

**KUMAUN UNIVERSITY**  
**Department of Home Science**  
**(SYLLABUS-CBCS)**  
**(Course Outline – Master of Arts - Home Science)**  
**(Two Year Course – Semester System)**

<b>First Semester</b>	<b>Name of Course</b>	<b>Course number</b>	<b>Credit</b>	<b>Marks</b>
	Advanced Food Science	HSC/CC001	04	<b>(70+30=100)</b>
	Theories of Human Development	HSC/CC002	04	<b>(70+30=100)</b>
	Advanced Fabric and Clothing Construction	HSC/CC003	04	<b>(70+30=100)</b>
	Research Methods and Statistics	HSC/CC004	04	<b>(70+30=100)</b>
	Practical	HSC/CC005	04	<b>100</b>
		<b>Core credits</b>	<b>20</b>	<b>500</b>

<b>Second Semester</b>	<b>Name of Course</b>	<b>Course number</b>	<b>Credit</b>	<b>Marks</b>
	Food safety and preservation	HSC/CC006	04	<b>(70+30=100)</b>
	Life span development	HSC/CC007	04	<b>(70+30=100)</b>
	Advanced Home Management	HSC/CC008	04	<b>(70+30=100)</b>
	Extension in Home Science	HSC/CC009	04	<b>(70+30=100)</b>
	Practical	HSC/CC010	04	<b>100</b>
		<b>Core credits</b>	<b>20</b>	<b>500</b>

<b>Third Semester</b>	<b>Name of Course</b>	<b>Course number</b>	<b>Credit</b>	<b>Marks</b>
<b>CORE COURSES</b>				
	Community Nutrition	HSC/CC011	04	<b>(70+30=100)</b>
	Indian Embroideries, Dyeing and Printing Techniques **	HSC/CC012	04	<b>(50+50=100)</b>
	Practical	HSC/CC013	04	<b>100</b>
<b>ELECTIVE COURSE</b>				
	Child welfare in India	HSC/EC014	04	<b>(70+30=100)</b>
	Early childhood education	HSC/EC015	04	<b>(70+30=100)</b>
	Human physiology	HSC/EC016	04	<b>(70+30=100)</b>

<b>Fourth Semester</b>	<b>Name of Course</b>	<b>Course number</b>	<b>Credit</b>	<b>Marks</b>
<b>CORE COURSE</b>				
	Human nutrition and diet therapy	HSC/CC017	04	<b>(70+30=100)</b>
<b>ELECTIVE COURSES</b>				
	Interior decoration	HSC/EC018	04	<b>(70+30=100)</b>
	Children with special needs	HSC/EC019	04	<b>(70+30=100)</b>
	Dissertation/Project	HSC/EC020	04	<b>100</b>
<b>OPEN ELECTIVE COURSE</b>				
	Entrepreneurship development	HSC/OEC021	04	<b>(70+30=100)</b>

**Grand Total: Core Credits 56 + Elective Credits 24 + Open elective= 4 Credits**

**Total credits= 84 Credits**

**Max. Marks for each paper: 100**

(i) Core Course **(CC)**

(ii) Elective Course **(EC)**

(iii) Open elective course **(OEC)**

**\*(70 marks for end semester exam+30 marks for internal assessment = 100)**

**\*\* (50 marks for end semester exam and 50 marks for internal assessment)**

## **FIRST SEMESTER- FIVE CORE COURSES**

### **PAPER I (CORE): HSC/CC001: ADVANCED FOOD SCIENCE**

**CREDIT: 04; MARKS- 100**

#### **Unit -1**

Different food groups and their nutritive values

Cereals: Breakfast cereals – Uncooked and ready to eat products; Cereal-based products – processed, fermented and baked

Pulses and legumes: Composition and processing; Toxic constituents of Pulses and elimination of toxic factors

Nuts and oilseeds: Use and processing

Fats and oils: Functions of oils and fats in food; Processing of fats

#### **Unit -2**

Fruits: Composition and nutritive value

Vegetables: Classification, composition, nutritive value and methods of cooking

#### **Unit -3**

Meat: Composition, cooking of meat; Changes produced during meat cooking; Meat substitutes

Fish: Type, composition and cookery, preservation and processing

Egg: Nutritive value and structure; Storage and processing; Effect of heat on egg protein; Egg products; Egg cookery; use of egg as a thickening agent and an emulsifying agent.

Milk: Composition and importance; Milk processing; Milk products; Milk substitute.

#### **Unit -4**

Sugar: Different types of sugars; Indian confectionary

Spices and condiments: Role of major and minor spices and their use; active principles in some spices, Adulteration of spices

#### **References**

1. Amerine MA, Pengborn RM, Roceasier EB (1965). Principles of Sensory Evaluation and Academic Press, New York.
2. Srilakshmi, B. Food Science, 4<sup>th</sup> Edition, New Age Publishers, New Delhi

## **PAPER II- (CORE): HSC/CC002: THEORIES OF HUMAN DEVELOPMENT**

**CREDIT: 04; MARKS- 100**

### **Unit I:**

Maslow's self-actualization theory

Freud's psychosexual or psychoanalytic theory

Erikson's psychosocial theory

### **Unit II:**

Skinner's theory of Operant or instrumental conditioning

Pavlov's theory of classical conditioning

Thorndike's Trial and Error Learning

### **Unit III:**

Kohlberg's six stages of moral reasoning

### **Unit IV:**

Piaget's cognitive development theory

### **References:**

1. Morgan, King et al (1999): "Introduction to Psychology", Tata Mc Graw-Hill Edition, Delhi, India
2. Hurlock E (2000): "Child Development", Tata Mc Graw-Hill Edition, Delhi, India
3. Bal Vikas evam Bal Manovigyan, Brinda Singh, Panchseel Prakashan, Jaipur

## **PAPER III- (CORE): HSC/CC003: ADVANCED FABRIC AND CLOTHING CONSTRUCTION**

**CREDIT: 04; MARKS- 100**

### **Unit I**

Yarn construction – mechanical and chemical spinning; Different stages of yarn construction; Types of yarn – simple, textured and spun; simple – simple, ply, cord; novelty; ply, cable, double and novelty; yarn numbering and yarn twist

Blends – meaning, types, process and reasons for blending, difference between blends and mixed

### **Unit II:**

Weaving technology: Definition, main operations; Characteristics of woven fabrics; Selvedge – types; Types of weaves

Loom – Parts of loom; Classification and types of loom; Motions of the loom

Non-woven fabrics – meaning, types, methods and uses

Knitting technology: Definition, classification, material and equipments; Methods of knitting – weft knitting and warp knitting; Uses and disadvantages of knitted fabrics

### **Unit III**

Equipment used in clothing construction

Sewing machine: Parts and attachments; common defects and remedial measures, care and maintenance

Anthropometric Measurements: Need; taking measurements for different garments; precautions and method; tools and materials

### **Unit IV**

Techniques of clothing construction:

Drafting: Meaning and importance; tools, method and precautions; drafting on paper and cloth;

Pattern making: Meaning and importance; parts of pattern; tools required; symbols used and general rules

General principles of clothing construction; Steps in clothing construction: Preparation of fabric for clothing construction; preparing layout; marking of cloth; principles of cutting; principles of stitching; finishing

## **Unit V:**

Use of construction features in design- seams, darts, tucks, pleats, gathers, placket opening, shirring Different types of – necklines, collars, yokes and sleeves. Renovation of clothing

### **References:**

1. Vastra evam Paridhan, Shashi Prabha Jain and Archana Jain, Shiva Prakashan, Indore
2. Parivarik Paridhan Vyavastha, Manju Patni and Sapna Henry, Star Publications
3. Vastra Vigyan ke Mool Sidhanth, G.P. Sherry, Vinod Pustak Mandir
4. Griha Vigyan Vishwakosh, Rama Sharma and M.K Mishra, Arjun Publishing House

## **PAPER IV- (CORE): HSC/CC004: RESEARCH METHODS AND STATISTICS**

**CREDIT: 04; MARKS- 100**

**Unit I** Research in Home Science-concept need and approaches, Research approaches-problem oriented and interdisciplinary. Type of research Historical survey, experimental and case study

**Unit II** Definition and identification of research problem selection Hypothesis, basis assumption and limitation of research problems

**Unit II** Sampling: Types of samples and selection of samples, data collection techniques: cross-selection and longitudinal, studies: questionnaire, interview schedule, observation, lab-techniques.

**Unit IV** Editing of statistical data, classification and tabulation, role of statistics in research, elementary statistics: classification, tabulation and frequency distribution of data.

**Unit V** Measures of central tendency- Mean, Median and Mode  
Measures of dispersion – standard deviation

Probability, normal distribution and use of normal distribution, probability tables

t-test for small sample, use of computer for analysis of data

Report writing

**References:**

1. Gupta, S.P., Statistical Methods, Sultan Chand and Sons, New Delhi, 1994
2. Jain, Gopal Lal, Research Methodology, Methods, Tools and Techniques, Mangal Deep Publications, Jaipur, 1998
3. Kothari, C.R.: An Introduction to Operational Research, Vikas Publishing House Pvt. Ltd, New Delhi, 1994
4. Wright, Susan E., Social Science Statistics Allyn and Bacon Inc., London, 1986
5. Wisniekwski, Mik, Quantitative Methods for Decision Makers, Mcmillan India Ltd., New Delhi, 1986

**Paper V (Core):HSC/CC005: PRACTICAL**

**CREDIT: 04; MARKS- 100**

**Practical:**

1. Drafting and lifting plan of different weaves on graph paper and glaze paper
2. Visit to a cloth weaving unit and report writing
3. Hand knitting samples/article
4. Construction of darts, pleats, tucks, gathers; basic seams; collars and sleeves.
5. Drafting of adult basic bodice and sleeve block and stitching of blouse and kurta
6. Understanding and handling of sewing machine: various parts; accessories; care, common defects and remedial measures
7. Preparation of research proposal in home Science and its report writing.
8. Important National and International food preparations using food groups

## **SEMESTER II – FIVE CORE COURSES**

### **Paper I (CORE): HSC/CC006: FOOD SAFETY AND PRESERVATION**

**CREDIT: 04; MARKS- 100**

#### **Unit 1**

Food sanitation and hygiene

Food borne diseases

#### **Unit 2**

Food Adulteration and Consumer Protection

Fortification of foods with vitamins and minerals

Novel and processed supplementary foods

Enzymes in food processing

#### **Unit -3**

Evaluation of foods: Visual examination and sensory evaluation (colour, texture, flavor and taste). Fermented foods, pickles, sauces.

#### **Unit 4**

Causes of food spoilage

Food preservation – Principles and methods

Home scale methods of food preservation

Preserved and processed products from fruits and vegetables



## **Paper II (CORE): HSC/CC007: LIFE SPAN DEVELOPMENT**

**CREDIT: 04; MARKS- 100**

### **Unit I:**

Development during different stages of life cycle.

Prenatal period, conception and pregnancy, stages of prenatal development, complications of pregnancy and birth process,

Pre-school period, physical growth and motor skills and development, language, speech and social development, skill in play, influence of nursery school home and environment on habits and development. Problems of this stage of growth

### **Unit**

### **II:**

Elementary school years- physical growth and health, motor personality, social, emotional, cognitive, language, interests and personality development, effect of peers, school and media, role of parent and teacher, problems of this stage of growth.

### **Adolescence**

Puberty and Adolescence – definition and characteristics

Physical changes during puberty and adolescence

Developmental tasks of adolescence

Social and emotional development during adolescence. Factors affecting social and emotional development

Role of parents, teachers, peers and society. Problems of adolescence – drop out from education system, juvenile delinquency – causes and

prevention, addiction and alcoholism

Problems of adjustment, identity crisis

### **Unit II: Early Adulthood**

Characteristics; Sub-stages; Developmental Tasks

Problems: Adjustments, Interests, Vocational, Marital life and adjustments, Divorce, Re- marriage, Unmarried life/singlehood

### **Unit III: Middle Age**

Characteristics;Subdivisions; Developmental Tasks

Problems: Some common problems unique to old age; Physical changes, Health, Changes in interests, Vocational, Changing family pattern, Family adjustments, Loss of spouse

### **Unit IV: Old Age**

Characteristics;Subdivisions;Developmental Tasks

Types of Changes during ageing: Physical, Sensory, Sexual, Health, Changes in motor abilities, Changes in mental abilities and cognitive capacities, Changes in interests, Retirement, Loss of spouse; Vocational and Family life hazards of old age; Consequences of ageing

### **REFERENCES**

1. Vikasatmak Manovigyan, Rajendra Prasad Singh, Jitendra Kumar Upadhyay, Rajendra Singh; Motilal Banarsidas, New Delhi.
2. Baal Vikas evam Baal Manovigyan, Vrinda Singh, Panchsheel Prakashan, Jaipur
3. Hurlock B Elizabeth (1981), Developmental Psychology – A Life Span Approach, Tata Mc Graw Hill
4. Hurlock B Elizabeth (1978), Child Growth and Development, Tata Mc Graw Hill
5. Hurlock B Elizabeth (1997), Child Development, Tata Mc Graw Hill
6. Papalia E Diane & Olds Wendkos Sally (1975), A Child's World – Infancy through Adolescence, Mc Graw-Hill Book Company
7. Berk E Laura (2000), Child Development, Allyn and Bacon

## **Paper III (CORE): HSC/CC008: ADVANCED HOME MANAGEMENT**

**CREDIT: 04; MARKS- 100**

### **Unit 1**

Management in family living, characteristics of management in home, role of home management, misconceptions regarding home management

Roles and responsibilities, characteristics and functions of a home manager

### **Unit 2**

Values – Concept, characteristics, classification and factors influencing values

Goals – Concept, types, factors influencing goals

Standards – Concept, classification of standards

Interrelatedness of values, goals and standards

### **Unit 3**

Management process: Planning, organizing, leading, controlling and evaluating

Decision making: Concept, steps, factors affecting, kind

Resources: Meaning and definition, role, characteristics, classification

### **Unit 4**

Time Management: Tools – peak loads, work curves, rest periods and work simplification

Energy Management: Classification of efforts used in home making, fatigue – types and causes  
Work simplification: Techniques – pathway chart, operation chart, micro-motion film analysis and path process chart

### **Unit 5**

Money Management: Budgeting – Definition, importance and steps in planning a budget.  
Account keeping – importance, types of account systems, methods of handling money, family financial records.

### **References:**

1. An Introduction to Family Resource Management, Premavathy Seetharaman, Sonia Batra and Preeti Mehra, CBS Publishers and Distributors
2. Economics of the household, B A Drew, Mc Millan company, New York.
3. Consumer Economics, Dr. Richard, Irwin, Illinois (1983)

## **Paper IV (CORE): HSC/CC009: EXTENSION IN HOME SCIENCE**

**CREDIT: 04; MARKS- 100**

### **Unit1:**

Home Science: Concept, objectives, areas and relationship with extension

Home Science Extension Education: Meaning, objectives, principles, process and methods

### **Unit 2**

Qualities of home science extension worker

Extension education methods

### **Unit 3**

Audio Visual aids in Home Science extension education

Agencies (national and international) associated with extension education for rural development

### **Unit 4**

Community development: Organization, principles, characteristics and functions

Role of home scientists in community development

### **References**

1. Griha Vigyan Prasar Shiksha, Manju Patney and U.S Thakur, Shiva Prakashan Indore
2. Communication for Development in the Third World Theory and Practices (1991) . Sage Publication, New Delhi.
3. Chaubey BK (1990) A Handbook of Education Extension, Jyoti Publication, Allahabad
4. Singh , R. (1987)Text Book of Extension Sahitya Kala Prakashan , Ludhiana
5. Extension Education in Community (1961) Ministry of Food and Agriculture, Government of India, New Delhi
6. Extension Programme Planning, Oxford and IBH Publishing Company Pvt. Ltd. New Delhi

**Paper V (CORE): HSC/CC010: PRACTICAL**

**CREDIT: 04; MARKS- 100**

1. Preparation of recipes from different Indian states
2. Preparation of low cost high nutritive value recipes
3. Preparation and use of instructional media: charts, posters, flash cards, Flannel graphs, models, Use of black board, Use of Bulletin board.
4. Preparation and use of slides use and handling of instructional aids
5. Demonstration as an instructional technology-method and result demonstration.
6. Group discussion, lesson planning.
7. Making family budget for different income groups while taking into consideration savings and Taxes

## **SEMESTER III – THREE CORE COURSES, THREE ELECTIVE COURSES**

### **Paper I (CORE): HSC/CC011: COMMUNITY NUTRITION**

**CREDIT: 04; MARKS- 100**

#### **Unit1:**

Prevalence, etiology, biochemical and clinical manifestation and preventive measures for: Protein Calories Malnutrition- Kwashiorkor and Marasmus

#### **Unit II:**

Prevalence, etiology, biochemical and clinical manifestation and preventive measures for: Iron deficiency, Iodine deficiency; Fluorine Deficiency and Toxicity

#### **Unit III:**

Prevalence, etiology, biochemical and clinical manifestation and preventive measures for Vitamin A deficiency; Beri-beri, Pellagra; Scurvy; Rickets, Osteomalacia and Osteoporosis

#### **Unit IV:**

Nutritional assessment and surveillance – Meaning, need, objectives and importance

Anthropometry – Need, importance, types, standards for reference

Biochemical methods – Biophysical or Radiological assessment, functional assessment, laboratory and biochemical assessment

Clinical assessment – Need, importance, identifying signs of deficiency diseases

Diet surveys – Need, importance, methods

**Paper II (CORE): HSC/CC012: INDIAN EMBROIDERIES, DYEING AND PRINTING TECHNIQUES**

**CREDIT: 04; MARKS- 100**

**Unit I:**

Dyes – Definition and classification of dyes

Different types of dyes: Natural dyes – Vegetable, animal and mineral;  
Synthetic dyes – direct, acid, basic, reactive, vat, sulphur, mordant, disperse, pigments

Suitability of various dyes to different fibres

**Unit II:**

Dyeing methods at different stages of processing – fibre, yarn, piece, union and cross

Colour fastness characteristics – washing, sunlight, crocking, and perspiration

Domestic methods of dyeing

**Unit III:**

Printing – Significance, methods – block, stencil, screen, roller

Faults in printing

Advantages and disadvantages of different printing methods

Preparation of printing paste, use of various ingredients and thickeners

Preparation of cloth for printing

After-treatment of printed goods

**Unit IV**

Historical background of traditional Indian embroidery

General embroidery techniques; Hand embroidery–knowledge of basic hand embroidery stitches

Study of traditional embroideries of India: Texture, design and colour

Chikankari of Uttar Pradesh, Kantha of Bengal, Kasuti of Karnataka, Kutch Kathiawar of Gujarat, Phulkari of Punjab, Sindhi embroidery

## **Unit V**

Traditional Textiles of India: Texture, design and colour

Woven (in design) – Patola, brocade, chanderi, paithani, pochampalli, ikat, maheshwari

Printed woven fabric – dacca muslin, tassar, kota doris

Printed – Sanganeri, kharhi print of Gujarat

Painted – kalamkari, madhubani

Resist dyed – bandhej of Gujarat and Rajasthan

Khadi: Significance – National and economic; Revolution in Khadi

Handloom: Definition, role in national economy and some chief handloom clothes of India

### **References:**

Vastra Rachna evam Chappai Takneek, Jain and Gupta, Shiva Prakashan, Indore

## **Paper III (CORE): HSC/CC013: PRACTICAL**

### **CREDIT: 04; MARKS- 100**

1. Familiarize students with methods of assessment of nutritional status and conduct single person case study to assess and evaluate nutritional status or carry out a survey using anthropometric measurements.
2. Construction of articles using different types of printing and dyeing techniques
3. Sample preparation of traditional Indian embroideries and machine embroideries  
Preparation of two articles using different hand embroideries  
Preparation of two articles using machine embroideries, Documentation of Indian textile and costumes.



## **ELECTIVE COURSES:**

### **Paper I HSC/EC014: CHILD WELFARE IN INDIA**

**CREDIT: 04; MARKS- 100**

#### **Unit I: Child Welfare in India**

Concept and historical perspective, Need and relevance

Historical evolution of Child welfare

Rights of children; Protection of Child rights; Convention on the rights of the child

Child in the Constitution of India

#### **Unit II: Profile of child in India**

Demographic: Total population, Child population, Sex ratio, Infant Mortality Rate (IMR),

Literacy, School enrolment rate

#### **Unit III: Children at Risk**

Children in especially difficult circumstances, Children in emergency situation, Disabled child, Destitute child, Street child, Delinquent child, Working child

Social problems related to children – female foeticide (pre-birth and pre-conception elimination), juvenile delinquency, child labour, child abuse and child marriage, discrimination against girl

child

#### **Unit IV: Policies and Legislations for Child Welfare**

National Children's Board, The National Policy for the Child, The National Children's Fund, Child Labor Cell

Child Labour Act; PC-PNDT Act; Child Marriage Act, The Children's Act, Juvenile Justice Act, Right to Education Act

#### **Unit V: Child Welfare agencies and programmes in India**

International, national and local agencies – governmental and non-governmental (UNICEF, ICCW, Mobile Creches, Bal Bhwan)

Welfare programs – ICDS, Mid-day Meal Programme, Universal Immunization Programme, etc

## **References:**

1. Baig, T.A. (1979): Our Children. New Delhi: Ministry of Information and Broadcasting,  
Govt. of India
2. Chowdhry, D.P. (1980): Child Welfare and Development. Delhi: Atma Ram

## **Paper II: HSC/EC015: EARLY CHILDHOOD EDUCATION**

**CREDIT: 04; MARKS- 100**

### **Unit I: Historical perspective of early childhood education**

Contribution of various thinkers (their ideology, applications and limitations)

Western: John Amos Comenius, Johann Heinrich Pestalozzi, John Locke, Friedrich Wilhelm Froebel, Jean Jacques Rousseau, Maria Montessori

Indian: Rabindranath Tagore (1861 – 1941), Gijubhai Badeka, M.K Gandhi, Tarabai Modak

### **Unit II: Principles of Early Childhood Education**

Objectives; Need and significance; Basic Principles; The Playway Method; Early Childhood education services in India - Government Sector – ICDS, NIPCCD, NCERT etc; Voluntary Sector – ICCW, Balwadi, Mobile Creche’s, ECCE centers etc.; Private Sector (Nursery, Pre- Primary etc)

### **Unit III: Early Childhood Years (3 – 6 Years)**

Children in the Early Childhood Years – Developmental Characteristics; Developmental needs;

Interests; Significance of First Five Years of Life

### **Unit IV: Play**

Concept of Play; Play and Learning; Role of play in development; Play as a means of understanding children’s development; Different types of play

among preschool children (unoccupied behaviour, onlooker, solitary independent play, parallel activity, associative play, cooperative or organized supplementary play)

**References:**

1. NCERT (1991), A Guide for Nursery School Teachers, NCERT, New Delhi
2. Seth Kanta, Ahuja Kavita (1996), Minimum Specifications for Pre-Schools, NCERT, New Delhi
3. Kohn Ruth (2003), The Exploring Child – A Handbook for Pre-Primary Teachers, Orient Longman, Delhi
4. Chowdhury D Paul (1995), Child Welfare/Development, Atma Ram & Sons, Delhi
5. Certificate Course in Organizing Child Care Services, IGNOU, (Block 1 to 6)
6. Grewal J S (1998), Early Childhood Education – Foundations and Practice, Har Prasad Bhargava, Agra

**Paper IV: HSC/EC016: HUMAN PHYSIOLOGY**

**CREDIT: 04; MARKS- 100**

**Unit I** Physiological process, structural and functional basis of human body Skeletal system, joints and muscular system

**UnitII** Composition and functions of blood and lymph, heart and course of blood circulation, blood pressure, pulse and heart sounds

**Unit III** Physiology of digestion, digestive enzymes and their function, function of liver, absorption from the intestine

**Unit IV** Respiratory apparatus, mechanism of respiration, respiratory rates, volume and transport of gases, physiology of kidney and skin

**Unit V** The location, secretion and functions of various endocrine glands, male female reproductive organs, pregnancy parturition and ,milk secretion

## **REFERENCES**

1. Arhur J. Banders; Human Physiology- The mechanisms of body function, Tata Mc Grawaw-Hill Publishing
2. C. Guyton; Text book of Medical Physiology V<sup>th</sup> edition, W.B. Sanders company- Philadelphia, London.

**SEMESTER IV- ONE CORE COURSE, FOUR ELECTIVE COURSES AND ONE OPEN ELECTIVE COURSE**

**Paper I (CORE): HSC/CC017: HUMAN NUTRITION AND DIET THERAPY**

**CREDIT: 04; MARKS- 100**

**Unit I** Nutrients in foods: their functions, requirements and sources digestion absorption and utilization of nutrients. Effect of low and excess intake of nutrients on human body Energy requirement, BMR, Water, its functions, sources and routes of excretion, recommended dietary allowances

**Unit II** Methods of assessment of nutritional status

**Unit III** BMR Diet therapy: History of dietetics, effect if illness on food acceptance and utilization, role of dietician, taking patients history, education of patient and dietetic counseling.

**Unit IV** Therapeutic modifications of normal diet, food exchange lists feeding methods, principles of dietetic management of chronically ill patients

**Unit V** Causes, symptoms and principles of diet management of

- Fevers (Long and short duration)
- Peptic ulcer, gastritis
- Jaundice, hepatitis cirrhosis and infantile cirrhosis
- Diarrhea, constipation
- Cardiovascular diseases, hyper lipidemia, hypertension, congestive heart failure
- Nephritis (acute and chronic) renal stone, gout, arthritis
- Diabetes mellitus, obesity and under weight (PCM)
- Diet in surgery, fractures, burns injury, allergy and AIDS

**References:**

1. A Text book of food and nutrition by M. Swami Nathan, Ganesh Publishers, Bo1 I & II.

2. Clinical Dietetics and Nutrition by F.P. Antia, Oxford University Press. New Delhi, London & New York
3. Human Nutrition and Diets by S. Deevidoon, R. Pasamore, J.F. Brock and A.S. Truwell, Churchill and Livingstone.
4. Modern Nutrition in Health & Disease, Yong & Shails Normel & Therapeutic Nutrition by F.T. Proudfit & C.H. Robinson.

## **ELECTIVE COURSES**

### **Paper I : HSC/EC018: INTERIOR DECORATION**

**CREDIT: 04; MARKS- 100**

**Unit I** Factors affecting housing needs and demand in India population, income, occupation, family mobility and technological development. Solving India's housing problems, needs obstacles setting goals, standards, role of central and state Government and local housing agencies, rent control policies housing schemes.

**Units II** Introduction to interior decoration, importance of interior planning and decoration, planning principles for specific areas.

**Unit III** Element and principles of design and their application in interiors, principles of Harmony, proportion, balance and rhythm, application of elements and principles of design in interior planning and decoration.

**Units IV** Factors for developing furnishing plans characteristics of the rooms, family needs; Styles, usage and available type of furniture etc. furnishing cost and budget, planning for background areas and their treatment, floors walls ceilings and their structural characteristics, material, finishes and techniques of preparation and decoration.

**Units V** Furniture arrangement, types of furniture and selection criteria, window treatment, types of window and its parts, functional and decorative treatment, Light sources and colour scheme, Developing light plans for different areas, Functional and decorative accessories for interiors.

## **References**

1. Drothy Stepat-Devan And Others- Introduction to interior Design, N.Y. Macmillan 1980.
2. Mike Lawrence: The Complete interior Decorator U.K. Macdanald, 1986.
3. Faulker and Faulker, inside today's home, N.Y. Holt Rinehart and Winston, 1975

## **Paper II: HSC/EC019: CHILDREN WITH SPECIAL NEEDS**

**CREDIT: 04; MARKS- 100**

### **Unit I**

Children with special needs: Definition, characteristics, classification according to types of impairment

Special education for children with special needs

### **Unit II:**

Mental retardation: definition and levels, causes, identification, educational provisions

Gifted and creative children: definition, characteristics, special needs, identification and educational provisions

### **Unit III:**

Visually handicapped children: Classification, identification and educational provisions

Hearing impaired: Classification, identification, causes and educational provisions

### **Unit IV:**

Children with orthopaedic impairments: Definition, classification, causes, educational provisions

and rehabilitation

Children with behaviour disorders: autism and aggressive behaviour

### **References:**

1. Bhargava M. (1994)-Introduction to Exceptional Children, Sterling Publishers, New Delhi.
2. Kar Chintamani (1996)- Exceptional Children: Their Psychology and Education, Sterling

Publishers, New Delhi.

3. Sahu B.K. (1993) – Education of the Exceptional Children, Kalyani Publishers, New Delhi.
4. Vishisht Avashyakta wale bacchon ki shiksha tatha nirdeshan evam paramarsh, VinayRishivar, Agarwal Publications
5. Vishisht Balak, Abha Rani Bisht and Swati Saxena, Agarwal Publications
6. Vishesh Avakshyataon waale Bacche Part I and II, DECE-3, Bacchon ke liye sewayen evam karyakram, IGNOU
7. Vishisht Baalak – Shiksha evam Punarwaas, Mahesh Bhargava, H.P. Bhargava Book House, Agra

#### **Paper IV: HSC/EC020: DISSERTATION/PROJECT**

**CREDIT: 04; MARKS- 100**

Dissertation is an optional elective. Therefore student has the option of either choosing three theory papers as electives or choosing two theory papers and Dissertation. Minimum eligibility for dissertation is 70% aggregate in last examination. University norms laid down in the ordinances of the PG syllabus must be followed for evaluation of dissertation.



## **OPEN ELECTIVE COURSE**

### **Paper IV: HSC/OEC021: ENTREPRENEURSHIP DEVELOPMENT**

**CREDIT: 04; MARKS- 100**

**Unit I** Entrepreneurship – Definition, need, scope and characteristics of entrepreneurship development and employment promotion Identification of Opportunities

**Unit II** Entrepreneur and enterprise, entrepreneurial qualities, assessing entrepreneurial qualities, environment scanning and opportunity identification. Methods source and type of opportunity, assessment criteria and profiling opportunities.

**Unit III** Infrastructure and support system, Industrial support agencies, Procedure and steps involved in setting up an enterprise, sources of information and industry organization.

**Unit IV** Project planning and formulation of project, identification and product selection, generating project ideas, short listing, final selection market survey, market alternatives, an overview of the future, Product development, Product Selection, Preparation of project report

**Unit V** Enterprise management, Basic management concepts, personnel management, product management, material management, financial management and accounting, market management, crises management.

**Unit VI** Interaction with entrepreneurs, Visit to industry, Project planning formulation and report preparation , Case studies

