## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

#### **HSC-401 - THERAPEUTIC NUTRITION**

#### **Outcomes of the course**

The students will be able to

#### A) Remember and explain in a systematic way

- Understands the meaning, objectives and purpose of therapeutic nutrition.
- Understands about modification of normal diets to therapeutic diets.

#### B) Understands and Uses

 Planning and preparation of diets for different diseases like Obesity, Cardiovascular, Renal, Diabetes mellitus etc,

## C) Critically explains, judges

 Calculation of Nutrient Requirements and modification of the diets for complications in different disease conditions.

## D) Working in out of prescribed areas under co-curricular activity

 Preparation of diets for the patients in acceptable manner by applying their own choice of foods through observing the family members, elderly, friends, neighbours and patients.

#### E) Practical skills

- Planning and preparation of diets for different disease conditions.
- Diet counselling and patient education.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

#### **HSC-401 - THERAPEUTIC NUTRITION**

Theory: 4Hours/week Practicals: 2Hours/week

#### **THEORY**

## **Unit -I Introduction to Therapeutic Nutrition**

- Therapeutic Nutrition Purpose of Diet Therapy, Therapeutic adaptation of normal diets liquid, soft and special feeding methods, pre- and post operative diets.
- Dietitian Roles and responsibilities, Diet counselling, follow up and patient education.
- IDA Indian Dietetic Association

#### **Unit -II Malnutrition and Fevers**

- Fevers Acute and Chronic fevers Typhoid, T.B. Causes, symptoms and dietary management
- Under weight, Overweight and Obesity Causes, assessment, symptoms and dietary management and complications

#### **Unit -III Gastrointestinal and Liver Diseases**

- Gastrointestinal Diseases Dyspepsia, Peptic ulcer, Diarrhoea, Constipation and Malabsorption Syndrome – Steatorrhea, Celiac disease and Tropical Sprue – Causes, symptoms and dietary management
- Liver diseases Hepatitis, Cirrhosis of liver Causes, symptoms and dietary management

#### **Unit -IV Cardio-vascular and Renal Diseases**

- Cardio-Vascular Diseases Role of fat in the development of Atherosclerosis, Hypertension Causes, symptoms and dietary management
- Kidney disease Nephritis, Nephrosis, Renal Failure, and Renal calculi Causes, symptoms and dietary management.

#### **Unit -V Diabetes and Cancer**

- Diabetes Mellitus Classification, causes, symptoms,
- Tests for detection of Diabetes Mellitus, Dietary management- and complications
- Cancer Classification, risk factors, symptoms, general systemic reactions, nutritional requirements; Role of food and dietary guidelines for prevention of cancer

#### **PRACTICALS**

## Planning and preparation of the following diets

- 1. Preparation of modified diets-Liquid and Soft diets.
- 2. Planning and preparation of diet in fevers Typhoid and T.B.
- 3. Planning and preparation of diets for Underweight and Obesity.
- 2. Planning and preparation of diet in diseases of Gastrointestinal System Peptic Ulcer, Viral Hepatitis
- 3. Planning and preparation of diet in Cardio-Vascular diseases Atherosclerosis and Hypertension
- 4. Planning and preparation of diet in Kidney diseases Nephritis
- 5. Planning and preparation of diet in Diabetes Mellitus

#### **REFERENCES**

- 1. Bamji MS, Krishnaswamy K, Brahmam GNV. (2016). Textbook of Human Nutrition, 4th edition, Oxford and IBH Publishing Co. Pvt. Ltd.
- 2. Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). "The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt. Ltd.
- 3. NIN. (2017). Food Composition Tables, National Institute of Nutrition, Hyderabad.
- 4. Srilakahsmi, B. (2019). Dietetics, 8<sup>th</sup> edition, New Age International Publishers.
- 5. Srilakahsmi, B. (2018). Nutrition Science, 6<sup>th</sup> edition, New Age International Publishers.
- 6. Sumati R. Mudambi, Rajagopal, M.V.(2012). Fundamentals of Foods, Nutrition and Diet Therapy, 6<sup>th</sup> edition, New Age International Publishers.
- 7. Swaminadhan, M., (1988). Essentials of Food and Nutrition, Volume I and II, The Bangalore Printing and Publishing Co. Ltd., Bangalore.
- 8. Wardlaw MG&Insel PM. (2004). Perspectives in Nutrition, Sixth Edition,

#### **CO-CURRICULAR ACTIVITIES**

- 1. Academic based: -
  - Visit to dietetics Dept. and diet counselling centre
  - Exhibition on therapeutic diets
  - Diet plans and laboratory reports
- 2. Research based: -
  - Case studies
  - Project work on assessment of obesity among staff members and students of the college
- 3. Value based: -
  - Clean and green, nutrition games
  - Drama, dance, and music to propagate and promote nutrition education

- 4. Celebration of Important Days (National and International): -
  - World Diabetes day -November 14<sup>th</sup>
  - World Cancer day -February 4<sup>th</sup>
  - World Health day -April 7<sup>th</sup>
  - National Cancer Awareness Day-Nov 7<sup>th</sup>

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(under CBCS w.e.f. 2021-22)

## **HSC-401 Therapeutic Nutrition**

#### **Model Question Paper**

Time: 3 hrs. Max. Marks: 75

#### PART - A

#### Answer any FIVE questions. Each question carries 5 Marks

(5X5 = 25 Marks)

- 1. Write the purpose of diet therapy?
- 2. Classify fevers and explain the symptoms.
- 3. What is meant by hypertension? Elucidate the causes for it.
- 4. Define liver cirrhosis. Write the principles of dietary management?
- 5. What is type II diabetes? Explain the causative factors
- 6. Elucidate the points to be considered for planning a diet to prevent constipation?
- 7. Define Diet counselling. Explain its importance in today's life.
- 8. What is 'Peptic ulcer'? Write the causative factors.

#### PART - B

## **Answer FIVE questions. Each Question carries 10 marks**

(5x10 = 50 Marks)

9. a) Write in detail about the therapeutic adaptation of normal diet.

(OR)

- b) Who is a Dietician? Explain the Roles and responsibilities of a dietician.
- 10. a) What are complications of obesity?

(OR)

- b) Elucidate the causative factors for Typhoid? Write the dietary management for Typhoid.
- 11. a) Describe the symptoms, and dietary management of Celiac disease

(OR)

- b) What are the functions of liver and discuss about the agents responsible for liver damage.
- 12. a) What is meant by Atherosclerosis . Explain the symptoms and plan a diet for an Atherosclerosis patient.

(OR)

- b) Elucidate the reasons for Renal Failure. Give an account of dietary restrictions during this condition.
- 13. a) Describe the principles of dietary management of a person with Diabetes Mellitus (OR)
  - b) Discuss the dietary guidelines to be followed for prevention of cancer.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

## HSC-402 FABRIC CONSTRUCTION AND APPAREL CARE

#### **Outcomes of the course**

At the end of the course the students will be able to learn:

#### A) Remember and explain in a systematic way

- Concepts of Grain- fabric count, Thread count, balance, selvedge weft and warp etc.
- Meaning of knitting, weaving and finishes in fabric construction.

### B) Understands and Use

- Knowledge in selection of clothing.
- Learn the process of laundering to different fabrics like cotton, woollen, silk etc.

## C) Critically explains

- Different methods of fabric construction
- Examine the use of finishes in textile field.
- Analyze the selection of clothing and planning of wardrobe

#### D) Working in out of prescribed areas under co-curricular activity

- Visit to weaving centre and dry cleaning centres.
- Identify methods of removing stains in fabrics

#### E) Practical skills

- Identify and prepare different weaves.
- Examine the thread count of the fabric and analyse its balance for durability.
- Removing different stains on fabric.
- Drafting and stitching of Salwar and Kameez.

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(under CBCS w.e.f. 2021-22)

#### HSC - 402 FABRIC CONSTRUCTION AND APPAREL CARE

Theory: 4 Hours/week Practicals: 2Hours/week

#### **THEORY**

#### **Unit I Fabric Construction**

- Weaving Introduction, parts of the loom, Steps in weaving.
- Types of weaves Basic and Decorative weaves.
- Concept of Grain, fabric count / Thread count, balance, selvedge.

## **Unit II Knitting and Non-woven fabrics**

- •Knitting Definition, classification (weft and warp) Types of knitting,
- •Comparison of Knitting with Weaving Properties of Knits Use and Care of Knits
- ●Non woven Fabrics Felting, Bonding, Braiding, Knotting and bonding.

  Properties of Non-woven fabrics. Applications of non woven fabrics.

#### Unit III Finishes - Chemical, Mechanical and functional finishes

- •Introduction to finishes Importance, Kinds of finishing processes, Classification
- •Chemical finishes. Bleaching, mercerizing, shrinking, degumming, weighting.
- Mechanical finishes Tentering, Decating, Calendering, Schreinerizing, Moireing,
   napping, flocking, Crepe and wrinkled effect, beetling and embossing
- •Functional finishes water repellence, flame proofing, mildew proofing, moth proofing, antiseptic and antistatic finishes.

#### **Unit IV Clothing Selection and Wardrobe Planning**

- Factors affecting selection of clothing.
- •Clothing selection Clothing for specific groups Infants, children and teenagers.
- •Selection of common household linen Towel, table linen and bed sheets.
- Wardrobe planning Definition, Importance, Factors and Steps for planning wardrobe

#### **Unit V Laundering**

- Manual Laundry Equipment Washing, Drying and Ironing.
- •Machine Laundry Procedure in use of washing machines Precautions.

  Reagents/ supplies used in Laundry Soap, detergent, bleaching agents etc.
- •Laundering procedure for cotton and linen, woollens, silk and synthetics,
- Process of Dry cleaning
- •Stain removal Classification of stains and ways of stain removal

#### **PRACTICALS**

- 1. Identification and preparation of different weaves
- 2. Identification of thread count of a fabrics
- 3. Samples of different knits
- 4. Classify stains and identify the methods of removing stains.
- 5. Drafting and stitching of salwar.
- 6. Drafting and stitching of Kameez.

#### REFERENCES

- 1. Deepali Rastogi and Sheetal Chopra. (2017). Textile Science" 1st edition, Orient Black Swan Pvt. Ltd.
- 2. Sushma Gupta, NeeruGarg, Renu Saini (2018). Text book of clothing, textiles and laundry" 8<sup>th</sup> edition, Kalyani publishers.
- 3. Seema Sekhri(2017). Text book of Fabric Science Fundamentals to Finishing, 2<sup>nd</sup> edition, PHI Learning Pvt. Ltd.
- 4. Vastala. (2003). Text book of Textiles and Clothing", 1st edition, Published by ICAR.
- 5. Kanwar Varinder Pal Singh. (2004). Introduction to Textiles, 1<sup>st</sup> edition, Kalyani Publishers.
- 7. Dantyagi. S, (1996). Fundamentals of Textiles and Their Care, 5<sup>th</sup> edition, Orient Longman Limited.
- 8. Neomia D' Souza (1998). Fabric Care, 1<sup>st</sup> edition, New Age International Publishers
- 9. Durga Deulkar, (2002), Household Textiles and laundry Work, Atma Ram & Sons, Delhi.

#### **CO- CURRICULAR ACTIVITES**

- 1. Seminar / Assignment / Quiz / Group Discussion
- 2. Use of ICT in Class reports and Seminars.
- 3. Visit to dry cleaning centres to know about laundry and stain removing techniques.
- 4. Visit to Weaving centre

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(under CBCS W.E.F. 2021-22)

#### **HSC-402 FABRIC CONSTRUCTION AND APPAREL CARE**

## **Model Question Paper**

Time: 3 hrs	Max Marks: 75

#### PART - A

#### Answer any FIVE questions. Each question carries 5 Marks.

(5X5=25 Marks)

- 1. Give an account of parts of a loom.
- 2. Define Selvedge? What are different types of selvedges?
- 3. Write about Plain weave and its variations.
- 4. Enumerate the properties of Non–woven fabrics
- 5. Write a short note on selection of bed linen.
- 6. Write about Tentering and Decating?
- 7. Compare and contrast between Knitting and Weaving.
- 8. Explain the methods of removing any five stains on cotton cloth?

#### PART - B

#### **Answer FIVE questions. Each question carries 10 Marks.**

(5X10=50 Marks)

10. a) Write in detail about decorative weaves.

(OR)

- b) Define weaving? Explain steps in weaving process.
- 11. a) Write in detail about methods of weft knitting.

(OR)

- b) What is Felting? Explain its process, uses and drawbacks.
- 12. a) Classify finishes. Explain Bleaching and Degumming processes

(OR)

- b) What are called Functional finishes? Explain water repellence, flame proofing and mildew & moth proofing finishes.
- 13. a) Explain in detail about the factors affecting selection of clothing?

(OR)

- b) What are the factors and steps for planning a wardrobe?
- 14. a) Explain in detail about the process of Dry cleaning.

(OR)

b) Discuss different types of Laundry reagents and their use?

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

#### HSC- 403 - HUMAN DEVELOPMENT AND FAMILY DYNAMICS

#### **Outcomes of the course**

The students will be able to:

## A) Remember and explain in a systematic way

- Factors essential for harmonious and wholesome family living.
- Knowledge on pubertal changes, adolescence and appreciate value of marriage in Indian families
- Meaning of Pre-marital counselling and Post -marital counselling

#### A) Understand and Use

- Understand the need for planning and preparation of parenthood.
- Understand the importance of adjustments to strengthen marital and family relationships

## B) Critically explains, judges

• Problems of adolescence during each sub stage and coping up strategies.

#### C) Working in out of prescribed areas under co-curricular activity

- Visiting counselling centres and understanding coping up strategies of problems
- Familiarise with problems of elderly through case studies and institutional visits.

#### D) Practical skills

- Methods of study of adolescent problems using scales and schedules
- Case study method to find out the adjustment problems of married couple.
- Case study method to find out the Physical and Psychological problems of elderly

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(under CBCS w.e.f. 2021-22)

#### HSC- 403 - HUMAN DEVELOPMENT AND FAMILY DYNAMICS

Theory: 4Hours/week
Practicals: 2Hours./week

#### **THEORY**

## **Unit I Human Development - Adolescence**

- Adolescence Definitions by WHO, UNICEF, NCERT, Characteristics.
- Physical and physiological Changes during puberty for Boys and girls-
- Developments during adolescence Cognitive- Piaget's Formal-operational stage, Emotional and Social development
- Major concerns during adolescence Substance abuse, Delinquency Suicidal Ideation, Teen age pregnancy etc. - Symptoms and warning signs - Use of Counselling.

## **Unit II Human Development - Young Adult Hood**

- Definition, Development tasks, significance of the period, Changing responsibilities
- Adjustments during young adulthood period
- Preparation for Marriage Factors to be considered in the choice of marriage partner. Modes of mate selection, Self-choice marriage and arranged marriage – Advantages and disadvantages.
- Pre-marital counselling Meaning and Need for Pre-marital Counselling.

#### **Unit III Marriage and Adjustments**

- Marriage –Definition and Functions, needs and goals. Criteria for successful marriage.
- Values and goals of marriage Indian context. Different Marriage practices-Advantages and disadvantages.
- Adjustments in marriage In laws, sex adjustment to mate, adjustment to parenthood, and financial adjustments.
- Transition to Parenthood Factors that influence Planned Parenthood.
- Factors responsible for an increase in the rate of legal marital dissolution Postmarital counselling.

#### **Unit IV Indian Family and Changing Trends**

- Family Meaning, Definition, functions of family, sociological significance of family.
- Types of Family Definitions of Joint, Extended, Nuclear Families, Alternate family styles - Modern trends in family – Advantages and disadvantages.
- Changing Indian family structure Factors responsible Advantages and disadvantages, Impact on Children.
- Problems faced by the modern family Need for family counselling.

## Unit V Human Development - Middle and Late Adulthood

- Middle adulthood Definition, physical and physiological changes health issues,
   Psychological changes during middle age, coping up strategies, preparation for retirement.
- Late adulthood Sub groups and definitions, Late adulthood and Ageing (beyond 60 years) Definitions, Characteristics of old age Physical and physiological changes during old age, cognitive and memory changes.
- Problems of old age and coping up strategies
- Cultural perspective on aging and institutionalization –Indian context

#### **PRACTICALS**

- 1. Study of adolescent adjustment problems
- 2. Case study of adolescent boy and Girl
- 3. Identification of Mate selection criteria depicted in Mass media
- 4. Case study of Married couple-Marital adjustment
- 5. Case study of elderly man and woman.
- 6. Visit to counselling centre –Finding common problems of adolescents and married Couples.

#### **REFERENCES**

- 1. Berk, E. L. (2013). Exploring life span development.3rded. McGraw Hill, New York.
- 2. Hurlock E.B. (1990) Child Development MC. Graw Hill Company Ltd, New York. McGraw- Hill, New Delhi.
- 3. Papalia, D.E. and Olds, SW. (2008). Human development. 11thed. McGraw Hill. New York
- 4. Parbati Sahu.(2009). Marriage and Family Relationships, 1<sup>st</sup> edition, Kalyani publishers
- 5. Rajammal P Devadasand and Jaya, N..(1984). A Text Book on Child Development, MacMillan India ltd.
- 6. Santrock, J. W. (2007). A topical approach to life-span development. McGraw-Hill, New Delhi:

- 7. Singh, A. (Ed).( 2015). Foundations of Human Development: A life span approach. New Delhi.
- 8. Sushila Srivastava and SudhaRani.K. (2014). Text Book of Human Development A Life Span Developmental Approach" 1<sup>st</sup> edition, S. Chand & Company Pvt. Ltd.

## **CO-CURRICULAR ACTIVITIES**

- 1. Analysing the reasons for suicides among adolescents reported in mass media
- 2. Identification of Mate selection criteria depicted in Mass media
- 3. Visiting counselling centres and understanding coping up strategies of problems
- 4. Familiarise with problems of elderly through case studies and institutional visits.

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(Under CBCS W.E.F. 2021-22)

#### **HSC-403 - HUMAN DEVELOPMENT AND FAMILY DYNAMICS**

## **Model Question Paper**

Time: 3 hrs Max Marks: 75

#### PART - A

### Answer any FIVE questions. Each question carries 5 Marks.

(5x5=25Marks)

- 1. Enlist physical changes appear during puberty in boys and girls.
- 2. Explain about cognitive development during adolescence.
- 3. Write about changing responsibilities during young adulthood.
- 4. Elucidate the goals of marriage.
- 5. Write the need for Pre-marital Counselling in Indian context.
- 6. Enumerate the functions of a family.
- 7. State the family life stages.
- 8. Write the physiological changes during old age

## PART - B

#### Answer FIVE questions. Each question carries 10 Marks.

(5x10=50Marks)

9. a) Define adolescence. Explain the characteristics of adolescents

(OR)

- b) Discuss major concerns for parents and teachers during adolescent period
- 10. a) Explain modes of mate selection. Discuss advantages and disadvantages of different methods

(OR)

- b) Describe developmental tasks and changing responsibilities during young adulthood period.
- 11. a) Define marriage. Write the criteria for a successful marriage.

(OR)

- b) What is meant by Planned parenthood. Discuss the factors that influence planned parenthood.
- 12. a) Define Nuclear family. Discuss the advantages and disadvantages of nuclear family.

(OR)

- b) Elucidate the causes for disintegration of Joint family system and its impact on children.
- 13. a) Describe the problems of old age and discuss the coping up strategies.

(OR)

b) Identify the psychological changes during middle age and discuss the coping up strategies.

## **B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER**

## (under CBCS w.e.f. 2021-22)

## **HSC-404- NUTRITIONAL BIOCHEMISTRY**

#### **Outcomes of the course**

The student will be able to demonstrate the following:-

#### A) Remembers and explains in a systematic way

- Understands the metabolism of different macro and micro nutrients in human physiology.
- Acquires knowledge on factors affecting digestion, absorption of nutrients.
- Knowledge on enzymes and its role in nutrient metabolism.

#### B) Understands and uses

- Selects foods based on nutrient chemical components and their function biochemically, physiologically and metabolically as well as their impact on disease.
- Understands nutritional needs in healthy individuals and in and diseased conditions.

## C) Critically explains, judges and solves

- Identifies nutrients in foods.
- Estimates Qualitative and quantitative analysis of nutrients in different foods.
- Identifies Food enzymes.

## D) Working in out of prescribed area under a co-curricular activity

- Observing in hospitals/ private laboratories analysis methods according to the person to person metabolism
- Observing therapeutic diets in hospitals according to the person to person metabolism.

#### E) Practical skills

Tests for identification of mono, di and polysaccharides, proteins and amino acids, fats and enzymes.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

#### HSC-404 – NUTRITIONAL BIOCHEMISTRY

Theory: 4Hours/week Practicals: 2Hours/week

#### **THEORY**

## **UNIT Introduction to Biochemistry and Carbohydrates**

- Introduction to Biochemistry Some aspects of Physical and Organic Chemistry Acids,
   Bases, Hydrogen Ion Concentration PH, Buffers and Chemical Bonds.
- Chemistry of carbohydrates
  - Classification Monosaccharides Structural Aspects isomers, epimers, anomers and mutarotation and reactions of Monosacharides
  - ➤ Disaccharides and Polysaccharides & reactions of Carbohydrates.

## **UNIT II Lipids and Proteins**

- Chemistry of Lipids
  - ➤ Classification of Fatty Acids
  - ➤ Classification and Properties of Lipids, Structural Lipids Phospholipids, Glycolipids, Lipoproteins and Cholesterol.
- Chemistry of Proteins
  - ➤ Definition, Classification, Structures of amino acids and Reactions of Amino Acids
  - ➤ Definition, Properties and Classification of Proteins.

#### **UNIT III Enzymes and Co-Enzymes**

- Enzymes Definition, Properties, Classification, Enzyme Specificity, Enzyme Action, Inhibition and Factors effecting Enzyme Activity.
- Co enzymes Vitamins as co enzymes

## **UNIT IV** Metabolism of Carbohydrates

- Introduction to Metabolism Catabolism and anabolism.
- Metabolism of Carbohydrates
   — Utilization of glucose after absorption, Homeostasis of glucose
   — Role of liver and Hormones in regulation of blood glucose level, Glucose
   Tolerance Test.
- Anaerobic and aerobic metabolisms of Carbohydrates Glycolysis and Kreb's cycle.

#### UNIT V Metabolism of Lipids and Proteins

- Metabolism of Lipids Role of Adipose tissue and Liver in Lipid metabolism, Beta oxidation and bio synthesis of fatty acids.
- Metabolism of Amino acids Deamination, Transamination, Decarboxylation of amino acids and Urea cycle.
- o Integration of Carbohydrate, protein and Lipid metabolism

#### **PRACTICALS**

- 1. Preparation of acids, bases, buffers, measuring pH.
- 2. Qualitative analysis Identification of carbohydrates
- 3. Qualitative analysis Identification of proteins and amino acids
- 4. Qualitative analysis of Lipids.
- 5. Qualitative analysis of food enzymes plant and animal.

#### REFERENCES

- 1. Rama Rao, A.V.SS. (2015) A Text book of Biochemistry, 6<sup>th</sup> edition, UBSPD publications.
- 2. Singh S.P., (2011), Principles of Biochemistry, CBS Publishers.
- 3. Satyanarayana, U. (2000). Biochemistry, 2<sup>nd</sup> edition, Uppala Author publishers.
- 4. Dulsy Fatima, Dr. L.M. Narayanan (2005). Biochemistry, 1<sup>st</sup> edition, Saras publications.

#### **CO-CURRICULAR ACTIVITIES**

- 1. Preparation of charts, models, posters etc. on topics like structures, tests for identification and metabolic cycles of carbohydrates, proteins and lipids.
- 2. Field survey to collect data on metabolic disorders like diabetes mellitus in the community
- 3. Visit to hospitals/ private laboratories to observe analysis methods

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

## (under CBCS w.e.i. 2021-22)

## HSC-404 – NUTRITIONAL BIOCHEMISTRY Model Question Paper

Time: 3 hrs Max. Marks: 75

#### PART - A

#### Answer any FIVE questions. Each question carries 5 Marks

(5X5 = 25 Marks)

- 1. Write about buffers.
- 2. Give the structures of disaccharides.
- 3. Write about lipoproteins.
- 4. What are essential fatty acids? Write about their importance.
- 5. Write about the classification of enzymes.
- 6. Explain deamination.
- 7. Classify proteins.
- 8. Define metabolism. Explain catabolism with examples.

#### PART - B

## **Answer FIVE questions. Each Question carries 10 marks**

(5X10 = 50 Marks)

9. a) Discuss different chemical bonds.

OR

- b) Discuss different Polysaccharides.
- 10. a) Write the classification of lipids.

OR

- b) Classify amino acids and their structures.
- 11. a) What is co-enzyme? Write about different vitamins which act as co-enzymes.

OR

- b) Explain the factors affecting enzyme action.
- 12. a) Explain anaerobic metabolism of carbohydrates.

OR

- b) Explain the role of hormones in regulation of blood glucose level.
- 13. a) Explain the integration of carbohydrate, lipid and protein metabolisms.

OR

b) Describe beta oxidation of fatty acids.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (under CBCS w.e.f. 2021-22)

#### HSC- 405 - INTERIOR DESIGN AND DECORATION

#### **Outcomes of the course**

At the end of the course, the students will be able to learn

## A) Remember and explain in a systematic way

- Explain design, types of design, elements, Principles of design and colour harmonies.
- Understands colour concept, lighting methods and arts to decorate the interiors based on aesthetic performance.
- Acquire knowledge on selecting appropriate building materials, equipment and finishes with regard to safety and eco friendly construction.

#### B) Understands and Uses

• Apply the elements and principles of design and colour harmonies in the arrangement of furniture, accessories in different rooms, flower arrangement and table setting

## C) Critically explains, judges and solves

• Factors affecting the purchase of furniture; colour harmonies in different rooms

#### D) Working in out of prescribed areas under co-curricular activity

- Learn elements and principles of design by drawing, painting by collecting pictures from magazines
- Preparation of Chart, Posters and albums using principles of art and design
- Observation of Flower Arrangements at different places.

#### E) Practical skills

- Learn elements and principles of design by drawing, painting by collecting pictures from magazines
- Learn to arrange furniture in different rooms by applying elements and principles of design
- Learn to arrange Flower Arrangements by applying elements and principles of design
- Learn to lay the table formal and informal parties.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (Under CBCS W.E.F. 2021-22)

## **HSC - 405 - INTERIOR DESIGN AND DECORATION**

Theory: 4Hours/week Practicals: 2Hours/week

#### **THEORY**

## **Unit-I Interior Design – Elements & Principles**

- Interior Decoration Meaning, objectives of Interior decoration.
- Good taste Meaning, development of good taste
- Design Definition, types of design structural and decorative designs.
- Elements of Art/design Line, Form, Texture, Colour, Space, Light
- Principles of art/design Harmony, proportion, Balance, Emphasis and Rhythm
- Application of elements and principles of design in improving the appearance of home.

### **Unit- II Interior Design- Colour**

- Colour its importance and effect; Prang colour system Primary, Secondary and tertiary colours; Dimensions and characteristics of colour;
- Colour schemes and their use in interior decoration;
- Factors affecting colour schemes for different rooms and planning of colour schemes for different areas in the house.

#### **Unit-III Interior Decoration-Flower Arrangement**

- Flower Arrangement Elements and principles of art in flower arrangement.
- Types of flower arrangement Line, mass, line & mass, miniature etc.
- Styles of flower arrangement Traditional, oriental (Japanese) and modern.
  - ➤ Materials and equipment used in flower arrangement.
  - ➤ Points to be considered while selecting, storing and making of flower arrangements.
  - ➤ Importance of Flower Arrangement in interior decoration

## **Unit-IV Interior Decoration - Furniture & Furnishings**

- Furniture Arrangement Selection of furniture and considerations in arranging the furniture; Furniture arrangement in different rooms.
- Furnishings Fabrics used as soft furnishings; Selection of fabrics for Upholstery (slip covers, cushions etc.) and Floor covers (carpets and rugs)
- Lighting Natural and Artificial Fittings Types and their use in Interior Decoration

#### **Unit-V Interior Decoration -Accessories**

- Accessories Functions, classification, kinds, selection, planning, placement and care of accessories
- Window Treatments Types of windows and window treatments; Factors to be considered in the selection of curtains and draperies
- Table setting General rules for setting and laying the table; Types Formal and Informal table setting, Table manners and etiquette.

#### **PRACTICALS**

- 1. Interior Design A) Elements of Design, B) Types of Design Natural, Decorative, Conventional, Geometric and Abstract Drawing/ painting/clippings from magazines.
- 2. Application of principles of art in different rooms- a) Harmony b) Balance c) Rhythm
- 3. d) Emphasis and e) Proportion Drawing/painting/clippings from magazines.
- 4. Colour Value chart, prang colour chart and six standard colours, Application of colour harmonies in different rooms of the house.
- 5. Different types of flowers arrangement.
- 6. Furniture arrangement in different rooms.
- 7. Table setting Formal and informal table setting.
- 8. Window treatments Types

#### **REFERENCES**

- 9. Bela Bhargava (2016). Family resource Management & Interior Decoration, 1<sup>st</sup> edition reprint, University Book House Pvt Ltd. Jaipur.
- 10. Parimalam, Andal, & Premlatha (2015). A Textbook of Interior Decoration, 1<sup>st</sup>editionreprint, Satish Serial Publishing Home.
- 11. Premavathy Seetharaman & ParveenPannu (2014). Interior Design and Decoration, CBS Publishers.
- 12. Premlata Mullick (2016). Textbook of Home Science,  $4^{\text{th}}$  edition , Kalyani Publishers
- 13. Stella Soundara raj (2009). A Text book of Household Arts, 4<sup>th</sup> edition, Orient Black Swan Ltd.
- 14. SubasiniMohapatra (2010). Home Management and Household Economics, 1<sup>st</sup> edition Kalyani Publishers.
- 15. Sushma Gupta, Neeru Garg &Renu Saini (2018). Text book of Family Resource Management, Hygiene and Physiology, 11<sup>th</sup> edition, Kalyani Publishers.
- 16. Verghese, M.A. & Oagle, M.N. (2005). Home Management, New Age International Publishers.

## **CO- CURRICULAR ACTIVITES**

- 1. Drawing, colouring, and painting using principles of art, Interior designing & Decoration
- 2. Modelling- clay, chart, cardboard etc.
- 3. Quiz, Seminars, debates and Group discussion
- 4. Chart and Poster Presentations
- 5. Organizing exhibitions
- 6. Flower Arrangements
- 7. Table Settings
- 8. Furniture arrangement
- 9. Album making

# B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER

(under CBCS w.e.f. 2021-22)

#### **HSC-405 - INTERIOR DESIGN AND DECORATION**

## **Model Question Paper**

Time: 3 hrs. Max. Marks: 75

#### PART - A

### Answer any FIVE questions. Each question carries 5 Marks

(5X5 = 25 Marks)

- 1. Explain the importance of Interior Decoration.
- 2. Define design. Write about decorative design.
- 3. What points will you consider while making colour scheme for a room?
- 4. Write about furniture arrangement in child's room.
- 5. Write about the importance of different elements of art in flower arrangement.
- 6. Mention the different requirements to be considered while laying the table.
- 7. Give an account of miniature arrangement.
- 8. What are accessories? Write about the functions of accessories.

#### PART-B

#### **Answer FIVE questions. Each Question carries 10 marks**

(5x10 = 50 Marks)

9. a) What are the objectives of Interior Decoration?

(OR)

- b) Define harmony. What are the ways of creating harmony in a room?
- 10. a) Write in detail about Prang colour system.

(OR)

- b) Discuss Contrasting colour schemes.
- 11. a) Explain the principles of Art in flower arrangement.

(OR)

- b) Write about the different types of flower arrangements.
- 12. a) Discuss factors to be considered in the selection of furniture.

(OR)

- b) Describe the role of wall and floor finishes in interior decoration?
- 13. a) Write about the selection and arrangement of accessories.

(OR)

b) Explain the rules for laying the table for a formal party.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (Under CBCS W.E.F. 2021-22)

# HSC - 406 HOME SCIENCE EXTENSION AND COMMUNITY DEVELOPMENT

#### **Outcomes of the course**

At the end of the course, the students are able to learn:

#### A) Remember and explain in a systematic way

- Features of rural, urban and tribal communities
- Meaning of community development

#### B) Understands and Uses

- Importance of Programme Planning in organising community development programmes
- Planning lessons for specific groups

#### C) Critically explains

- Role of various Governmental and Non-Governmental agencies in Community development
- Objectives and services rendered by Governmental and Non-Governmental agencies to the community.

#### D) Working in out of prescribed areas under co-curricular activity

• Learn about Panchayat Raj set-up at different levels, by visiting and exploring with Government officials and village heads.

#### E) Practical skills

- Planning, Preparation and execution of lessons in the classrooms and community.
- Conducting project work on community development programmes.

## **B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER**

(under CBCS w.e.f. 2021-22)

## HSC - 406 HOME SCIENCE EXTENSION AND COMMUNITY DEVELOPMENT

Theory: 4Hours/Week Practicals: 2 Hours/Week

#### **THEORY**

#### **Unit 1 Program Planning**

- Definition, Objectives and Principles of Program Planning in Extension
- Steps in Program Planning
- Evaluation Principles, methods of evaluating individual and group performances.
- Methods to find out felt and unfelt needs of the community.

#### **Unit-II Lesson Planning**

- Characteristics of good lesson plan Pre-requisites and components of lesson planning.
- Planning lessons for a specific groups Women and Children
- Different topics for lesson plans Swatcha Bharath, Nutrition and health education.

#### **Unit-III Community Types and Their Characteristics**

- Features of Rural community
- Features of Urban community
- Features of Tribal community

#### **Unit-IV Community Development**

- Community Development Definition, Scope objectives Role of Functionaries
  - ➤ Panchayat Raj Systems in India (brief) Meaning, Definition, Democratic Decentralization
  - Five tier system of Panchayat Raj Village Panchayath –Functions
- Mandal Parishath Seven Committees (Planning, Production etc.,) Functions
- ZillaParishath Commitees, Functions- District, State and central level
- Extension organization in Panchayath raj set-up
- Concept of Welfare State, Directive Principles

#### Unit- V Government and Non-Governmental Organizations

- Government and Non- Governmental Organizations-Meaning and definition
- Role of organizations (Government and Voluntary ) for the development of people
- International Agencies WHO, CARE, UNICEF,
- National and Voluntary Agencies ICDS, RASS, KVK, DWCRA, MEPMA
- Local Level Voluntary Agencies, people's organizations at grass roots PASS

#### **PRACTICALS**

- 1. Plan an activity to create awareness among women and children of community surveyed according to their needs and interests Lecture cum group discussion
- 2. Field Visits Mandal Office, ICDS, Mahila Pranganam, PASS organization
- 3. Community development Need based group project work.

#### **REFERENCES**

- 1. A guide book for Anganwadi workers. Published by the department of women & child development. Ministry of Human resource development. Government of India.
- 2. Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers
- 3. Dahama.O.P. (1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.
- 4. Indhubala 1980), Gruhavignasastravistarana, Telugu academy text book publications
- 5. Adivi Reddy (1985). ExtensionEducation, Sreelakshmi press, Baptla,
- 6. Dubey, V.K.. (2009). Extension Education & Communication, New Age International Ltd
- 7. Sanths Govind, G. Tamliselvi And J. Meenainbigai. (2011). Extension Education and Rural Development .Agroblos (India) Chopasani Road Jodhpur- 342002 (Raj.)

#### **CO- CURRICULAR ACTIVITIES**

- 1. Prepare a model lesson plan to create awareness among women and children in the community surveyed.
- 2. Execute the lessons in the community.
- 3. Prepare a model/ method demonstration to educate the women on nutritious locally available foods and demonstrate in the community.
- 4. Visit to the ICDS office to acquaint with the services rendered and submit the report.
- 5. Visit to local NGO (Eg: PASS) organization to know the functions.
- 6. Visit to KVK, Mahila praganam to have awareness on different training programs given by the Government to the needy women.
- 7. Plan, organize and execute awareness program in the community at the end of the semester on nutrition and health education.

## B.Sc. DEGREE COURSE IN HOME SCIENCE IV SEMESTER (Under CBCS W.E.F. 2021-22)

## **HSC-406 HOME SCIENCE EXTENSION AND COMMUNITY**

#### DEVELOPMENT

#### MODEL QUESTION PAPER

Time: 3 hrs Max. Marks: 75

#### PART - A

#### Answer any FIVE questions. Each question carries 5 Marks

(5X5 = 25 Marks)

- 1. Write the objectives of program planning?
- 2. Elucidate the characteristics of a good lesson plan?
- 3. Explain the feature of tribal community.
- 4. What are the objectives of community development?
- 5. Functionaries of Panchayath Raj system.
- 6. Give an account of Felt and unfelt needs.
- 7. Write about KVK.
- 8. Enumerate steps in evaluation process.

#### PART - B

#### **Answer FIVE questions. Each Question carries 10 marks**

(5X10 = 50 Marks)

- 9. a) Define Programme planning. Explain the steps in Programme planning.
  - (OR)
  - b) Plan a programme to educate the rural people on "Swatcha Bharath".
- 10. a) What is lesson planning? Write about the pre-requisites and components of a lesson plan

(OR)

- b) Plan a lesson in detail on 'Green leafy vegetables' to educate the rural women and children.
- 11. a) What are the characteristics of Indian villages?

(OR)

- b) Discuss the features of urban community.
- 12. a) What is democratic decentralization? Describe the three tiers of Panchayath Raj system.

(OR)

b) Write functions of Zilla Parishath committees at different levels.

13. a) What are voluntary organizations? Write about the objectives and services rendered by any two voluntary organizations.

(OR)

b) Describe the role of DWCRA in the development of rural women.

## DOMAIN RELATED SKILL ENHANCEMENT COURSES (SEC)

## **Suggested By the Subject Committee**

## (TENTATIVE)

Semester V	HSC 501	Fruit and Vegetable Preservation (FN-6)	4	-	4
		Fruit and Vegetable Preservation Practicals	-	2	1
	HSC 502	Traditional Textiles and Fashion Designing (TEX-4)	4	-	4
		Traditional Textiles and Fashion Designing Practicals	-	2	1
HSC 503		Early Childhood Care, Education and Management (HD-4)	4	-	4
		ECCE Teaching practice Practicals	-	2	1
	HSC 504	Family Resource Management (HM-3)	4	-	4
		Family Resource Management Practicals	-	2	1
	HSC 505	Surveying and Reporting(EXT-3)	4	-	4
		Surveying and ReportingPracticals	-	2	1
	HSC 506	Food Service Management	4	-	4
		Food Service Management Practical	-	2	1
		Total Marks	36		30

## SYLLABUS VETTED BY

Prof. KARNAM ANURADHA, M.Sc., M. Phil., Ph.D. BOS CHAIRPERSON

## Department of Home Science Sri Venkateswara University TIRUPATI.

## SUBJECT EXPERTS

S.No	DOMAIN COURSES		SUBJECT EXPERTS
1	Food Science and Nutrition (FN)	1.	<b>Dr. K. V. Sucharitha</b> , Asst. Professor, Dept. of Home Science, S.V .University, Tirupati.
		2.	<b>Dr. K. Manjula,</b> Asst. Professor, Dept. of Home Science, S.V .University, Tirupati.
		3.	Mrs. B. Sandhya Lakshmi, Lecturer in Home Science, Osmania College for women, Kurnool.
		4.	<b>Dr. G. Nagamani,</b> Lecturer (Contract), Dept. of Home Science, S.P.W Degree and PG College, Tirupati
2	Human Development (HD)	1.	<b>Dr. C. Kalapriya,</b> Asst.Professor Dept. of Home Science, D.K.Govt. College for Women(A), Nellore.
		2.	<b>Dr. B. Swaroopa Rani</b> , Asst. Professor Dept. of Home Science, S.V .University, Tirupati
3	Textiles and Apparel Science (TEX)	1.	<b>Dr. P. Kumari,</b> Professor, Dept. of Home Science, S.P.W Degree and PG college, Tirupati.
		2.	<b>Mrs. G. Srivani,</b> Lecturer (Contract), Dept. of Home Science, S.P.W Degree and PG College, Tirupati.
		3.	<b>Dr. C. Kalapriya,</b> Asst.Professor Dept. of Home Science, D.K.Govt. College for Women(A),, Nellore.
4	Housing and Family Resource Management (HM)	1.	<b>Dr. V. Lakshmi,</b> Asst.Professor, Dept. of Home Science, S.P.W Degree and PG College, Tirupati.
		2.	Mrs. B. Sandhya Lakshmi, Lecturer in Home Science, Osmania College for women, Kurnool.
5	Extension and Community Development (EXT)	1.	<b>Dr. P. Kumari,</b> Professor, Dept. of Home Science, S.P.W Degree and PG college, Tirupati