pressing ?
27. Describe industrial pressing of a trouser?
28. What are the Principles of Pattern Making?
29. Describe the draping method.
30. What are the working principles of Straight Knife as Cutting Accessory.?

(4x2=8)

### **Part D**

**Essay type questions, weight 4 each.**  
**Answer any two each within three pages**

31. Explain the requirements of fusing and properties of fused laminate?
32. Explain two stitches and two seams used in garment industry.
33. What is Die cutting? Explain,

(2x4=8)

## **FOOD QUALITY ASSURANCE**

### **HS6BO13U2**

Time: 3 hrs

Max weightage-25

### **Part A**

**Objective type questions, weightage 1 for each bunch of 4 questions**

#### **I. Choose the correct answer:**

1. The food additive, Lecithin comes under:
 

(A) Antioxidants	( B) Emulsifiers
(C)Leavening agents	(D) Preservatives
  
2. Fungus which produces *aflatoxin*

(A) Claviceps purpurea	(B) Aspergillus flavus
(C) Penicillium islandicum	(D) Fusarium sporotrichoides

3. Which among the following is not a naturally occurring toxicant in food?

- (A) Goitrogens (B) Benzopyrines  
(C) Saponins (D) Cyanogens

4. Which of the following is the adulterant in honey?

- (A) Chicory (B) Molasses  
(C) Argemone oil (D) Starch

**II. Name the following:**

5. The causative organism of Botulism  
6. Substances used to prevent oxidation of fats by molecular oxygen  
7. Major tool for achieving food safety  
8. Instrument used to find out the specific gravity of milk

**III. Match the following:**

9. Flavour enhancer - PFA  
10. Preservative - Propyl gallate  
11. Antioxidant - Sodium nitrite  
12. Food safety Act - Monosodium glutamate

**IV. State whether True or False:**

13. All food-borne illness can be prevented.  
14. Typhoid is not a food-borne infection  
15. Additives are used to maintain or improve the quality of food  
16. The Meat Products Order is not a compulsory standard.

**(4x1=4)**

**Part B**

**Short answer type questions, weight 1 each.**

**Answer any 5 of the following**

17. Define food quality assurance.  
18. What is Codex Alimentarius?  
19. Brief on Trypsin inhibitors.  
20. List four general types of potential hazards that are associated with food.  
21. What are chelating agents? Give two examples.  
22. List any 4 chemical toxicants of external origin.  
23. Define food additives.  
24. What is potable water? List the sources of contamination of water.

**(5x1=5)**

**Part C**

**Short essay type questions, weight 2 each**

**Answer any 4 each within one page**

25. Bring out the importance of HACCP
26. What is the importance of nutrition labelling to the consumer and manufacturer?
27. What are the causes and symptoms of Lathyrism?
28. What are BIS standards?. How are they useful to us?
29. Differentiate between food poisoning and food infection.
30. What are pesticides? How are they classified? (4x2=8)

**Part D**

**Essay type questions, weight 4 each.**

**Answer any two each within three pages**

31. What are the different food additives used in food industry? Explain.
32. Explain the naturally occurring toxicants in foods . How can it be reduced?
33. Define food adulteration. Explain the different types of adulteration. (2x4=8)

\*\*\*\*\*

**EARLY CHILDHOOD CARE AND INTERVENTION**

**HS6BO13U3**

Time: 3 hrs

Max weightage-25

**Part A**

**Objective type questions, weightage 1 for each bunch of 4 questions**

**I. Choose the correct answer**

1. The children can reach out for objects at .  
(A) 6 months (B) At birth (C) 2 weeks (D) 3 months\
2. A biological risk  
(A) X - Rays (B) Hypoglycaemia (C) Maternal diseases (D) drugs



3. Obtaining information about the skills of an individual

(A) Developmental delay (B) Assessment (C) Intervention (D) Programme

4. Dyslexia is

(A) Learning disability (B) Giftedness (C) Attention deficit disorder (D) Habit

**II. Fill in the blanks**

5. Papaya is a rich source of .....
6. TDSC is based on ----- .
7. Pre – school assistants are also called -----
8. Double promotion is an example of -----

**III. Name the following**

9. The Key stimulator
10. The first secretion of breast milk.
11. The babies with problems at birth .
12. The best age for hearing test

**IV. State whether True or False**

13. The breast feeding helps to develop a close mother – child relationship
14. A child walk alone around 2 years.
15. Age appropriate toys enhance optimal child development.
16. Deficiency of iron is called pellagra.

**(4x1=4)**

**Part B**

**Short answer type questions, weight 1 each.**

**Answer any 5 of the following**

17. Name four types of home environment
18. List four purposes of developmental assessment
19. Give the full form of TDSC, NICU, VEP & BERA
20. Enlist the four categories in Denver developmental Screening test II
21. Write four reasons for hearing loss.
22. Bring out four aims of early stimulation
23. Describe the effect of touch on infants

**(5x1=5)**

**Part C**

**Short essay type questions, weight 2 each**

**Answer any 4 each within one page**

24. How can you encourage the child to eat
25. Describe the major milestones based on DOC
26. What are the warning symptoms of visual impairment from 6 -9 months
27. Describe BERA test

28. Enumerate the uses of records in a pre-school  
29. Bring out the role of parents in early intervention

(4x2=8)

**Part D**

**Essay type questions, weight 4 each.**

**Answer any two each within three pages**

30. Importance & ways of home – school relationships  
31. Describe the ways to encourage exploration  
32. New born stimulation at home  
33. Bring out the techniques for visual stimulation

(2x4=8)

\*\*\*\*\*

**SURFACE ORNAMENTATION TECHNIQUES**

**HS6BO13U4**

Time: 3 Hrs

Maximum Weight: 25

**Part A**

**(Objective Type Questions) Answer all  
Weight 1 for each bunch**

I Choose the correct answer from the brackets:

1. Cut work is ----- form of ornamentation work.  
(a) a drawn (b) an open (c) a knotted
2. ----- is the embellishment of any material with design done by needle work  
(a) Ikat, (b) chintz, (c) Embroidery
3. Gujarat is Famous for-----work.  
(a) Kutch work, (b) shawl weaving, (c) Banchara Embroidery
4. Tie and dye is a type of-----work.  
(a) Resist (b) painting (c) mirror work.

II Fill in the blanks:

5. Chickan work is an art form of----- .
6. Attaching a piece of different coloured material in design form is-----.
7. Block printing is a method of -----printing.
8. Mirror works are famous work of-----.

III Match the Following:

- 9. Dabbing - fullness
- 10. Kasuti - Bengal
- 11. Kantha - fabric painting
- 12. Tucks - Karnataka

IV True or False

- 13. Kasuti is purely feminine embroidery from Jaipure.
- 14. Ribbon embroidery is a durable work.
- 15. Kantha is a patch work.
- 16. White embroidery is the other name for Chickankari.

(4x1=4)

### Part B

#### Short Answer Type Questions

**Weight 1 each. Answer any 5 out of the following**

- 17. Discuss about ribbon embroidery.
- 18. Give a note on appliqué work.
- 19. What are tassels?
- 20. Give short notes on Kasuti works.
- 21. Give an account on crocheting.
- 22. Write notes on lazy daisy stitch.
- 23. Differentiate cut work from patch work.
- 24. Write notes on Zardosi work.

(5x1=5)

### Part C

#### Short Answer Type Questions

**Weight 2 each. Answer any 4 out of the following**

- 25. Write on different techniques in fabric painting.
- 26. Briefly explain smocking and its applications.
- 27. Explain any advanced tie& dye technique with illustration.
- 28. Write a note on cross stitch.
- 29. Give an account on batik printing.
- 30. Write briefly on the application & colors of Kantha work.

(4x2=8)

### Part D

#### Essay type Questions

**Weight 4 each. Answer any 2 out of the following**

- 31. Discuss about various traditional embroidery techniques of India.
- 32. Give an account on various trimmings and decorations applied on garments.
- 33. Write an essay on tools and techniques used in Embroidery.

(2x4=8)

# WOMEN 'S STUDIES

**HS6BO13U5**

Time : 3 hrs

Maximum weightage -25

## Part A

Answer all four bunches

Weightage 1 for each bunch

I Fill up the following

1. ----- is the number of females per 1000 males in the total population.
2. MMR is vaccine for preventing-----.
3. -----is gender selective or sex selective abortion.
4. Marriage of a female younger than -----years is illegal.

II Name the following:-

5. The bill according to which 33% of seats in the political field are reserved for women.
6. A process of bone loss commonly seen among women that results in pain, disability and increased risk of fractures.
7. The nodal agency which leads the states efforts to improve the situation of women and girls.
8. Name a sexually transmitted disease that has now become a pandemic.

III State whether True or False.

9. India is the country with the highest population after China.
10. The number of female children in the 0-6 years category has shown a steady increase as per the last two census reports.
11. The National population Policy was drafted with a view to encourage one child norm.
12. Medical termination of pregnancy is illegal.

IV Match the following

- |                             |                    |
|-----------------------------|--------------------|
| 13. Highest female literacy | Female foeticide   |
| 14. Antenatal Care          | Punjab             |
| 15. Sex Discrimination test | Maternal Morbidity |
| 16. Self Help Groups        | Kerala             |

( 4 X 1 =4)

## Part B

(Short answer Type)

Answer any 5 questions

17. Write a short note on foeticide ?
18. What are the measures to protect children against sexual harassment?
19. Comment on issues confronting single women?
20. State any two objectives of Self Help Groups.
21. Give any four suggestions to promote entrepreneurship among women..
22. Write a short note on the salient features of "Kudambasree" as SHG.
23. List any four factors that lead to domestic violence.

(5 X 1=5)

**Part C**  
**(Short Essay Type)**  
**Answer any 4 questions**

24. Briefly explain any four factors that hinders a woman in rural India from obtaining good education?
25. Explain any two problems confronting divorced women?
26. State any four objectives of National Commission for Women?
27. "Education leads to empowerment" State two points to justify the above statement?
28. List any four factors that hinders women from entering the political field.
29. State the significance of legal literacy for Women. List two measures to achieve legal literacy.

(4 X 2 =8)

**Part D**  
**( Essay Type)**  
**Answer any 2 questions**

30. Comment on the health status of women in India with special reference to Kerala.
31. Elaborate on the literacy level of women in India.
32. What are the advantages of increasing the literacy rate?
33. Dowry- A boon or bane? Give your views.

## **ACKNOWLEDGEMENT**

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