# **Appendix**

# Home Science Pass Paper

Fifth Semester

GE-I- Human Nutrition

Sixth Semester

GE -II- Nutrition, A Life span Approach

Details Syllabus is same as Hons.-GE-I & II. This may be applicable for 16 -17 and 17-18 batch.

Fifth Semester

<u>DSE- Childhood In India</u> / changed and Food Science is included as DSE-I- This may be applicable for 17-18bacth.

#### DSE-I- Childhood in India to be deleted & FOOD SCIENCE to

#### be included as DSE-1

Appendix - A

## Objectives:

- **1.**To know about the composition of food.
- **2.**To know about Preservation Techniques and evaluation of food.

# Theory

#### Unit -1

- Introduction to food science
- Definitions, importance and applications
- . Basic Terminology used in food Science.

### **Unit-II**- Basic food Microbiology

- Introduction to yeast, mould and bacteria characteristics and their role in preservation and Spoilage of food
- . Hygiene and Sanitation Practices in food Processing and waste disposal.
- **Unit III** Preservation Techniques, Principles and their application.
- . High temperature, low temperature, removal of moisture, irradiation and additives.
- Food packaging and labeling : FSSAI, Codex

# Unit -IV- Sensory Science

- . Physiological basis of Sensory Evaluation and Sensory Attributes of food.
- . Sensory Evaluation: Assessment, Subjective and Objective.

# Unit-V- Food laws and Quality Assurance

- . National and International food laws -FSSAI,BIS,AGMARK,Codex and ISO: 22000, ISO:9000,ISO:14000
- .Quality Assurance procedures-GMP,GHP,HACCP

#### **Practical**

- **1.**I -Applications and factors affecting formation of Sols, Gels, Foams and emulsion
- **II**-Study of microscopic structure of different food Starches and their gelatinization properties
- **2-I**-Slide preparation and identification of bacteria, yeast and mould.
- **II**-Assessment of hygiene practices of food handles.
- **3**-I-Preservatin of food using different methods(Blanching, Dehydration, Freezing)
- **II-**Basic Principle Involved in food preservation using additives.
- **4.I**-Sensory evaluation method and their applications.
- **II-** Food analysis; Moisture, PH, Acidity, total soluble solids by refracto meter.
- **5-**Evaluation of food labels

#### **Recommended Readings**

- **1-**Manay S.& Shadaksharaswamy M(2002). Foods-Facts and Principles. Wiley Eastern Ltd.
- **2**-Srilaksmi (2007).Food Science,4<sup>th</sup> Edition, New Age International.
- **3-**Sethi Mohini and Rao E(2011).Food science (Experiments and Applications).2<sup>nd</sup> edition.CBS Publishers & Distributer Pvt. Ltd.

# Appendix-B

#### **SEC-III-C**

# Care and well-being in Human Development

## Theory-

**Unit-I**-care and human Development

- .Definition, Concepts & relevance of care
- .Vulnerable Periods in life that require care
- .Principles & Components of care

**Unity- II**: Well-being & Human Development

- . Concept of well-being -Physical, Psychological, Spiritual
- .Life crises and well-being
- .Factors & Experiences that promote well-belling

Unit III-Care & well-being at different stages of life

- .Childhood Years
- .Adolescence
- .Adulthood and old age
- .Well-being of Caregivers

**Unit IV**-Policies, Services & programs

- .School health programs
- .Nutrition & health for all
- .Counseling & Yoga

#### Practical:-

- 1-Observation of children (1Infant, 1 toddler) To understand their care needs
- **2-**Interview of a mother of a school-going child to understand here perspective of care and child's well-being.
- **3-**Interaction with two adolescents (male, female) to explore their perspective on well-being.
- 4-Visit to a senior citizens home, to study their care and well-being
- **5-**Lecture /workshop by a counselor on significance of Counseling
- **6-**Participation in yoga/self development session

Recommended Reading:-

- .IGNOU.(2011).Positive Psychology-2, MCft-006, Applied Social Psychology. New Delhi
- .Santrock.J.W(2007)Life Span Development (3<sup>rd</sup> ed.).New Delhi. Tata McGraw-Hill.
- Seligman M.E.P(2002). Authentic happiness: Using the new Positive Psychology to realize your Potential for lasting fulfillment. New York. Free press
- .Sriram.R.(2004)Ensuring infant and maternal health in India. In J. Pattnaik(Ed).

Childhood in south Asia: A Critical look at issues, Policies and Programs Conn.USA: Information Age.

Singhi.P.(1999) Child health & well-being: Psychosocial Care within & beyond hospital walls. In T.S.Saraswathi (Ed.).Culture, Socialization and human development. New Delhi: Sage.