

Fundamentals of Food and Nutrition - F.N. – 101

CC-1

2+2=4

(MARKS 15-35)

Objectives:

- To aware the students about afferent food groups and major foods.
- To acquaint the students about the different nutrients of the food and its sources.
- To aware the students about deficiencies of different nutrients, its effect on body, treatment.

Unit – 1

A. Introduction of food and nutrition.

- Definition of food, classification of food, functions of food, food as a source of nutrients. Definition of nutrition, nutrient, Health sign of good and poor nutrition, about problems related to nutrition. Relation between food,nutrition and health. Factors affecting on food and nutrition(economical, social and psychological).

B. Basic food groups.

- Cereals and pulses.
- Milk and milk products, vegetables and fruits.
- Sugar and Jaggery, Meat, Fish, Poultry, Condiments and spices
(their nutrient contribution)

Unit – 2 Nutrients of food

A. Carbohydrates

- Classification, Functions of carbohydrates, Importance sources of carbohydrates and its requirement.

B. Lipids

- Classification and functions, Properties and rancidity of fat,Sources and requirement and deficiency of fat.

Unit – 3

A. Protein

- Definition, chemical composition, classification and function of protein, Amino acids classification, essential amino acids and non essential amino

acids. Nutritional significance of Amino acids, sources and requirement of protein and deficiency of protein.

B. Energy

- Definition and unit of energy, energy yielding food factors, energy requirement, determination of energy by bomb calorimeter, gross energy value of food.
- Physiological energy value of food, Basal metabolism, definition, standard for BMR, factors affecting BMR, determination of BMR by Benedicts and both apparatus, determination of energy metabolism during work by max plank respirometer.

Unit – 4

(A) Vitamins & Minerals

- Classification and general functions of vitamins and Minerals.
- Fat soluble vitamins A,D,E,K and deficiency diseases of fat soluble vitamins.
- Water soluble vitamin B₁, B₂, B₆, deficiency diseases of water soluble vitamin.
- Sources, Requirement, Functions and Deficiency of Calcium, Phosphorus, Iron, Iodine.

(B) Cooking methods- Objectives, principles, preparation and methods.

- Effect of cooking on nutrients.
- Measurement techniques and equivalent measurements.

Practical:

- Preparation of different nutrient rich recipe.
- Planning and preparation of carbohydrate rich diet.
- Planning and preparation of protein rich diet.
- Planning and preparation of energy rich diet.
- Planning and preparation of vitamin D rich diet.
- Planning and preparation of vitamin B₁ and B₂ rich diet.
- Planning and preparation of vitamin C rich diet.
- Planning and preparation of vitamin calcium rich diet.
- Planning and preparation of vitamin Iron rich diet.

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- 3) The rov well Williams, essentials of nutrition and Diet therapy, fifth Glition, Tinu mirror / Mospo company, westline industrial prive, St. Louis Missouri – 1990.
- 4) Hand book of food preparation CFTR1.
- 5) E. Gopalan; B.V ramsastri, nutritive value of Indiam foods, national institute of nutrition, Indian council of Medical Researal, Hyderabad – 7.

INTRODUCTION TO TEXTILES AND CLOTHING
CONSTRUCTION - C. T. (102)

CC -2

2+2=4

(MARKS 15-35)

Objectives:

- 1) To gain an understanding about textile fibers and its properties.
- 2) To train by giving basic needle work for clothing construction.
- 3) To aware the students about sewing machine, measuring methods and construct the basic stitches.
- 4) To impart knowledge about different laundry reagent and their importance in laundry.

Unit-1

(A) TEXTILE FIBERS

- A) Definition and classification.
- B) Textile terminology.

(B) NATURAL FIBERS-COTTON, LINEN, SILK, WOOL MINOR, FIBERS.

- (A) Origin
- (B) Physical properties
- (C) Chemical properties

Unit-2

(A) YARNS

1. Spinning Process-Maul and ring
2. Twist of yarn and count
3. Types

(B) WEAVES

1. Definition
2. Types-Basic and fancy

(C) FABRIC CONSTRUCTION

1. Types-Weaving, Felting Knitting
2. Process

Unit-3

- 1) Clothing Construction- , Sewing machine - its parts, Care, Common defects and it's repairing, Tools for clothing construction, Measuring tools, Marking tools
- 2) Cutting and Stitching tools, Finishing tools, Switches for clothing construction, Temporary, Permanent, Decorative, Clothing construction-II, Types and its
- 3) Finishing, Fullness - Darts, Tucks, Pleats, Gathering, Shearing, Smoking, Princes line, Godet., Repairing and mending of cloths, Sleeves and cuff finishes
- 4) Neckline finishes, Fasteners

Unit-4

(A) Laundry Science

1. Methods-wet and dry washing
2. Tools and equipments
3. Stain removal

(B)

1. Washing of various fabrics-cotton Linen, silk and wool
2. Reagents-water, detergent, soap, starch, blue, belch

(C) Textile finishes

1. Importance
2. Types-Mechanical and chemical

Particles :

(A) To Study the fiber identification-cotton, Linen, Wool, Silk, Nylon and Polyester.

(B) To study the identification of yarns.

(C) To study different types of weaves - plain, rib, basket, twelve, huckaback, satin, sateen.

(D) To Study the sewing machine and it's up keep ment.

(E) To Study the different tools in clothing construction.

(F) To Study different stitches used in clothing construction.

- Temporary - Even basting, uneven basting diagonal basting.
- Permanent stitch - Running back stitch, overcasting.
- Decorative stitch - stem, chain, herringbone, Feather, Lezydazy, Stain, Cross buttonhole, Fish bone.

(G) To Study different seams - Plain, Flactfail, French, pepped topstitch.

- (H) To study fullness in cloths - Dart, tucks, Pleats, gathering, smoking.
- (I) To study renovation of cloths - darning and patch.
- (J) To study the fastners - button - hole, huck-eye, clips.
- (K) To study the stain removal
- (L) To study of washing & finishing process of cotton, wool & synthetic Fabric.

Reference

1. Textile fiber and their use - Hess.
2. Household Textile and Laundry work. Durgha Deulkar.
3. Fundamental's of textile and their cara Sushila Dant yagi
4. Basic Process and clothing construction Serie, Doonfaji
5. Fabrics - Denny
6. Modern home laundry work - Shonney and J. O. Byeety
7. Textile Fiber to Fabric Corbman
8. Guide to Sewing-Reader digest.
9. SIVAN MARG DARSHAN - Nirmala Mistri
10. Comparative clothing construction technique- Virginia Lewis
11. Textbook of home science - Sushma Gupta and Neeru gorg.

GENERAL BIOLOGY - BIO – 103

CA-1

2+2=4

(MARKS 15-35)

Objectives

- (C) To impart basic understanding of biology and introduction to living beings and plants.
- (D) To introduce basic topics like cell structure and cell division process.
- (E) To impart knowledge about morphology of typical flowering plant and plant physiology.

Unit – 1

A)General Biology

- Introduction and scope of biology
- Cell plant cell, animal cells its structure and difference between the two.
- Cell Division.

B)Morphology

- Morphology of typical flowering plant.
- Flower its structure and function, fertilization and pollination.
- Root, types of root, modification for special function.

Unit – 2

(A) Stem and leaf

- Function of stem, modification for special function.
- Leaf its parts function and types of leaf.
- Modification of leaf for special functions.

(B) Seed fruit

- Seed, structure of monocot and disco seed.
- Seed germination and its types.
- Fruit:- types of fruit.

Unit – 3

(A) Plants

- Classification of plants kingdom.
- Plant tissue

(B) Plant physiology

- Osmosis and plasmolysis
- Photosynthesis
- Respiration

Unit – 4

(A) Animal classification

- Classification of animal kingdom
- Study of different phylum's
- Body organization in animals

(B) Animal tissue

- study of epithelial tissue
- study of connective tissue
- study of nervous tissue

Practical

- (A) Study of compound microscope.
- (B) Study of typical flowering plants.
- (C) Study of flower
- (D) Study of plant tissue
- (E) Study of animal tissue
- (F) Classification of plant kingdom
- (G) Identification of different worms
- (H) Identification of different insects
- (I) T.S. of sunflower stem, sunflower root
- (J) T.S. of maize stem
- (K) Preparation of onion cell slide.

Reference books:

- 1) Botany – A C Dutta
- 2) Text book of Gujarat Secondary Board.

ELEMENTARY AND APPLIED PHYSICS - PHY – 104

CA – 2

3+0=3

(MARKS - 70)

Objective:

- 1) To give knowledge about physical unit & unit system.
- 2) To provide basic understanding of application of physics in Home Science.
- 3) To aware students on all the necessary rules and laws of physics which are required to be known to home science students.

Unit – 1

- Introduction: - Meaning, importance, branches and scope.
- Physical quantities, its units and unit systems.
- Motion:- basic concepts related to motion new tons laws of motion.
- Force:- Introduction, classification
- Common understanding of density, Mass, Weight.

Unit – 2

- Work, power & energy.
Definition, unit, types of energy conservation of energy.
- Heat & temperature :
Meaning, measurement.
- Heat conduction, expansion.
- Specific and latent heat.
- Sound and waves:
- Types / classification and properties, Infrasonic sound, ultrasonic sound its use, echo.

Unit – 3 Light

- Nature, properties of light.
- Reflection, reflection of light through lens, prism and mirror.
- Dispersion of light.
- Colours: Basic colours, spectra, rain bow.
- Electricity and Magnetism.
- Concepts related to magnetism and electricity.
- Application of magnetism & electricity.
- Battery – Types of battery, Door bell, Generator, Electric motor etc.

Unit – 4 Instruments used in laboratory.

- Spectrometer, PH meter, colorimeter, centrifuge.
- Techniques of separation.
- Electrophoresis, chromatography.
- Radiation :- classification, properties and uses.
- Nano technologies: Introduction & uses.

ELEMENTS OF ECONOMICS - ECO- 105

ES – 1

2+0=2

(MARKS - 35)

Unit –1 :

Introduction of Economics:

- a. Nature, scope and importance of Economics
- b. Division of Economics
- c. Methods of Economics
- d. Economics- types, problems and functioning of economics

Unit –2: Fundamental Concepts:

- a. Goods and services
- b. Utility
- c. Value and price
- d. Health and welfare
- e. Income, saving and investments
- f. Types of equilibrium

Unit –3: Human Wants:

Origin, characteristics and classification and consumer behaviors, Elementary idea about

- a. Concepts of marginal utility
- b. Law of Diminishing marginal utility
- c. Law of substitution
- d. Indifference curve
- e. Consumer surplus

Unit –4: Demand and Supply:

Elasticity of demand

Market: Types of market, types of purchasing, sales promotion technique

FUNDAMENTALS OF SOCIO – SOC - 105

ES – 1

2+0=2

(MARKS - 35)

Objectives:

- 1) To aware the students about afferent food groups and major foods.
- 2) To acquaint the students about the different nutrients of the food and its sources.
- 3) To aware the students about deficiencies of different nutrients, its effect on body, treatment.

Unit – 1

- (A) Sociology – as a School of Thought
- (A) Emergence and Development of Sociology,
- (B) Scope of Sociology,
- (C) Branches of sociology,
- (D) Relation of Sociology with other social science
- (B) Basic Concept of Sociology
- B) Characteristics of Social Standards,
- C) Basic Concept of ‘Society’,
- D) Social Status and Role,
 - (C) Individual and Society
 - (D) Culture , Definition of Culture,
 - (E) Civilization , Meaning, scope of civilization,
 - (F) Agencies of socialization.

Unit – 2

- Type of Social Institutions – Family, Marriage, Economic, Political, Religion, Education,
 - (G) Meaning Divination, Characteristics, Functions and types of Social Institutions,
- Research Methods in Sociology
 - (H) Meaning, Scope, Importance, Process and different methods of social research

Unit – 3

A.

Society

(I) Meaning, characteristics of social system, Function and Dysfunction,

Caste System

(J) Meaning, characteristics, define class and its different from the cast.

(K) Define race and tribal communities

B. Social Processes and social change

(L) Interaction and types of interaction

(M) Social change – its meaning and factors responsible for social change

(N) Social evolution – meaning and stages

C. Environment and Society

Unit – 4

- Contribution of Sociologists
- The Demographic Structure in India
- The Scheduled caste, The Scheduled tribe and other Backward classes.
- Social structure
- Women in India.

Art & Craft - AC 106

EG – 1

0+2=2

(MARKS - 35)

Objectives:

1. To acquire knowledge to students for various Indian arts & craft.
2. To provide knowledge regarding types of art made.
3. To acquired knowledge related to craft skill.

Contents

1. To visit any centre of exhibition related to art and craft.
2. Bandhani (Tie & dye).
3. Batik (Cold & dye).
4. Painting (Fabric and glass).
5. Printing (Stainsil, block and vegetable printing).
6. To use waste materials and made efforts for best sample.
7. To collect designs of jewelry by different materials.
8. To collect various embroidery sample

BEAUTY THERAPY AND HAIR CARE- B.H.- 106

EG -1

0+2=2

(MARKS – 35)

OBJECTIVES:-

- (A) To develop skill in students for professionals.
- (B) To enrich knowledge of students regarding skin treatment and hair treatment.
- (C) To develop care of self grooming.

PRACTICAL

- (1) Skin Theory,
- (2) Home Care Recipes For Skin And Hair,
- (3) Basic Facials,
- (4) Waxing
- (5) Hair Disorders,
- (6) Shampooing,
- (7) Conditioning,
- (8) Henna Application,
- (9) Roller Setting,
- (10) Crimping,
- (11) Ironing,
- (12) Hair Cuts,
- (13) Hair-Styling,
- (14) Day Makeup, Evening Makeup, Engagement Makeup And Party Makeup.

COMPUTER APPLICATION - C.A. – 107

FE – 1

0+2=2

(MARKS - 35)

Practical

1. Introduction to Computer.
2. M.S. Word
3. M.S. Excel
4. M.S. PowerPoint.
5. Internet.

COMMUNICATION SKILL – C.S- 107

FE – 1

0+2=2

(MARKS - 35)

OBJECTIVES :

- (A) To develop understanding regarding the vital aspects of communication and various Audio & Visual media & their use.
- (B) To develop understanding regarding the new communication technologies & their use.
- (C) To develop skills in developing & using different communication technologies for various presentations.
- (D) To develop knowledge of communication methods & media for rural development.

PRACTICAL

1. Preparation of various communication media & their application for community development.
2. Correspondence technique.
 - Letter writing.
 - Application writing
 - Telephonic talk
3. Basic conversation tact
 - Byer - Seller
 - Hotel manager Costumer -
 - Other oral communication

REFERENCES :

- Chatterjee, p.c. (1988) Broad Casting in India, New Delhi, Sage publications.
- Berger,C.R. & chuffee,sceds (1987) : Handbook of communication science, sage publication, New Delhi.
- Brown, J Lewis, R and Harclerod, F (1985): All instruction : Technology media and methods, Mcgraw Hill, New Delhi.
- Benerjee (eds) (1985) : Culture & Communication, Pariot Publishers, Delhi.
- Ellington, H (1985) : A Hand book of Educational Technology, Kogan Page, London.