T. Y. B. Sc (Home Science) syllabus  
Major General Home Science  
Semester V & VI  

Updated June - 2018  

Dr. Veena S. Sarma  
Chairman  
General Home Science  
Board
### Annexure 'A'

#### Examination Coding Details

**B.Sc (Home Science) Semester – V**  
**General Home Science**

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CC-Core Course  DSE-Discipline Specific Elective  SEC-Skill Enhancement Course
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**Effect from Academic Year 2018-2019**

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T.Y.B.Sc. (Home-Science) (MAJOR – GENERAL HOME SCIENCE)
SEMESTER – V
CANTEEN MANAGEMENT PAPER NO.1
(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

OBJECTIVES –
To enable students to
1 To Understand the Principles of canteen management .
2 Prepare for canteen Jobs.

THEORY

Unit-I A Introduction to canteen management
a. Meaning
b. Importance
c. Characteristic of Canteen Management

B. Steps for canteen management
a. Planning
b. Organising
c. Directing
d. Co Coordinating
e. Controlling
f. Evaluating

Unit-II Purchasing, storage & cooking
a. Purchasing, Receiving & Storage
b. Cooking & Presentation technique.
c. Hygiene sanitation & safety

Unit – III Menu Planning and Food Service
a. Introduction, Definition & Need of Menu Planning in Canteen.
b. Steps of Menu Planning in canteen Preparation
c. Principles and types of Menu planning in canteen management
d. Types of food service

Unit-IV Training & Account Keeping
a. Meaning of training
b. Need of Training
c. Planning of Training programme for helpers
d. Account keeping - types, Advantages and disadvantages.
Unit- V Cost & Serving Balance
a. Importance of Food cost control
b. Factors affecting on Food cost control.

Unit- VI Interior decoration of Canteen in Relation to Selection of
a. Color
b. Lighting
c. Music
d. Window curtains
e. Picture
f. Table setting
g. Floor Covering
h. Flower arrangement
i. Furniture arrangement
j. Wall Covering

PRACTICAL:
1. Planning your own college canteen for students allotted various duties to students in group like cook, senator officers, accountant, cashier, purchaser, helpers its. Write in systematic way
2. Running your own college canteen for requirement. (One day / Three Days/ One Week
3. Plan and prepare an ideal canteen and its arrangement (On Graph paper)
4. Arrange table setting and prepare Menu card for tea party/ buffet/ children party/ any other occasion
5. Visit to hostel, hotel, restaurant, mess and prepare report in details with: Area of the food institute, use of furnishings, menu card, furniture arrangement, staff and their duty (cook, manager, receptionist, cashier, waiters, servants etc.), dress code for workers, storage area, interior designing, accounting system, sanitation and hygiene. Atmosphere of the food institute and other details if any

RECOMMENDED READINGS:
- Running your Own Restaurant.
- Catering in schools and college
- Hotel Management.
T.Y.B.Sc. (Home-Science) (MAJOR - GENERAL HOME-SCIENCE)

SEMESTER - V

RESEARCH AND DOCUMENTATION PAPER NO.2

(CREDITS: THEORY - 4, PRACTICAL - 2, TOTAL - 6)

OBJECTIVES –

To enable students to

1. Understand the fundamental principles of methodology concerning research;
2. Prepare research tools applicable to developmental issues;
3. Develop skills in documentation

THEORY

UNIT - 1 Research

1.1 Introduction
1.2 Meaning and definition of research
1.3 Characteristics of social research
1.4 Objectives of research
1.5 Role of research in Home-science

UNIT - 2 Main steps and importance of research

2.1 Introduction
2.2 Major steps of social research
2.3 Importance of research
2.4 Types of social research
   2.4.1 Pure research
   2.4.2 Applied research

UNIT - 3 Hypothesis of Research

3.1 Introduction
3.2 Meaning and definition of hypothesis
3.3 Characteristics of hypothesis
OBJECTIVES
1) To know about the role of development communicator in developing NGO
2) To teach students how to start NGO.
3) To understand about NGO Management

THEORY:

Unit 1 Concept of NGO
1.1 Meaning of NGO and GO
1.2 Difference between Government Organizations and NGO
1.3 Characteristics of good NGO
1.4 Structure of NGO
1.5 Function of NGO
1.6 Historical Perspective of NGO
1.7 Advantages of NGO
1.8 Present status of NGO
1.9 Contribution of NGO in the Development
1.10 Role of Development Communicator in developing NGO

Unit 2 Starting of NGO
2.1 Steps for starting NGO
2.2 Registration of NGO
2.3 Selection of Personnel
2.4 Training of Personnel
2.5 Proposal writing under NGO
2.6 Identifying Funding agencies
2.7 Resource Mobilization
2.8 Planning, Implementation and Evaluation strategy under NGO
2.9 Documentation
2.9 PR in NGO

Unit 3: NGO Management
3.1 Organizational types and structures
3.2 Managing people and teams in NGOs
3.3 NGO management competencies
3.4 Applying NGO principles and values
3.5 Accountability and impact assessment for NGOs
Unit 4 Problems of NGO
  4.1 Training
  4.2 Recruitment
  4.3 Funding
  4.4 Resource Mobilization
  4.5 Documentation

PRACTICAL
1. Visit of Local NGO
2. Studying the Annual report of NGOs
3. Studying the ongoing Activities
4. Studying the problems

PROJECT WORK
Visit/or invite to any one NGO/worker and collect the information about How to start NGO and which procedure is require for its registration and other documentations and need of many more details.

RECOMMENDED READINGS
1) S. Chandra, Guidelines for NGO Management in India (2003), Published by Kanishka Distributors, New Delhi
4) Sundar, P. 2013, Business and Community: The Story of Corporate Social Responsibility in India, New Delhi, Sage Publication.
5) Aggarwal, S. 2008, Corporate Social Responsibility in India,
T.Y.B.Sc. (Home-Science) (MAJOR – GENERAL HOME SCIENCE)
SEMESTER – V
PRINCIPLES OF EARLY CHILDHOOD EDUCATION
(PAPER NO. 4)
(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

OBJECTIVES:
1. To know importance of early childhood years and significance of intervention programs for early child development.
2. To develop insight into historical developments both globally and in India.
3. To understand meaning of curriculum and various components to be included in the daily program to promote all round development of children.
4. To recognize role of play in children's development and its use as a medium for working with children.

THEORY:

Unit : 1 Significance and objectives of Early Childhood Care and Education
1.1 Present status of young children in India
1.2 Significance of Early Childhood years in individual's development

Unit : 2 ECCE Program
2.1 I.C.D.S.
2.2. Creche
2.2 Day care

Unit : 3 Historical overview of ECCE
3.1 Global perspective, view of Educations and philosophers
3.2 Rousseau, Pestalozzi, Frobel, Montessori

Unit : 4 ECCE in India:
4.1 Overview of pre and post independence period
4.2 Contributions of Ravindranath Tagore, Mohandas Gandhi, Gijubhai badhela, Taraben Modak

Unit : 5 Curriculum for ECCE
5.1 Meaning of curriculum
5.2 Foundation of curriculum development
5.3 Sample of curriculum of ECCE

Unit: 6 Play
6.1 Play as means of development and learning
6.2 Overview of theory of play
6.3 Types of play
6.4 Involve the play of ECCE program

**PRACTICAL**

Practical : 1 prepare of Education game for Early childhood children's
Practical : 2 Arrange the lecture on C.D.P.O. (Child Development Program Officer) and visit for ICDS centre (anganwadi)
Practical : 3 Visit for Creche or Day care
Practical : 4 Visit for ECCE centre (Pre primary.Centre)

**REFERENCE**

1. Up and About 20 Activities for primary school – Atma Vidya Education Foundation.
2. Play activities for young children – Swaminathan.
3. Stimulation activities for young children – Murliharan R. Ashana
T.Y.B.Sc. (Home-Science). (MAJOR – GENERAL HOME SCIENCE)
SEMESTER – V
ADVANCE CLOTHING CONSTRUCTION PAPER NO.5

(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

OBJECTIVES
1. To able the students to equip them with techniques
2. Acquaint with the various step involved in the apparel making
3. To improve the skill in garment making
4. Prepare the garment as per measurement using appropriate tool, machine and technique

THEORY
Unit : 1 Introduction to body measurement
1.1 Meaning of Standard measurement
1.2 Standard measuring points of body parts
1.3 Eight heads theory

Unit : 2 Introduction to pattern making
2.1 Methods of pattern making
2.2 Drafting
2.3 Paper Pattern
2.4 Block Pattern
2.5 Lay Out

Unit : 3 Preparatory steps for garment construction
3.1 Fabric for apparel making
3.2 Preparation for cutting for garments construction
3.3 Width of fabric

Unit : 4 Seams and finishing
4.1 Type of Seams
4.2 Finishes of Seams

Unit : 5 Study of garment components
5.1 Classification and application
5.2 Types of Sleeve
5.3 Types of collars
5.4 Types of necklines
5.5 Types of pockets

Unit: 6 Design & Fitting
   6.1 Designing for different figure types
   6.2 Fitting guidelines
   6.3 Fitting Problems
   6.4 Fitting Remedies

PRACTICAL

1. Application of different types of Seams
2. Bodice Block -- Adult Bodice Block, Child Bodice Block
3. Construction of skirt/Salwar for self
4. Construction of top/kurta for self
5. Project Work: Sketch of Sleeves
   Sketch of Collars
   Sketch of Pocket
   Sketch of Neckline

RECOMMENDED READINGS

T.Y.B.Sc. (Home-Science) (MAJOR - GENERAL HOME SCIENCE)  
SEMESTER - V  
NUTRITION AND FITNESS  PAPER NO. 6  
(CREDITS: THEORY - 4, PRACTICAL - 2, TOTAL - 6)  

OBJECTIVES  
1) Understand the concept of diet and health.  
2) Know the importance of nutrition.  
3) Gain knowledge about physical activity and weigh management.  

THEORY:  
UNIT : 1 - Understanding Fitness  
1.1 Definition of fitness, health and related terms  
1.2 Assessment of fitness  
1.3 Approaches for keeping fit.  

UNIT : 2 - Importance of nutrition  
2.1 Role of nutrition in fitness  
2.2 Nutritional guidelines for health and fitness  
2.3 Nutritional supplements.  

UNIT : 3 - Importance of Physical activity  
3.1 Importance and benefits of physical activity.  
3.2 Physical Activity – frequency, intensity, time and type with examples.  
3.3 Physical Activity – Guidelines and physical activity pyramid  

UNIT : 4 - Weight Management  
4.1 Assessment, etiology, health complications of overweight and obesity.  
4.2 Diet and exercise for weight management  
4.3 Fad diets  
4.4 Principles of planning weight reducing diets  

UNIT : 5 - Sports Nutrition  
5.1 Introduction  
5.2 Endurance and ultra Endurance athletes and nutritioonal requirements of athletes  
5.3 Nutrition before, during and after exercise  

UNIT: 6 - Role of yoga in fitness  

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6.1  What is yoga
6.2  Brief history and development of yoga
6.3  The fundamentals of yoga
6.4  Yogic practices for health and fitness
6.5  General guidelines for yoga practice

Practical

1. Assessment of fitness status during rest and after exercise for different age group using anthropometry. (any five sample in each group)
   1. Pulse rate
   2. Blood pressure
   3. Waist circumference
   4. Arm circumference
   5. Hip circumference
   6. Height, weight and BMI

2. Technique of yoga and its benefits (any ten yoga)
3. Market survey of different nutritional supplements
4. Visit of fitness club
5. Preparation of energy drink in laboratory (any two)
6. Preparation of low calorie diet in laboratory (any two)

RECOMMENDED READINGS

- Williams Melvin, Nutrition for health, fitness and sports, 2004 Mc Grow Hill.
- Joshi AS, Nutrition and Dietetics 2010, Tata Mc. Grow Hill
T.Y.B.Sc. (Home-Science) (MAJOR- GENERAL HOME SCIENCE)
SEMESTER –V
MICROBIOLOGY     PAPER NO. 7
(CREDITS: THEORY-4, PRACTICAL -2, TOTAL-6)

OBJECTIVES

1. Basic understanding and application of Microbiology in medicine, industry and environment.
2. Gain deeper knowledge of role of Microorganisms in human and environment.

THEORY:

Unit 1: Introduction to Microbiology
1.1 Brief History- Contribution of various scientists in establishment of Microbiology as a discipline.
1.1.1 Invention of Microscope
1.1.2 Germ theory of Fermentation, decay and disease.
1.2 Scope of Microbiology- Economic, Industrial and Medical.

Unit 2: Types of Microorganisms
2.1 Structure and Economic Importance of: Virus, Bacteria, Fungi (Including Yeast), Algae and Protozoa.
2.2 Cultivation of Microorganisms in the laboratory. Types of cultivation media used.

Unit 3: Sterilization
3.1 Physical methods
3.2 Chemical Methods

Unit 4: Immunity
4.1 Definition of Antigen and Antibody
4.2 Immune body Formation
4.3 Classification of Immunity
4.4 Brief understanding of Autoimmune Disease- Rheumatoid Arthritis, Type 1 Diabetes, Psoriasis

Practical:

1. Study and care of Compound Microscope and it’s parts.
2. Study of Microbiology laboratory Instruments: Autoclave, Hot Air Oven, Incubator and Centrifuge.

3. Study of permanent slides:
   A. Fungi: Aspergillus, Rhizopus, Mucor
   B. Protozoa: Amoeba, Euglena, Paramecium
   C. Algae: Spirogyra

4. Wet Mount Preparation of Yeast

5. Examination of Food Samples for Food Spoilage: Bread, Vegetables, Fruits, Pickles.

RECOMMENDED READINGS


3. Microbiology ane khadyavignan ma teni agatyata by Gira mankad, Publisher; Saurashtra University, Rajkot
OBJECTIVES
1. Study of textile craft
2. To improve knowledge about Woven, Embroidery, Printed, Dyed textile
3. Status of Handloom & Handcraft

THEORY

Unit: 1 Study of Textile Crafts of India: with reference to history, production centers, techniques, designs, colours and products
  1.1 Woven Sari
  1.2 Banaras Brocades
  1.3 Jamdani
  1.4 Baluchars
  1.5 Pathani
  1.6 Chanderi
  1.7 Kanjivarm
  1.8 Vichitraapuri
  1.9 Patpola, Badhni, Laheria

Unit: 2 Woven Shawls
  2.1 Kashmir
  2.2 Panjabi
  2.3 Kachchhi
  2.4 Arunachal

Unit: 3 Embroidered Textiles
  3.1 Kanthas of Bengal
  3.2 Phulkari of Punjab
  3.3 Kashmiri work of Kashmir
  3.4 Gujarat emboiderries
  3.5 Shadi work of Lakhnaun

Unit: 4 Painted and Printed textiles
  4.1 Kalamkari of Andhra pradesh
  4.2 Ajrakh of Gujarat
  4.3 Bandhani of Gujranat
  4.4 Varli Printed

Unit: 5 Cottage Industries – “Khadi Udhyog”
  5.1 History of Khadi Udhyog
  5.2 Types of Khadi
  5.3 Use of Khadi
  5.4 Current fashion trends of Khadi in global market
PRACTICAL

1. Embroidery stitches of traditional embroideries – Any Three
   1) Kanthas of Bengal
   2) Phulkari of Punjab
   3) Kashmiri work of Kashmir
   4) Gujarat embroideries
   5) Chikankari of Uttar Pradesh
   6) Applique work of Bihar

2. Traditional textile crafts (Power Point Presentation- any one)
3. Collection and information of Painted/printed Photograph/ Picture
4. Visit to craft centers
   1. Khadi unit
   2. Handloom industry
   3. Handicraft sector

RECOMMENDED READINGS

1. Care and Presentation of Museum projects Agarwal, O.P., 1977, – II, NRL
OBJECTIVES

To enable student,
To aware knowledge of house hold gardening and its designing

THEORY

Unit : 1 Introduction
1.1 Principles of gardening
1.2 Knowledge of Types of plant and soil
1.3 Cultivation of soil
1.4 Importance of gardening
1.5 Drainage, surface & subsoil
1.6 Watering
1.7 Transplanting
1.8 Potting

Unit : 2 Garden Design
2.1 Selection of site – Different types of soil
2.2 Water
2.3 Layout
2.4 Rock garden
2.5 Rosary
2.6 Water garden
2.7 Terrace garden
2.8 Kitchen garden

Unit : 3 Indoor Gardening
3.1 Cultivation and Maintenance of
3.1.1 Hanging plant
3.1.2 Climbers
3.1.3 Cacti
3.1.4 Flowering plant from bulb
3.1.5 Pot plant for foliage
3.2 Cultivation of lawn and its main Stenance
3.3 Propagation of plants by seed, grafting, budding, cutting and layering

Unit : 4 Methods of Cultivation of fruits and Vegetables
4.1 Lady finger, Beans, sweet potatoes, carrots, cabbage, onions and garlic, tomatoes, Brinjals, leafy vegetables.
4.2 Lemon, graps, Pomegranate Strawberry, Banana, guava.
Unit: 5 Fertilizers

5.1 Biofertilizers and chemical fertilizers.
5.2 Types of natural and chemical fertilizer and their use.
5.3 Common pests -- Common pests, Insects and their control.

PRACTICAL
1) Study of garden tools
2) Preparing plan for kitchen garden or home garden.
3) Preparing seed bed and seed sowing
4) Demonstration practical: Propagation by grafting, budding, layering.
5) Preparation of compost.
6) Cultivation and maintenance of indoor plants.
   -- Pot filling, cultivation.
   -- Maintenance of climbers and leafy vegetables -- methi, coriander, spinach, beans
7) Preparing flower beds

RECOMMENDED READINGS/WEBSITES
1) Gardening -- Premila Mehta.
2) Percy Lancaster's Gardening in India Revised by T.K. Bose S.D. Mukherjee
3) Complete Gardening in India -- K.S. Gopalswamy Iyenger (Bangalore)
4) Plant Propagation, Principles & Practice -- Hartmann H. & Kester D.E. (Prentice Hall of India
   Pvt. Ctd. New Delhi)
T.Y.B.Sc. (Home-Science) (GENERAL HOME SCIENCE) SEMESTER - VI
MEDIA FOR DEVELOPMENT PROJECT PAPER NO.3
(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

Objectives
To enable student to
1) Explore the use of different media in development projects.
2) Acquire skills in developing and using media in development projects.

Theory

Unit 1: Media Education in Indian Society
1.1 Media role to development of India
1.2 Role of Media in Indian Democracy
1.3 Challenges and Issues
1.4 Changing Role of Mass Media

Unit 2: Media Technology and Learning
2.1 Effective learning through technology
2.2 Design Media technology for Education
2.3 Media and Human Resource Development
2.4 Media and Social Networking
2.5 New Media Culture

Unit 3: Types of Media Education Tools
3.1 Radio - Digital Radio Revolution
3.2 Television
3.3 Video cassettes
3.4 Computer
3.5 Internet
3.6 Multimedia Packages
3.7 Tape slide Presentation
3.8 Teleconference
3.9 E-mail
3.10 Telecast
3.11 Advertising

Unit 4: Software in Folk Media
4.1 Types of folk media - music, dance, theatre
4.1.1 Folk music - the cultural, physical, intellectual, emotional, moral and spiritual value of music
4.1.2 Folk dances - varieties and their value in education

Unit 5: Software in Print Media
5.1 The press - social responsibility of the press media
5.2 Newspaper circulation and readership
5.3 Online, Newspaper and Magazines
5.4 Newspaper Categories - Daily, Weekly, National, International, Online
5.5 Role of Print Media

Practical
1) Designing communication strategies as part of the project. Select the media, prepare and apply them in the field.
2) Demonstrate some of the recorded folk forms i.e. puppetry/ Bhavai / Role play/ Street play or any other one.
3) Script writing for Radio/ TV/ Newspaper article.
4) Collect review of different forms of advertisement.
5) Prepare advertisement for commercial programs/ development programs

References
Mathur P (2009), 21st Century Media Environment, Delhi : Author Press
OBJECTIVES
1) Student will gain knowledge about the adolescents' relations and well-being.
2) Students will gain knowledge about development of adolescent.
3) To impart skill and knowledge about the adolescent problems and remedies for them.

THEORY
Unit : 1 Adolescent
1.1 Introduction and concept
1.2 Puberty

Unit : 2 Developments of Adolescent
2.1 Physical development (Sexual maturity)
2.2 Emotion development
2.3 Social development

Unit : 3 Adolescent Education
3.1 Introduction
3.2 Concept of Adolescent education
3.3 Need of Adolescent education
3.4 Role of Parents and Teacher in Adolescent education

Unit : 4 Sexually Transmitted Disease (STD)
4.1 Introduction
4.2 Characteristics of STD
4.3 Different types of STD
4.4 Gonorrhea and Cholaryngia
4.5 Syphilis
4.6 Bubo's
4.7 AIDS

Unit : 5 Reproduction Health
5.1 Drug abuse
5.2 Anemia – a health problem of adolescent
5.3 Gender Equality

Unit : 6 Family Planning
6.1 Meaning of Family Planning
6.2 Method of Family Planning

PRACTICAL
1. Expert Lecture – Adolescent Problem and its Solution
2. Making Chart/poster of AIDS
3. Lecture of Family Planning Councillor OR Visit of Family Planning Depotante
4. Group Discussion (Control of drug abuse)
5. Survey A study of problem rising up Adolescent
T.Y.B.Sc. (Home-Science) (GENERAL HOME SCIENCE)  SEMESTER-VI
HEALTH, HYGIENE AND HOME NURSING  PAPER NO.5
(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

THEORY

Unit 1 Personal Hygiene
Hereditary habits, Cleanliness, daily living, clothing, exercise, rest, eating and defecation

Unit 2 Community Hygiene
Air and ventilation – composition, changes due to respiration, changes due to combustion, smoke, dust and bacteria, Industrial impurities, Diseases due to impurities of air ventilation, examination of air.

Unit 3 Type of Fractures
Causes, types and symptoms, treatment of Fractures

Unit 4 Slings & Bandages
Application of Slings, Splint and various bandages, Dislocation, Sprain strain Signs, Symptoms and treatment

Unit 5 Wounds, Bites and Stings and their first Aid
Unit 6 Foreign body in eye, ear, and nose
Unit 7 Care of Sick person at home
a. Daily care – bed making, care of mouth, bed bath (sponging), giving medicine protection of patient and nurse
b. Making and occupied bed making the patient comfort in bed, use of back rest, cotton swab (pad) and pillow.
c. Feeding the patient, basic food requirements and needs of sick person, preparation of tray, helping the patient to have meals on improved bed table.
d. How to maintain medicine chart at minimum essentials, care of medical supply, dangers of self medication
   - Self disposal of old medicine, administering medicine following doctor’s prescription.
e. Filling up of hot water bag and ice bag, inhalation, applications of moist heat, poultice.
PRACTICALS
1. Bed making
2. Bandages
3. Poultice
4. Thermometer
5. First aid box
6. Food of patient – Liquid, Semi liquid, solid
7. Hot water bag, ice cap
T.Y.B.Sc. (Home-Science) (MAJOR – GENERAL HOMESCIENCE)  
SEMESTER – VI  
FOOD PRESERVATION AND FANCY COOKERY  
PAPER NO. 6  
(CREDITS: THEORY – 4, PRACTICAL – 2, TOTAL – 6)

OBJECTIVES-
To enable student to
1. To gain knowledge regarding principles of food preservation.
2. To prepare students for home scale production of preservation products such as jam, jelly, tomato ketchup etc.
3. To teach students different methods of food preservation.
4. To appraise the students of the latest development in food preservation.
5. To understand cookery as science.
6. To apply science to food preparation

THEORY
Unit – 1  
Introduction of Food Preservation
  1.1 Importance of food preservation
  1.2 Principle of food preservation

Unit – 2  
Methods of food preservation
  4.2 Bacteriostatic method – De-hydration, fermentation, freezing or Low temperature, salt, sugar, oil, vinegar, chemicals etc.
  4.3 Bactericidal method – Use of higher temperature, pasteurisation, canning, boiling, irradiation.

Unit – 3  
Food spoilage
  3.1 Food fit for consumption.
  3.2 deterioration of food quality – non perishable, semi perishable and perishable foods.
  3.3 Causes of food spoilage.

Unit – 4  
Preservation of food products, preparation and principles of preservation.
  4.1 Fruit juice and squashes.
  4.2 Jam, Jelly, Marmalade.
  4.3 Tomato products (Chutney and ketchup)
  4.4 Pickles

Unit-5  
Introduction to cookery
  5.1 Aims and Objectives of cooking foods
  5.2 Importance of Spices in Indian foods
5.3 Beverages

Unit -6 Cooking Materials

6.1 Foundation ingredients
6.2 Fats
6.3 Raising agents
6.4 Eggs
6.5 Salt
6.6 Liquid
6.7 Flavoring and seasoning
6.8 Sweetening
6.9 Thickening

PRACTICALS

Prepare the following food products in the laboratory

1. Syrup and Squash
2. Jam
3. Jelly
4. Marmalade
5. Pickles
6. Tomato ketchup
7. Beverage (Hot and Cold)
8. Soups
9. Desserts
10. Snacks

Reference:

6. M. Swaminathan, “Food Science, Chemistry and Experimental Foods”. 

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T.Y.B.Sc. (Home-Science) (MAJOR- GENERAL HOME SCIENCE) SEMESTER - VI

APPLIED PHYSIOLOGY PAPER NO. 7
(CREDITS: THEORY-4, PRACTICAL -2, TOTAL-6)

OBJECTIVES

The course will enable students to
1. Advance their understanding of scope of the relevant issues and topics of human physiology.
2. Enable the students to understand the integrated function of all systems and the grounding of nutritional science in physiology.
3. Understand alterations of structure and function in various organs and systems in disease conditions.

THEORY

Unit: 1 Homeostasis

1.1 Concept of Homeostasis
1.2 Role of Body system in maintaining Homeostasis

Unit: 2 Digestive System

2.1 Composition & function of saliva, gastric juice & intestinal juice.
2.2 Factors affecting secretion of digestive juice
2.3 Digestion of carbohydrates, Protein & lipids
2.4 Absorption in the small intestine & large intestine

Unit: 3 – Body temperature, Temperature Regulation

3.1 Normal Body Temperature
3.2 Heat Production & Heat loss
3.3 Regulation of Body Temperature

Unit: 4 BLOOD

4.1 Composition of blood
4.2 Blood cells – Types and functions
4.3 Coagulation of blood
4.4 Blood groups & Rh- factor
4.5 Blood pressure & factors affecting blood pressure
4.6 Structure of heart, junctional tissue & its regulation

UNIT: 5 Urinary System

5.1 Structure of Kidney
5.2 Structure of Nephron
5.3 Urine formation
UNIT: 6 Nervous System

6.1 Types of neurons
6.2 Transmission of nerve impulse in nerve fiber & synapse

PRACTICAL

1. Preparation of smear and identification of blood cell.
2. Demonstration of barn Body
3. Blood group and Rh -factor
5. Total count of WBC and RBC
6. Differential count of WBC
7. Measurement of blood pressure (After Exercise & during rest)
8. Abnormalities of urine- sugar, protein, bile salt, ketone bodies & blood
9. Measurement of body temperature and pulse rate (After Exercise & During rest)

REFERENCE BOOKS

1. Human physiology – C.C.Chatterjee
2. Human Physiology – Agrawal
3. Text book of Medical Physiology – Guyton
4. Essentials of Medical physiology- K. Sembulingam, Prema Sembulingam

\[ V. S. \text{ Summ} \]
\[ 11 \text{ June} \]

[Signature]

Chairman

General Huns Science Board