# STATE MODEL SYLLABUS FOR UNDER GRADUATE COURSE IN HOME SCIENCE

(Bachelor of Arts/ Science Examination)

# UNDER CHOICE BASED CREDIT SYSTEM

# CROSSCUTTING ISSUES RELEVANT TO PROFESSIONAL ETHICS, GENDER, HUMAN VALUES AND ENVIRONMENT & SUSTAINABILITY

Mapping Colour Index:						
	-	<b>Professional Ethics</b>				
	-	Gender				
	-	<b>Human Values</b>				
	-	Environment &				
	Sus	stainability				

# **Course structure of UG Home Science Honours**

Semester	Course	Course Name	Credits	Total marks
I	AECC-I	AECC-I - English Communications/ Environmental Science	04	100
	C-I	Human Development I: The Childhood Years	04	75
	C-I Practical	Human Development I: The Childhood Years Practical	02	25
	C-II		04	75
	C-II Practical	Food and Nutrition Food and Nutrition Practical	02	25
	GE-I	Human Nutrition	06	100
			22	400
II	AECC-II	AECC-II- English Communications/ Environmental Science	04	100
	C-III C-III Practical	Extension Education Extension Education	04	75
			02	25
	C-IV C-IV Practical	Family Description Management	04	75
		Family Resource Management Practical	02	25
	GE-II	Human Development and Family Studies	06	100
			22	400
III	C-V	Textiles	04	75
	C-V Practical	Textiles Practical	02	25
	C-VI	Dynamics of Communication	04	75
	C-VI Practical	Dynamics of Communication Practical	02	25
	C-VII	Personal Finance & Consumer	04	75
	C-VII Practical	Studies	02	25
		Personal Finance & Consumer Studies Practical		

	GE-III		06	100
		Family Resource Management		
	SEC-I	Home Based Catering/Maternal and Child Nutrition	04	100
			28	500
IV	C-VIII	Human Development II: Development in Adolescence and Adulthood Human Development II: Development in Adolescence and Adulthood Practical	04	75
	C-VIII Practical		02	25
	C-IX	Nutrition: A Life Cycle	04	75
	C-IX Practical	Approach Nutrition: A Life Cycle Approach Practical	02	25
	C-X	Fashion Design	04	75
	C-X Practical	Fashion Design Practical	02	25
	GE-IV	Family Resource Management	06	100
	SEC-II	SEC-II	04	100
			28	500
Semester	Course	Course Name	28 Credits	500 Total marks
Semester V	Course C-XI			
		Course Name  Therapeutic Nutrition Therapeutic Nutrition Practical	Credits	Total marks
	C-XI	Therapeutic Nutrition Therapeutic Nutrition Practical	Credits 04	Total marks
	C-XI C-XI Practical	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive	Credits  04  02	Total marks 75 25
	C-XI C-XI Practical C-XII	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical	O4 02 04	75 25 75
	C-XI C-XI Practical C-XII C-XII Practical	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive	04 02 04 02	75 25 75 25
	C-XI C-XI Practical C-XII C-XII Practical DSE-I	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage Practical	04 02 04 02 04 02	75 25 75 25 75
	C-XI C-XI Practical  C-XII C-XII Practical  DSE-I DSE-I Practical	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage	04 02 04 02 04 02 04 02	Total marks  75 25  75 25  75 25  25
	C-XI C-XI Practical  C-XII C-XII Practical  DSE-I DSE-I Practical  DSE-II	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage Practical Communication Systems and	04 02 04 02 04 02 04 02	75 25 75 25 75 25 75 25 25
	C-XI C-XI Practical  C-XII C-XII Practical  DSE-I DSE-I Practical  DSE-II	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage Practical Communication Systems and Mass Media Communication Systems and	04 02 04 02 04 02 04	75 25 75 25 75 25 75 25
	C-XI C-XI Practical  C-XII C-XII Practical  DSE-I DSE-I Practical  DSE-II	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage Practical Communication Systems and Mass Media Communication Systems and Mass Media practical	04 02 04 02 04 02 04 02	75 25 75 25 75 25 75 25 25
V	C-XI C-XI Practical  C-XII C-XII Practical  DSE-I DSE-I Practical  DSE-II DSE-II Practical	Therapeutic Nutrition Therapeutic Nutrition Practical Physiology and Promotive Health Physiology and Promotive Health Practical Indian Textiles Heritage Indian Textiles Heritage Practical Communication Systems and Mass Media Communication Systems and	04 02 04 02 04 02 04 02 24	Total marks  75 25  75 25  75 25  75 25  400

C-XIV	Socio Economic Environment	04	75
C-XIV Practical	Socio Economic Environment Practical	02	25
DSE-III	Marriage and family relationship	04	75
DSE-III Practical	Practical Marriage and family relationship	02	25
DSE-IV	Public Nutrition	04	75
DSE-IV Practical		02	25
OR			
DSE-IV	Dissertation	06	100*
		24	400
	TOTAL	148	2600

# Discipline Specific Elective Papers: (Credit: 06 each)

# (4 papers to be selected by students of Home Science Honours): DSE (1-IV)

- 1. Indian Textiles Heritage
- 2. Communication Systems and Mass Media
- 3. Marriage and family relationship
- 4. \*Dissertation (can be opted as alternative of DSE-IV only and of 6 credits. **Dissertation** content: 60, Seminar cumViva: 20)

OR

Public Nutrition (Students Those who have not secured 60% in Aggregate)

# **HOME SCIENCE**

# **HONOURS PAPERS:**

**Core course** – 14 papers

**Discipline Specific Elective** – 4 papers

Generic Elective for Non Home Science students – 4 papers.

Total – 100 marks

Credit per paper – 6

Teaching hours per paper -50 hours +10 hours tutorial

Marks per paper with practical – Midterm : 15 marks, End term: 60 marks, Practical: 25 marks

# **Generic Elective**

Marks per paper – Mid term : 20 marks, End term : 80 marks

# BA/BSc HOME SCIENCE (HONS) CORE COURSES

# Core Course 1: HUMAN DEVELOPMENT 1: THE CHILDHOOD YEARS (CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES:60

# **Objective**

- To understand importance of Human development & principles involved in it.
- To study the developmental pattern of children starting from prenatal period up to middle childhood years in the areas of physical ,motor, social , emotional &language development.

#### Outcomes:

- Strength the higher order of thinking regarding human Development and its principles.
- Comprehend advanced foundation knowledge regarding all the developments in prenatal and post natal stage.

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

- Definition of growth and development, scope of child development
- Scientific methods of Studies of Child Development
- Principles of Growth and Development
- Stages of human Development

# Unit II: Prenatal Development, Birth and the Neonate

- Conception, Pregnancy
- Stages of Prenatal Development and factors affecting prenatal Development
- Capacities of the new born

# **Unit III: Infancy and Preschool years (0-5 years)**

- Physical and motor development
- Social and Emotional development
- Language development

# **Unit IV: Late Childhood years (6-10 years)**

- Physical and motor development
- Social and emotional development
- Language development

#### **PRACTICAL**

- 1. Prepare poster showing different emotions (pleasant and unpleasant).
- 2. Plan and develop activities to facilitate cognitive development through preparation of materials such as Posters, toys etc.

3. Study the role of familial (parents) and non familial (pears/teachers/neighbors) people in a child's life

#### RECOMMENDED READINGS

#### Text book:

- Hurlock, E.B. (2008). Developmental Psychology. Tata McGraw-Hill. New Delhi
- Singh, A. (Ed). (2015). Foundations of Human Development: A life span approach.
   New Delhi: Orient Black Swan.

#### Reference book:

- Bee. H.(1995). The developing child. Harper Collins.
- Berk, L.E. (2007). Development through the lifespan Delhi: Pearson Education.
- Rice. F.P. (1998). Human development: A lifespan approach. New Jersey: prentice Hall.
- Santrok, J.W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw- Hill.

# Core course 2: FOOD AND NUTRITION

(CREDITS: THEORY-4 PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To understand basic concepts of food, nutrition and their related terms
- To study the functions, requirement deficiency of macro micronutrients in the human body.
- To examine the difference between weights & measures of raw & cooked foods.
- To gain knowledge on nutritional contribution of various foods and principles involved in it's cooking.

# Outcomes:

• Acquire a reach basket of knowledge regarding food, nutrition and related terms gain regarding nutritional contribution of various of foods and the principles of cooking them

# Unit I: Basic concepts in food and nutrition

Basic terms used in study of food and nutrition.

- Understanding relationship between food, nutrition and health.
- Classification of food
- Functions of food- physiological, psychological and social.

#### **Unit II: Nutrients**

- Classification, Functions, dietary sources, daily requirement and clinical manifestations in deficiency/ excess of the following nutrients:
- Carbohydrates, Proteins and Lipids
- Fat soluble vitamins- A, D, E and K
- Water soluble vitamins- Thiamin, Riboflavin, Niacin, Folate, Vitamin B12 and Vitamin C,
- Minerals- Calcium, Iron, Zinc and Iodine.

# **Unit III: Food groups**

Nutritional contribution and changes during cooking of the following food groups:

- Cereal
- Pulses
- Fruits and vegetables
- Milk & milk products
- Meat, poultry and fish

# Unit IV: Methods of cooking and enhancing the nutritional quality of foods-

- Methods of cooking- Dry, moist, frying and microwave cooking---their advantages and disadvantages.
- Enhancing the nutritional quality of foods ---Supplementation, germination, fermentation, fortification and GM foods.

#### **PRACTICAL**

- 1. Weights and measures- Raw and Cooked food (Rice, dal, chapatti, egg, seasonal vegetables)
- 2. Understanding the principles of cooking involved and nutritional quality of following foods
  - Cereals: Boiled rice, pulao, chapatti, paratha, puri, pastas
- Pulses: whole, dehusked
- Vegetables: curries, dry preparations
- Milk and milk products: Kheer, custard
- **3.** Understanding the principles of cooking involved and nutritional quality of the following foods.
- Baked products: Biscuits, cookies, cakes, tarts and pies
- Snacks: pakoras, cutlets, samosas, upma, poha, and sandwiches

- Salads: salads and salad dressings.
- Fermented products: Idli, dosa, appam, kulcha, dhokla etc.

#### RECOMMENDED READINGS

#### **Text Book:**

- Sri lakshmi (2007) .Food science .4th edition. New age international Ltd.
- Swaminathan, M. -Essentials of Food and Nutrition. Ganesh and Company

#### Reference book:

- Bamji MS, KrishnaswamyK.Brahman GNV (2009). Textbook of Human Nutrition 3<sup>rd</sup>edition. Oxford and IBH publish Co Pvt Ltd.
- Wardlaw and insel MG Insel PM (2004). Perspectives in Nutrition's sixth edition Mosby.
- Chadha R and Mathur P (eds) Nutrition: a lifecycle approach. Orient Blackswan, New Delhi. 2015
- Khanna K, Gupta S, Seth R, Mahhna R, Rekhi T (2004). The art and science of cooking; a practical manual revised edition elite publishing house pvt Ltd.
- Raina U. Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic food preparation -A complete manual, fourth edition. Orient black swan Ltd.

#### **Core course:3- EXTENSION EDUCATION**

THEORY LECTURES 60

# **Objectives:**

- To enable the student to understand the meaning, principles, philosophy of Home Science Extension Education.
- To enable the student to know about different methods used in Extension Education.

• To enrich the Knowledge of the students about teaching learning process in Extension education.

#### Outcomes:

• Fundamental knowledge about teaching learning process in extension Education

#### **UNIT-I**

#### **Extension Education-**

- Definition needs and objectives.
- Principles of extension education.
- Behavioral changes brought about by extension education.

#### **UNIT II**

# **Role of Extension Education in Development –**

- Role of Home Science &its inter relationship with Community Development.
- Role & qualities of Home Science extension workers.

#### **UNIT III**

# Methods of teaching in Extension Education-

- Individual, group & mass methods. Individual Methods: Farm and Home Visits, Office Calls, Telephone Calls, Personal letters.
- Group Methods: Method Demonstration, Result Demonstration. Group Discussion, Field Trips, Lecture, Seminars and Workshop
- Mass Methods: Leaflets, Circular Letter, Radio, T.V. Bulletins, News Articles, Their advantages & disadvantages.

#### **UNIT IV**

# **Teaching-Learning process-**

- Meaning, principles & steps in teaching learning process.
- Criteria for effective extension teaching. Elements of teaching and learning situation.
- Criteria for effective learning. Principles of learning. Factors affecting learning.

# Core paper III: Practical

**Practical: 25 Marks** 

- Prepare posters: women empowerment, violence against women, child & maternal health issues, environmental pollution.
- Prepare a project report within one thousand words on any one of the above issues.

#### Text Book:

- 1.Education and communication for development O.P. Dahama and
- O.P. Bhatnagar.
- 2. Extension Education and Communication—V.K. Dubey and Indira Bishnoi

#### Reference Books:

- Extension communication and management G.L. Ray.
- Extension Techniques for Rural Management C. Satapathy & Sabita Mishra.
- Extension Education A. Reddy

#### Core course 4 FAMILY RESOURCE MANAGEMENT

(CREDITS: THEORY -4 PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To achieve goals in life through judicious resource management
  - To utilize the available resources effectively.

#### Outcomes:

• Develop the aptitude and attitudes towards judicious family resources management and to utilize the family resource management efficiently.

•

# Unit I: Introduction to Family Resource Management and its application

- Concept and scope of family resource management
- Processes in resource Management
- Decision Making

#### **Unit II: Resources**

- Meaning, classification and characteristics of family resources, factors affecting utilization of resources.
- Motivating factors in home management: values, standards and goals and their interrelationship.

# Unit III: Availability and management of specific resources by an individual/ family

- Money-Types of income, Supplementing family income
- Time-Concept, Factors and steps in time management

# Unit IV: Availability and management of specific resources by an individual/ family

- Energy- Efforts, Fatigue, Work simplification
- Steps in successful event planning—Planning, Budgeting and Evaluating.

#### **PRACTICAL**

- 1. SWOC analysis
- 2. Building decision making abilities through management games (Any two)

3. Preparation of time plans for one day for self and family. Event planning for family occasion.(Any one).

#### RECOMMENDED READINGS

#### Text Book

- Rao V.S and Narayana P.S., Principles and practices of management, 2007, konark publishers Pvt Ltd.
- Nickell, P and Dorsey, J.M., Management in family living,2015,CBS Publishers and Distributors

#### **Reference Book**

- Management for Modern Families I.H.Gross and E.W. Crandall.
- Home Management Vergese, Ogale, Srinivasan
- Home Management for Indian Families. M.K.Mann
- Home Management Education Planning Group, Arya publishing house, Delhi.
- Text book of Home Science- Premlata Mallick.
- An Introduction to family Resource management-Premavathy Seetharaman, Sonia Batra & Preeti mehera
- Koontz H and O'Donnel C, 2005Management- A System and Contingency analysis of Managerial Functions. New York: Mc Graw – Hill Book Company
- Kretiner, 2009, Management Theory and Applications, Cengage Larning: India

#### Core course 5: TEXTILES

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To know the manufacturing process of different types of textile fibers, their structures and uses
- To know the manufacturing process of different types of fabrics.
- To impart knowledge on different textile finishes

#### Outcomes:

• Develop theoretical knowledge about textile fibre there structure and there use

#### **Unit I: Introduction to Textile Fibres**

- Meaning and classification of fibres
- Production, properties and usage of fibres

Natural fibre: cotton, flax, silk and wool

Man-made fibers: Rayon(Viscose)

# Unit II: Yarn construction and their properties

- Yarn formation
- Mechanical spinning (cotton system, wool system, worsted system) chemical spinning (wet, dry, melt)
- Types of yarns: Staple and filament, simple yarn, complex yarns

# Unit III: Techniques of fabric construction, finishing, dyeing and printing

- Parts of a loom
- Operations of a loom
- Classification of weaves (Plain, Basket, Ribbed, Twill, Satin, Sateen)- Structure,
   Properties, usages

#### **Unit IV: Finishing**

- Finishing-Mechanical finishes-Beetling, Calendaring, Embossing, Glazing, Napping.
- Chemical Finishes- Mercerization, Ammoniating.
- Dyeing Types of dyes

# **PRACTICAL**

Fiber identification tests- visuals, burning, microscopic
 Yarn identification- single, ply, cord, textured, elastic, monofilament, multifilament

and spun yarn.

- 2. Thread count and balance, Dimensional stability,
- 3. Weaves- Identification and their design interpretation on graph (any three)

#### **RECOMMENDED READINGS:**

#### **Text Book:**

Corbman P.B. (1985) Textiles- Fiber to fabric (6th Edition), Gregg Division /Mc Graw

Hill Book Co, US.

# **Reference Book:**

- Joseph, M.L. (1988) Essentials of Textiles (6th Edition), Holt, Rinehart and Winston Inc, Florida.
- Vilensky G. (1983) Textile science, CBS Publishers and Distributors, Delhi.
- Tortora, G. Phyllis, Understanding Textiles, Mc Millanm Co. USA.
- Sekhri S. (2013) Textbook of Fabric Science: Fundamentals to finishing, PHI Learning, Delhi.

# **Core course 6: DYNAMICS OF COMMUNICATION**

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To understand the different spheres of communication
- To understand the concept, process, models and process of communication

#### **Outcomes:**

• Develop wide knowledge about the concept process and mode of communication

# **Unit I: Communication:**

- Historical background, concept and nature
- Functions of communication
- Types of communication- formal and informal communication; verbal and non-verbal communication
- Scope of communication- education, corporate communication, management of organizations advertising and public relations.

#### Unit II: Principles, elements and models Communication

- Signs, symbols and codes in communication
- Postulates / principles of communication
- Elements of communication and their characteristics
- Models of communication- -Aristotle, Losswell, Shannon & Weaver, Osgood and Schramm,
- Riley models
- Barriers to communication

#### **Unit III: Effective communication**

Concept, nature and relevance to communication process: Empathy, Persuasion,
 Perception, Listening

#### Unit IV: Diffusion, adoption & innovation-

Concept & elements of diffusion

Adoption – Characteristics, stages& factors associated with adoption. Sources of information, characteristics of adopters.

# **PRACTICAL**

- 1. Developing skills of communication by forming small groups among the students.
- 2. Review of selected issues published in newspapers.
- 3. Writing short stories, related to health and nutrition for conveying messages to the society.

# RECOMMENDED READINGS

# **Text book:**

- Devito. J. (1998) Human communication New York: Harper & Row.
- Extension communication and management G.L.Ray.

# **Reference Book:**

- Barker, L. (1990) "Communication" New Jersey prentice Hall Inc 171.
- Patri and Patri (2002); Essentials of communication Greenspan publication

#### Core course 7: PERSONAL FINANCE AND CONSUMER STUDIES

(CREDITS: THEORY-4 PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To gain knowledge about the need of consumer education
- To create awareness among consumers through education

#### Outcomes:

• Understand the need of consumer education and how to create awareness among consumer trough education.

# **Unit I: Income and expenditure**

- Budgets, maintaining household accounts
- Factors influencing expenditure
- Family savings and investments-objectives and types of savings.

# Unit II: Consumer in India: Consumer problems and education

- Definition of a consumer
- Role of consumers National income, per capita income.
- Changing nature of the business world, e- commerce, e-business.
- Consumer problems- products and service related problems and solution.

#### **Unit III: Consumer Protection**

- Consumer education and empowerment.
- Consumer protection

# Unit IV: Legislative Measures for Consumer Protection, Standardization and quality control measures:

- Consumer organizations Role and function
  - Basic legislative framework for consumer protection in India- consumer protection Act
     1986, alternative redressed mechanisms, mediation centers.
  - ISI, FPO, AGMARK, ISO FSSAI, Eco mark, , handloom mark,

# **PRACTICAL**

- 1. Evaluation of advertisements in the print media
- 2. Evaluation of labels on different types of food products (at least three).
- 3. Learning to fill up different forms of banks and post office. (at least three).

#### RECOMMENDED READING

#### Text Book:

 Khanna S.R. Hanspal S. Kapoor S. & Awashti H.K. 2007, Consumer affairs, Universities press India Pvt Ltd.

#### Reference Book:

- Sawhney H.K & Mital, M, 2007, Family finance & consumer studies, Elite publishing House Pvt Ltd.
- Seetharaman P. and Sethi, M. 2001, Consumerism, Strength and Tactics, New Delhi CBS Publisher

#### **Core Course 8: HUMAN DEVELOPMENT II**

# DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD

(CREDITS: THEORY-4 PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To know the different developmental tasks during adolescence.
- To know the socio-emotional and cognitive developments of adulthood.

# **Outcome:**

 Acquire knowledge about adolescence and socio emotional and cognitive development of adolescent and adulthood

# **Unit I: Puberty**

Characteristic and age at puberty

Puberty growth spurt

Body changes at puberty

Effect of puberty

# **Unit II: Adolescence**

• Characteristics of adolescent years

- Developmental tasks during Adolescence
- · Physical changes
- Emotional changes

# **Unit III: Early Adulthood**

- Developmental tasks of early adulthood
- Characteristics of early adulthood
- Changes in interest
- Social mobility

# Unit IV: Early Adulthood and family adjustment

- Marital adjustment
- Adjustment to parenthood
  - Adjustment to singlehood

# **PRACTICAL**

- 1. To study creativity during adolescence
- 2. Use of the questionnaire method to study the responsibility of an adult in roles as:

Father/ husband

Mother/wife

- 3. Use of the questionnaire method to study the responsibility of an adult in roles as:
- Single parent
- Employed woman

#### RECOMMENDED READINGS

#### Text book:

 Singh A. (Ed.) 2015: Foundation of Human Development, A life span approach, New Delhi, Orient Black Swan.

#### **Reference Book:**

• Berk. L.E. (2007) Development through the lifespan, Delhi: Person Education.

- Rice F.P(1998) Human Development: A lifespan approach, New Jersey: Prentice Hall
- Rutter, M. and Rutter, M (1992) A topical approach to life-span, development, New Delhi Tata Mc Graw-Hill.
- Sntrock J.W. (2007) A tropical approach to life- spam development, New Delhi: Tata McGraw- Hill
- Tennant, M and Pogson, p. (1995) Learning and Change in the Adult year San Francisco, Jossey- Bass

# Core Course 9: NUTRITION: A LIFE CYCLE APPROACH

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES: 60

**Objectives:** 

- To know the importance of nutrition in different stages of life cycle.
- To study the nutritional need in special conditions.

#### Outcomes:

• Develop wide knowledge about importance of nutrition in different stages of lifecycle and special condition

# **Unit I: Principle of meal planning**

- Food groups and food exchange list
- Factors affecting meal planning.
- Dietary guidelines for Indians-2017

#### **Unit II**

# **Nutrition during childhood**

RDA, nutritional guidelines, and healthy food choices-

- Infants
- Preschool children
- · School children
- Adolescents

# **Unit III: Nutrition during adulthood**

RDA, nutritional guidelines, healthy food choices.

Adult

- Pregnant woman
- Lactating mother
- Elderly

# **Unit IV: Nutrition for special conditions**

- Nutrition for physical fitness and sports
- Feeding problems in fussy eaters. (children)
- Food Consideration during natural disasters e.g. floods,

# **PRACTICAL**

- 1. Prepare a table on rich sources of different nutrients
- 2. Prepare a of food exchange list
- 3. Planning and preparation of diets for –
- Preschooler
- Pregnant and Lactating woman
- Elderly

#### RECOMMENDED READINGS

#### **Text Book:**

- Human Nutrition-B. Srilaxmi, New age publication.
- Principles of Nutrition and Dietetics-Swaminathan M.

#### **Reference Book:**

- Gopalan C, Rama Sastri BV, Balasubramanian SC (1989)
- Nutritive Value of Indian Foods. National Institute of Nutrition, ICMR, Hyderabad.
- Seth V and Singh K (2006). Diet Planning through the Life Cycle: Part 1
- Bamji MS, Krishnaswamy , K. Brahman GNV(2009), Textbook of Human Nutition
   3<sup>rd</sup>Edition, Oxford and IBH Publishing Co. Pvt. Ltd
- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- Wardlaw GM, Hampi JS, DiSilvestro RA (2004). Perspectives in Nutrition, 6th edition.
  - McGraw Hill.
- Chadha R and Mathur P eds. Nutrition: A Lifecycle Approach. Orient Blackswan, New Delhi. 2015.

# (CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES:60

# **Objectives:**

 To support and collaborate with fashion, textiles and design industry to achieve a sustainable progress.

 To give advance knowledge and pushing the boundaries in fashion, textile and designing

#### **Outcomes:**

• 10 Contribute knowledge in the process of fashion in textile industry to achieve a suitable progress.

#### **Unit I: Fashion**

Definition and background of fashion in India, fashion cycle Factors favoring and retarding fashion

- Role of a designer
- Leading Fashion designing centers in India NIFT, NID, SID, NIIFT

# **Unit II: Importance of clothing**

- Origin of clothing.
- Functions of Clothing
- Factors influencing selection of clothing
- Clothing related to various activities

# **Unit III: Selection of Clothing**

- Selection of clothes according to body built
- Use of colours in clothing.
- Selection and evaluation of ready-made garments

#### **Unit IV: Aesthetics in Dress.**

- Elements and principles of design
- Structural and applied design
- Sleeves, necklines, collars, pockets

#### **PRACTICAL**

- 1. Flat sketching of Sleeves, necklines,
- 2. Flat sketching of collars, pockets

3. Collections of dress designs of famous designers.

# RECOMMENDED READINGS

**Text Book:** Tata S.L., Edwards M.S., 1982, The Complete Book of Fashion Design, Harper and Row Publications, NewYork.

• The complete Book & Fashion Design, Harper and Row Publication, New York by Tate, S.L., Edwards, M.S 1982

# **Reference Book:**

- Brown, Patty, Rice J., 1998, Ready to Wear Apparel Analysis. Prentice Hall.
- Marshall S G, Jackson H O, Stanley MS, Kefgen M & Specht T, 2009, Individuality in Clothing & Personal
- Appearance, 6th Edition, Pearson Education, USA.

#### **Core Course 11: THERAPEUTIC NUTRITION**

# (CREDITS: THEORY-4, PRATICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To study about principles of therapeutic nutrition
- To know the nutritional need during different disease conditions.

#### **Outcomes:**

• Ability to identify different principles of therapeutic nutrition and nutrition needs during different disease condition

# Unit 1: Principles of nutrition care-

- Nutrition Care Process
- Therapeutic adaptations of normal diet
- Progressive diets- Clear fluid, full fluid, soft and regular

# Unit II: Etiology, clinical features and nutritional management:

- Weight Imbalances- Over weight and obesity, Under weight
- Eating disorder- anorexia nervosa and bulimia
- Type 1 and Type 2 -Diabetes Mellitus
- Hypertension and Coronary Heart Disease

# Unit III: Etiology, Clinical features and nutritional management of the following

- Diarrhea
- Lactose intolerance
- Liver: Infective Hepatitis

# Unit IV: Etiology clinical features and nutritional management of the following

- Typhoid
- Tuberculosis
- HIV

#### **PRATICAL**

Planning of Diets for the following\_

- 1. Therapeutic Diet- Normal, soft, clear and full fluid
- 2. Obesity, Type 2 Diabetes
- 3. Hypertension and CHD

#### RECOMMEDED READING

#### **Text Book:**

- Antia,F.P Clinical Dietetics and Nutrition
- Srilakshmi.B (2014) Dietetics. New Age International Publishers

#### **Reference Book:**

- Khanna, K. Gupta S, Seth R, Passi, S.J. Mahan, R. PuriS(2013), Text book of Nutrition and Dietetics Phoenix Publishing House Pvt Ltd.
- Mahan L K and Escott Stump S (2013) Krause's food & Nutrition Theraphy, 13<sup>th</sup>ed
   Saunders Elsevier
- Stacy Nix (2009) Willam's Basic Nutrition and Diet Therapy 13th Edition, Elsevier
   Mosby
- Seth V and Sing K (2007) Diet Planning through the life Cycle Part 11 Diet Therapy APractical Manual 4, edition, Elite Publishing House Pvt. Ltd.
- ICMR (2010) Nutritive value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research Hyderabad

Core Course 12: PHYSIOLOGY AND PROMOTIVE HEALTH

(CREDITS: THEORYT-4, PRACTICAL-2)

THEORY LECTURES; 60

#### **Objectives:**

- To understand the structure and functions of various organs of the body
- To focus on different mechanism of human body

#### Outcomes:

• Understand and know the function of various organs bodies end endocrine physiology.

# **Unit 1: Respiratory and Circulatory Physiology**

- Structure of Lungs and its function
- Structure of Heart and its function
- Different type of blood circulation and cardiac cycle

# **Unit II: Endocrine Physiology**

 Actions and disorders of pituitary, thyroid, parathyroid, adrenal and pancreatic hormones.

# Unit III: Renal and Reproductive physiology

- Structure of Kidney and its function
- Male reproductive organs and its function, Female reproductive organs and their functions,
- Physiology of Menstruation and Menopause

# **Unit IV: Promotive Health**

- Concept of Health, Disease and its prevention
- General risk factors and prevention of Anemia, Jaundice and Cancer
- Drug abuse and Alcoholism
- Family planning and contraception

### **PRATICAL**

- Case study of Iron deficiency Anemia, Investigation and diagnosis, Blood indices
   Measurement of blood pressure by using sphygmomanometer.
- Demonstration of procedures of clinical examination to see for pallor, jaundice, edema and dehydration and
- 3. Basic First Aid procedures CPR, Burns.

#### RECOMMENDED READINGS

#### Text Book:

- J.E. Park and K. Park (2009). Park's textbook of preventive and Social Medicine, 20th edition. M/s Banarsi Das, Jabalpur.
- Ross and Wilson (1973). Foundation of Anatomy and physiology, medical division of Longman Group Ltd

# **Reference Book:**

- Ganong WF (2003). Review of Medical Physiology, 21<sup>st</sup>ed Mc Graw Hill.
- Yash Pal Bedi (1980). A Handbook of social and preventive medicine, Atma Ram and Sons.

#### Core Couse 13: RESEARCH METHODOLOGY

(CREDITS: THEORY-4 PRATICAL-2)

THEORY LECTURES: 60

# **Objectives:**

- To understand the meaning and process of research in social sciences.
- To know about the technique of collection, analysis and interpretation of data.
- To understand the meaning & process of research in social sciences.
- To have fundamental knowledge about analysis of data & the diagrammatic representation of data.
- To learn the techniques of interpretation of data & report writing

# **Outcomes:**

• Comprehend advanced knowledge about the process of research in social science. The technique of collection analysis and interpretation of data

#### **Unit1: Research- Meaning, purpose and types**

- Theoretical, empirical
- Descriptive, analytical
- Applied, fundamental
- Qualitative, quantitative

# **Unit II: Research Design**

- Exploratory
- Explanatory
- and Experimental

# Unit III: Sampling, Tools and techniques

- Types of sampling
- Collection of data- primary and secondary data
- Tools and techniques of data collection observation, interview schedule, questionnaire, case study, FGDs
- Measures of central tendency- Mean, Median and Mode

# **Unit IV: The Research Process**

- Identifying the problems
- Review of literature
- Formulation of objectives and hypothesis
- Preparing the research design
- Data collection
- Data analysis
- Interpretation and report writing
- Bibliography/reference

# **PRATICAL**

- 1. Prepare a schedule/questionnaire on a topic
- 2. Make a pilot study by applying the above schedule.
- 3. Solve a given problem by using mean

#### RECOMMENDED READINGS

#### **Text Book:**

• Kothari C.R. (2008) Research Methodology: Methods and Techniques 2<sup>nd</sup> Ed. New Age International Pvt Ltd. New Delhi.

#### **Reference Book:**

 Kumar R. (2006) Research Methodology: A step by step Guide for Beginners, Sage Publication, New Delhi.

- Kelinger F.N. and Lee, H.B (2000) Foundations of Behavioral Research 4<sup>th</sup> Ed.
   Harcourt College Publishers.
- Black J.A & Champion D.J. (1976); Methods and issues in Social Research New York: John Wilely and Sons.

#### **Core Course 14: SOCIO ECONOMIC ENVIRONMENT**

(CREDITS: THEORY:-4, PRACTICAL -2)

THEORY LECTURES: 60

# **Objectives:**

- To know the relationship between society, economy and environment.
- Create awareness among people regarding constraints in economic environment and its consequences.

#### **Outcomes:**

- Acquire a basket of knowledge about society economy end Environment.
- DSE-1

# **Unit -1: Sociological Concerns and Orientation**

#### **Sociological Orientation**

- Society, Culture and institutions
- Family, Kinship and Relationships
- Social mobility and social change
- Cultural diversity in contemporary society.

# **Unit-II: Economics Theory and Environment**

- Definition, Scope of Economics
- Wants- Classification and Characteristics
- Utility- Law of Diminishing Marginal Utility, Law of Equi- Marginal Utility
   Demand- Law of Demand, Elasticity of Demand.
- Engel's Law of Consumption

# Unit III. Money, Banking and Public Revenue

- Types and function of money, inflation
- Types and functions of banks
- Public Revenue.

#### **Unit IV. Indian Economic Environment**

- Constraints on growth: Issue of population, income distribution, poverty, unemployment and migration, food security.
- Recent development programmes of the Government of India: Jana Dhana Yojana,
   Sarva Sikha Yojana, Objective and Achievement
- Issues related to gender discrimination: IMR, MMR, Sex Ratio, Literacy

#### **PRACTICAL**

Do a project on any of the following topic

- Changing families & Relations in Society
- Changing status and roles at home and work place
- Gender discrimination.
- current economic issues (Development and Environmental)

#### RECOMMENDED READINGS

#### **Text Book:**

- Ahuja H.L., 2010, Modern Micro Economics. Sultan Chand & sons
- Dhingra IC and Garg VK, 2010, Introductory Economic Theory. Sultan Chand & Sons
- Mishra & Puri, Recent edition 2014, Indian Economy, Himalaya Publishing House.

# **Reference Book:**

- Abhraham, M. F. (2006). Contemporary Sociology: An introduction to concepts and theories: New York: Oxford University Press.
- Beattie, J. (1964). Other cultures. Cohen and West.
- Das, V. (Ed.) (2003) The Oxford companion to sociology and social anthropology:
   volume 1 and 2.New Delhi: Oxford University Press.
- Johnson, M.H. (2001). Sociology: A systematic introduction. New Delhi: Allied Publishers Limited.
- Rawat, H.K. (2007). Sociology: Basic concepts. New Delhi: Rawat Publications.
- Srinivas, M.N. (Ed.) (1996). Caste: Its twentieth century avatar. New Delhi: Viking Penguin
- Mithani D.M., 2010 New Edition, Macro-Economics. Himalaya Publishing House
- Sundaram K.P.M., 2010, Introduction to Economics. RatanPrakashan

# DSE 1: INDIAN TEXTILES HERITAGE (CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES: 60

# **Objectives**

- To study about different traditional textile and crafts of India
- To know the care and storage techniques of different traditional textile.

#### **Outcomes:**

□ To study the socio- economic significance of traditional textile and its popularity in modern India. 1 Textile and crafts of India. Stop for a socio economic significance of textile and the popularity in modern India

# Unit I: history, production centers, techniques, designs, colors and products Study of Textile Crafts of India: with reference to

Woven Textiles -Benaras Brocades, Jamdanis and Baluchars of Bengal, Kani Shawls of Kashmir.

# Unit II: Study of Textile Crafts of India: with reference to history, production centers, techniques, designs, colours and products

Embroidered Textiles-Kanthas of Bengal, Kasuti of Karnataka, Phulkari of Punjab, Chikankari of Uttar Pradesh, Kashida of Kashmir, Gujarat embroideries.

Unit III: Study of Textile Crafts of India: with reference to history, production centers, techniques, designs, colours and products

- Painted and Printed textiles –Kalamkaris of Andhra Pradesh, Dabu printing of Rajasthan ,Ajarakh prints of Gujarat
- Dyed textiles –Bandhnis of Rajasthan and Gujarat, Ikats- Patola of Gujarat.
- Bandhas of Orissa

# **Unit IV. Conservation of Traditional Textile**

- Evolution and Socio- economic significance of Khadi, Handloom and Handicraft sector
- Sustenance of Traditional textile crafts

#### **PRACTICAL**

- 1. Traditional Embroideries
- 2. Tie and dye

Batik

**Block Printing** 

Stenciling

**3.** Visit to craft Centers.

#### Recommended Readings.

#### **Text Book:**

• Chattopadhaya K.D. 1995, Handicrafts of India, Wiley Eastern Limited Delhi

# **Reference Book:**

• Agrawal O.P. 1977 Care and Presentation of Museum Projects –II NRL

Das Shukla, Fabric Art- Heritage of India, Abhinav Publications N.Delhi

#### DSE II: COMMUNICATION SYSTEMS AND MASS MEDIA

(CREDITS: THEORY-4 PRACTICAL-2)

THEORY LECTURES:60

#### **Objectives:**

- To achieve the target of the organization by motivating and influencing the audience.
- To inform the public locally or globally.

# **Outcomes:**

□ Develop the aptitude and attitude towards organization by motivating and influencing the audience locally and globally.

#### **Unit I: Self and communication**

- Awareness of self in communication
- Intrapersonal communication
- Self-concept and self esteem

#### **Unit II: Interpersonal communication**

- Concept, types and functions of interpersonal communication
- Dyadic, small and large group communication
- Stages in human relationship development
- Small group communication: types and functions

# **Unit III: Organization and public communication**

- Organizational communication: concept types, functions and networks
- Public communication- concept and techniques

#### Unit IV: Mass Communication and Mass media

- Mass communication concept, significance, functions and elements
- Print media: types, nature, characteristics, reach, access.
- Radio: types, nature, characteristics, reach, access.
- Television and cinema: types, nature, characteristics, reach, access.
- ICTs: types, characteristics, reach and access.

#### **PRACTICAL**

- 1. Know yourself exercises.(Johari's window)
- 2. Studying group dynamics in organizations- formal and informal
- 3. Audience analysis- Leadership, listenership and viewership studies, Content analysis of mass media

# RECOMMENDED READINGS

#### **Text Book:**

Roy, G.L. Extension, Communication and Management.

Devito, J. (1998) Human communication. New York: Harper & Row.

Baran Stanley J (2009). Introduction to mass communication, Mc Graw hill medical publishing.

#### **Reference Book:**

- Barker, Larry Lee (1990) communication. Eaglewood cliffs, New Jersey: Prentice Hall.
- Mc Quail, D. (2000) Mass communication theories London: sage Publications
- Vivian, J (2012). The Media of mass communication, Pearson.
- Dominick, Joseph R. (2012). Dynamics of mass communication: media in transition,

# Mc Graw hill education

• Baran, Stanley J (2014). Mass communication theory, Wadsworth publishing

# DSE 3: MARRIAGE & FAMILY RELATIONSHIP (CREDITS: THEORY 4 AND PRACTICAL:2)

THEORY LECTURE:60

# **Objectives:**

- To understand the concept of marriage & its importance in family life.
- To acquire knowledge about the different pattern of marriage rituals & ceremonies existing in Indian society.
- To understand the problems of Family & Marital life prevalent in the society.

#### Outcomes:

• Comprehend advance knowledge about importance of knowledge in public health nutrition and different methods for assessment of nutritional status

# **UNIT I: Marriage as an Institution**

- Meaning, definitions, functions& importance of marriage.
- Types of marriages- Monogamy, polygamy, Exogamy, Endogamy, polyandry, Polygyny.
- Marriage in contemporary society.

# **UNIT II: Marriage Rituals & Ceremonies in different Indian Communities**

- Significance of marriage.
- Process of marriage among Hindu, Muslim & Christian Community.
- Adjustments in marriage- Sex, financial, in laws and among working couples.

# UNIT III: Family, kinship and relationship

- Meaning, definition, importance, characteristics & functions of family.
- Contemporary Family types prevalent in India.
- Family life Cycle: meaning, importance, & stages of family life cycle.
- Family- in- transition- Merits & demerits.

# **UNIT IV: Problems of Family**

- Prolonged sickness/illness, accidents widowhood, unemployment, economic distress /poverty, broken family, family with a disables and suicide in the family.
- Marital problems-Marital disharmony& conflict, separation & divorce, single parenthood, loss of spouse.

# **Practical**

1. Do a Project work on a topic related to marriage and family.

#### RECOMMEDNED READINGS

#### Text Book:

• Marriage and Family in India – Kapadia

#### **Reference Books:**

- The Family Goode, W.J.
- India Social Problems Madan G.R.
- Sociology Vidya Bhusan
- Indian Society and Social Institutions Nukhi H. R. Surjeet.
- An Introduction to Sociology Vidya Bhusan and Sachadeva.
- Indian Social Problems. Vol. I and II G.R. Madan.

#### **DSE-4: PUBLIC NUTRITION**

THEORY LECTURES: 60

# **Objectives:**

- To understand the importance of public health nutrition and its role
- To gain knowledge on different ongoing nutrition programmes.
- To study the different methods for assessment of nutritional status.

# Unit 1 Concept and scope of public nutrition

- Definition, Concept and Scope of public health nutrition
- Objectives, principles and scope of nutrition and health education and its promotion
- Role of Public nutritionist

## **Unit II: Nutritional problems and their implications**

Etiology, prevalence, clinical features and preventive strategies of Under nutrition -

- Protein energy malnutrition, nutritional anemia, vitamin A deficiency, iodine deficiency disorders.
- Over nutrition- obesity, coronary heart disease, diabetes.
- Fluorosis

#### Unit III: Assessment of nutritional Status

- Objectives and importance
- Methods of Assessment
- A. Direct- Clinical signs, nutritional anthropometry, biophysical tests.
- B. Indirect- Diet Surveys, Statistics.

# **Unit IV -International and National Nutrition Policy and Programmes:**

- International Agencies and their functions World Health Organization (WHO), Food and Agriculture Organization (FAO), United Nations International Children's Emergency Fund (UNICEF), Cooperatives for Assistance & Relief Everywhere (CARE).
- National Agencies and their functions, Indian Council of Agriculture (ICAR), Indian Council of Medical Research (ICMR), National Institute of Nutrition (NIN). National Institute of Public cooperation & child development(NIPCCD)

## **PRACTICAL**

- 1. Assessment of nutritional status:
- Anthropometry- weight and height measurements
- Interpretation of data on the basis of BMI of ten numbers of adolescents

## RECOMMENDED READINGS

#### **Text Book:**

- B Srilakshmi, Nutition Science, New Age Publication
- Park K (2011) Park's Text book or Preventive and Social Medicine, 21<sup>st</sup> Edition, M/S
   Banarasidas Bhanot Publisher, Jabalpur, India

#### **Reference Book:**

Wadhwa A and Sharma S (2003) Nutrition in community – A Text book, Elite
 Publishing House Pvt. Ltd New Delhi

- Park K (2011) Park's Text book or Preventive and Social Medicine, 21<sup>st</sup> Edition, M/S
   Banarasidas Bhanot Publisher, Jabalpur, India
- Bamji MS Krishnaswamy K and Brahman GNC (Eds) (2009), Text Book of Human Nutrition 3<sup>rd</sup> Edition, Oxford and IBH Publishing Co Pvt Ltd New Delhi,
- ICMR (2011) Dietary Guideline for Indian- A Manual National Institute of Nutrition, Indian Council of Medical Research Hyderabad.
- Bamji MS Krishnaswamy K and Brahman GNC (Eds) (2009), Text Book of Human
   Nutrition 3<sup>rd</sup> Edition, Oxford and IBH Publishing Co Pvt Ltd New Delhi,
  - Jeliffe DB, Jeliffe ERP, Zarfar A and NeumananCG(1989) Community Nutritional Assessment with special reference to less technically developed countries, Oxford University Press Oxford.
  - World Health Organization (2006) WHO Child growth Standards. Methods and development, length/height for age, weight of age, weight-for length, weight for height and body mass index for age (http://who.int/child growth/standards/en

## SKILL ENHANCEMENT COURSES (SEC)

# SEC-A: HOME BASED CATERING (CREDITS: THEORY 6)

THEORY LECTURES: 60

## **Objectives:**

- To know different type food service unit.
- To study the different-step towards planning and execution of food service unit.

# **Unit I: Introduction of food service**

Types of food service establishments

• State and local regulations related to catering.

# **Unit II: Food production**

- Menu planning in food production units Importance of menu
- Factors affecting menu planning in different kinds of food service units
- Quantity food production: Standardization of recipes, quantity food preparation techniques, recipe adjustments and portion control

#### Unit III: Resource management in food service unit

- Money
- Manpower
- Time

- Facilities and equipment
- Utilities

# Unit IV: Planning of food service unit

 Preliminary planning - Survey of types of units, identifying clientele, menu, operations and delivery

# Unit V: Purchase and storage in food service unit

Food purchase and storage

# Unit VI: Maintenance of hygiene and sanitation in food service unit

- Hygiene and sanitation
- Packaging

# **Recommended readings:**

#### Text Book:

Taneja S and Gupta SL (2001) Enterpreneurship development, Galgotia publishing.

#### **Reference Book:**

- West B Besie & Wood Levelle (1988) Food service in institutions 6<sup>th</sup> Edition revised By Hargar FV, Shuggart & Palgne Palacio June, Macmillian publishing company.
- SethiMohini (2005) institution food management New age international publishers.
- Knight J.B & Kotschevar LH (2000) quantity food production planning &management 3<sup>rd</sup> edition John Wiley & Sons.
- Philip E Thangam (2008) Modern Cookery for teaching and Trade Part I & II orient Longman.

# **SEC-B: MATERNAL AND CHILD NUTRITION**

(CREDIT: THEORY 6)

THEORY LECTURERS: 60

# **Objectives:**

- To study the community based health and nutrition programmes for mothers and children.
- To improve the health status of mother and child.

#### Unit-I:

- Nutritional needs during pregnancy,
- Relationship between maternal diet and birth outcome.

#### **Unit II:** Maternal nutritional status:

- Nutritional needs of nursing mothers and infants,
- Determinants of birth weight and consequences of low birth weight,

# Unit III Child feeding and care-

- Current feeding practices and nutritional concerns, guidelines for feeding, weaning and complementary feeding.
- Ongoing program me on maternal and child health

# **Unit IV**

- Child health and morbidity, neonatal, infant and child mortality, IMR and U5MR, link between mortality and malnutrition
- Overview of maternal and child nutrition policies and programmes.

# Unit V

- Common disorder during pregnancy:
- Anemia, pregnancy induced hypertension

# **Unit VI**

- Causes and prevention of Maternal Mortality
- Issues relating to maternal health: Hemorrhage, infection, unsafe abortion

# RECOMMENDED READINGS

# **Text Book:**

• Wadhwa A and Sharma S (2003). Nutrition in the community- A Textbook. Elite publishing house Pvt Ltd New Delhi.

# **Reference Book**

• Park K (2011). Park's textbook of preventive and social medicine, 21st edition M/s Banarasidas Bhanot publishers, Jabalpur, India.

- Bamji MS, Krishnaswamy K and Brahman GNV (Eds) (2009). Textbook of human nutrition 3<sup>rd</sup> edition. Oxford and IBH publishing Co. Pvt Ltd, New Delhi.
- National guidelines on infant and young child feeding (2006). Ministry of women and child development, Government of India.

## **Generic Elective Courses** (GE)

# **Generic Elective Paper I**

## **HUMAN NUTRITION**

# **Objectives:**

1. To gain knowledge about different nutrients, their classification, function, sources, requirement and deficiency diseases.

#### **UNIT-1:**

# **Basic Concepts of Nutrition:**

- Meaning and definition of Nutrients& Nutrition.
- Guidelines for good health.
- Food: Definition, Classification.
- Functions of Food- Physiological, psychological and socio-cultural. Understanding relationship between food, nutrition and health.
- Basic Food Groups: Basic four, Basic five, Basic seven and their importance.

#### **UNIT-II:**

# **Study of Macro Nutrients**

- Classification, functions, sources, requirement and
- Deficiency diseases of Carbohydrates, proteins & fats.

# **UNIT-III: Study of Micro-Nutrients:**

- Vitamins- Classification, functions, sources, daily requirement & deficiency diseases of Fat-soluble & Water -Soluble Vitamins – B Complex Vitamins and Vitamin C.
- Minerals: Functions, sources, daily requirement & deficiency of Iron, calcium, phosphorous, sodium & Iodine.
- Water & roughage- Functions, sources & deficiency.

# UNIT IV: Nutrition during different stages of lifecycle:

- Infants.
- Preschool children,
- School going children,
- Adolescent boys and girls,
- Adult man and woman,
- Pregnant Woman and Lactating Mother.

#### Text Book:

1. Food & Nutrition- Educational Planning Group, Arya Publication, New Delhi.

# **Reference Books:**

- Fundamental of food and Nutrition- by S.R.Mudambi.
- Srilakshmi B (2012) Nutrtion Science 4th Revised Edition, New Age International Publishers.
- Khann K. Gupta, S. Seth R. Passi, SJ, Mahna, R. Puri S(2013) Textbook of Nutrition and Dietetics, Phonenix Publishing House Pvt Ltd.
- ICMR (2010) Recommended Dietary Allowances for Indias, Published byNational Institute of Nutrition, Hyderabad
- Chadha R and Mathur P. cds (2015) Nutrition: A lifecycle Approach, Orient Blackwan, New Delhi.
- Seet V and Singh K (2006) Diet Planning through the life Cycle: Part 1 Normal

Nutrition A Practical Manual, Elite Publishing House Pvt. Ltd. New Delhi.

 Gopalan C. Rama Sastri BV. Balasubramanian SC (1989)NutritiveValue of Indian

Foods, National Institute of Nutrition, ICMR, Hyderabad.

Wardlaw and Insle, MG, Insel PM (2004), Perspectives in Nutrition, Six Edition,
 Mr. Graw Hill

# **Generic Elective Paper II**

# **Human Development & Family Studies**

# **Objectives:**

- To know the importance of child study and about pre-natal Development.
- To understand the importance of Breast feeding and artificial feeding.
- To know the causes and consequences of infant and maternal mortality in India.

#### **UNIT-I:**

- Study of Human Development Meaning and importance of studying human development,
- Stages of Human Development Infancy, early childhood, late childhood, adolescence, adulthood & old age.

#### **UNIT-II:**

- Pre-natal development-
- Conception,
- Symptoms
- Complication of pregnancy.
- Different stages of pre- natal development-period of ovum, embryo & foetus.
- Factors affecting pre-natal Development –Age of the Mother, Nutrition, Drugs and Smoking, X-ray, Infection and chronic diseases of mother, Rh-incompatibility, Maternal emotional state.

#### **UNIT-III:**

- Neonatal Care Immediate baby cleaning ,diet, temperature regulation , Daily Care of the new born baby, care of umbilicus ,care of the tongue and mouth ,massaging and exercise .
- Weaning, and care of the feeding equipment.
- Common childhood aliments -Vomiting, fever, thrush, Diarrhea, constipation Flatulence (wind), nappy rash.
- Maternal and Infant mortality Causes and prevention

# **UNIT - IV:**

- Family: Meaning, definition, characteristics and functions of family.
- Types of family: Nuclear and joint family, their merits and demerits, causes of

disintegration of joint family.

# **Text Book**:

1. Marriage and Family in India-K.M.Kapadia

# **Reference Books:**

- Child Development –E.B. Hurlock
- Child Development by K.C. Panda
- Family-Goode
- Principles of sociology R.N. Sahrma

# **Generic Elective Paper III**

#### **TEXTILES**

(CREDITS: THEORY-6)

THEORY LECTURES: 60

# **Objectives:**

- To know the manufacturing process of different types of textile fibers, their structures and uses
- To know the manufacturing process of different types of fabrics.
- To impart knowledge on different textile finishes

#### **Unit I: Introduction to Textile Fibres**

- Meaning and classification of fibres
- Source, composition, manufactureing processes and properties :

Natural fibers: cotton, flax, silk and wool

# Unit II: Yarn making

- Twist in yarn-S, Z twist
- Types of yarns: Simple an novelty yarns
- Unit III: Techniques of fabric construction
- Parts of a loom
- Operations of a loom
- Classification of weaves (Plain, Basket, Ribbed, Twill, Satin, Sateen)- Structure,
   Properties, usages

## **Unit IV: Finishing**

- Finishing-Mechanical finishes-Beetling, Calendaring, Embossing, Glazing, Napping.
- Chemical Finishes- Mercerization, waterproof and water repellent.
- Dyeing Types of dyes

#### **RECOMMENDED READINGS:**

# **Text Book:**

Corbman P.B. (1985) Textiles- Fiber to fabric ( $6^{th}$  Edition) , Gregg Division /Mc Graw Hill Book Co, US.

#### **Reference Book:**

- 1. Joseph, M.L. (1988) Essentials of Textiles (6<sup>th</sup> Edition), Holt, Rinehart and Winston Inc, Florida.
- 2. Vilensky G. (1983) Textile science, CBS Publishers and Distributors, Delhi.
- 3. Tortora, G. Phyllis, Understanding Textiles, Mc Millanm Co. USA.
- 4. Sekhri S. (2013) Textbook of Fabric Science: Fundamentals to finishing, PHI Learning, Delhi.

# **Generic Elective Paper -IV**

# **FAMILY RESOURCE**

**MANAGEMENT** 

(CREDITS:

THEORY -6)

THEORY LECTURES: 60

# **Objectives:**

- To achieve goals in life through judicious resource management
- To utilize the available resources effectively.

# Unit I: Introduction to Family Resource Management and its application

- Concept and scope of family resource management
- Processes in resource Management
- Decision Making

#### **Unit II: Resources**

- Meaning, classification and characteristics of family resources, factors affecting utilization of resources.
  - Motivating factors in home management: values, standards and goals and their inter- relationship.

# Unit III: Availability and management of specific resources by an individual/ family

- Money-Types of income, Supplementing family income
- Time-Concept, Factors and steps in time management

# Unit IV: Availability and management of specific resources by an individual/ family

- Energy- Efforts, Fatigue, Work simplification
- Steps in successful event planning—Planning, Budgeting and Evaluating.

# RECOMMENDED READINGS

#### **Text Book**

- Rao V.S and Narayana P.S., Principles and practices of management,
   2007, konark publishers Pvt Ltd.
- Nickell, P and Dorsey, J.M., Management in family living, 2015, CBS
   Publishers and Distributors

#### **Reference Book**

- Management for Modern Families I.H.Gross and E.W. Crandall.
- Home Management Vergese, Ogale, Srinivasan
- Home Management Education Planning Group, Arya publishing house, Delhi.
- An Introduction to family Resource management-Premavathy Seetharaman, Sonia Batra & Preeti Mehera
- Koontz H and O'Donnel C, 2005Management- A System and Contingency analysis of Managerial Functions. New York: Mc Graw – Hill Book Company
- Kretiner, 2009, Management Theory and Applications,
   Cengage Larning: India