FACULTY OF SCIENCES

SYLLABUS

Of

Bachelor of Science (HOME SCIENCE)

(Semester: I to VI)

(Under Continuous Evaluation Grading System)

Session: 2021-22

The Heritage Institution

KANYA MAHAVIDYALAYA

JALANDHAR

(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. HOME SCIENCE

(Session 2021-2022)

Upon successful completion of this Programme, students will be able to:

PSO (1) - To develop holistic understanding about various fields of Home Science including Family Resource Management, Foods and Nutrition, Human Development and Family Relations, Clothing and Textiles

PSO (2) - To understand the fundamentals of house planning, kitchens, laws and terminology used in building of house, kitchen equipments and their applications.

PSO (3) - To develop understanding about developmental stages from infancy to old age and insight into different areas of human development including physical, motor, cognitive, social and emotional development.

PSO (4) - To gain knowledge about different diseases, therapeutic nutrition, food preservation and safety, role of dietician in feeding of patients.

PSO (5) - To develop deep understanding of conversion of textiles fibres into fabric undergoing various spinning, weaving, and finishing techniques.

PSO (6) – To demonstrate skill in using various surface ornamentation techniques as such as dyeing , printing and embroidery as well as garment design and construction.

PSO (7) – To develop Capacity to serve as dietician , child and family counsellors, designers, food therapies, and in many more community services.

PSO (8) – To make the students capable of oral and written communication.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME
Bachelor of Science (Home Science)
(Session 2021-2022)

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
BHSL- 1421/ BHSL- 1031/ BHSL-1431	Punjabi (Compulsory)/ [1] Basic Punjabi/ [2] Punjab History And Culture	C	50	40	-	10	3
BHSL-1102	Communication Skills in English - I	C	50	40	-	10	3
BHSL- 1283	Introduction to Human Development	C	50	40	-	10	3
BHSL-1284	Hygiene	C	50	40	-	10	3
BHSM-1285	Basic Food and Nutrition	C	100	60	20	20	3+3
BHSM-1286	Applied Art	C	100	60	20	20	3+3
BHSM-1127	Computer Basics	C	100	50	30	20	3+3
AECD-1161	*Drug Abuse: Problem, Management and Prevention (Compulsory)	AC	50	40	-	10	3
SECF-1492	*****Foundation Course	AC	25	20	-	5	
Total			**500**				

C : Compulsory
E: Elective
AC : Audit Course
1: Special paper in lieu of Punjabi (compulsory)
2: Special paper in lieu of Punjabi (compulsory) for those students who are not domicile of Punjab

*Marks of these papers will not be added in total marks and only grades will be provided.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
INTRODUCTION TO HUMAN DEVELOPMENT
(Theory)
COURSE CODE: BHSL-1283

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO (1) – To develop knowledge about the history and scope of human development.

CO (2) – To gain understanding about the principles of development.

CO (3) – To understand the factors affecting growth and development, learning and maturation.

CO (4) – To understand the importance of fertilization.

CO (5) – To gain knowledge about the symptoms, care and complication of pregnancy.

CO (6) – To identify the factors affecting prenatal development.

CO (7) - To gain knowledge about the care of new born.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
INTRODUCTION TO HUMAN DEVELOPMENT
(Theory)
COURSE CODE: BHSL-1283

Time:3 Hrs **Max. Marks: 50**
Theory: 40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 8 Marks.

CONTENTS

Unit-I

Introduction to the field of Human development.
· Definition
· Scope and opportunities.
· Brief historical perspective.
Growth and development
· Definition
· Principles of Development
· Factors affecting growth & development, heredity, environment, learning and maturation.
· General Characteristics of various stages of Human life

Unit- II

Pre-natal Development
· Definition
· Importance of Fertilization
· Stages of prenatal development.
· Time Table of prenatal development.
· Factors affecting prenatal development.
· Hazards during prenatal development.
· Symptoms of pregnancy.
· Care & Complication during Pregnancy.

Unit-III

Birth of a Baby
· Birth Process
· Complications during birth.
· Type of Delivery.
· Preterm babies – Characteristics and care
New born.
· Reflexes of a new born.
· Characteristics of new-born.
· Breast feeding & weaning.
· Immunization schedule of new born

Unit – IV

Care of the new born
· Equipments for nursery
· Bathing of child
· Sleeping schedules & making beds.
· Sterilization of feeders & other equipments. Psychological aspects of parenthood.
· Psychological fatigue after birth symptom and care
· Role of father during pregnancy & after birth

REFERENCES:

1. Child Development by Laura E Berk
2. Child Development by Rajamal P. Devdas
3. Human Development by Grace J. Craig .s

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
Hygiene
COURSE CODE: BHSL-1284
(Theory)

COURSE OUTCOMES

Co (1) – To develop the knowledge about health hygiene, personal hygiene and immunity with its type.

CO (2) – To understand the knowledge about disease caused by Typhoid, Jaundice, Cholera, Diarrhoea, Measles and mumps.

CO (3) – To understand the knowledge about disease caused by vectors malaria, dengue, modes of spread, incubation periods with its symptoms and prevention.

CO (4) – To develop the knowledge about disuse caused by sexual contact HIV-AIDS and Eczema.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
Hygiene (Theory)
COURSE CODE: BHSL-1284

Time: 3 Hrs. **Max. Marks: 50**
Theory: 40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 8 marks.

CONTENT

Unit-I

Health & Hygiene

a) Definition of health Hygiene infection sources prevention, immunity & immunization schedule
b) Personal hygiene

Unit-II

Brief study of diseases cause mode of spread incubation period symptoms prevention& control

a) Disease caused by ingestion Typhoid, Jaundice, cholera, Diarrhoea and Dysentery & Food poisoning
b) Diseases caused by inhalation- Measles, mumps, and tuberculosis, chickenpox, COVID-19

Unit-III

c) Diseases caused by vectors- Malaria Dengue.
d) Diseases caused by sexual contact -HIV, AIDS
e) Diseases caused by contact- Eczema

Unit-IV

Water supply

a) Sources of contamination
b) Types of water
c) Purification of water at home
d) Modern Methods of purification of water (different types of filter – Aqua guard, R.O filter etc)

Reference Books:

1. Family resource management & Hygiene by Randhawa
2. Physiology and Hygiene by J.H Kellig
3. Public Health and Hygiene by Sorona Raj and V Kumaresan

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
BASIC FOOD & NUTRITION
COURSE CODE: BHSM-1285
(Theory)

COURSE OUTCOMES

CO (1) – To develop the knowledge about introduction to nutrition and storage methods of cereals, pulses, eggs, poultry, vegetables and fruit.

CO (2) – To distinguish between the different types of cooking methods- dry heat, moist heat, frying and microwave cooking.

CO (3) – to understand the knowledge about classification, functions and food sources, requirement, deficiencies of carbohydrates.

CO (4) – To develop the knowledge about classification. Food sources, functions and deficiencies of proteins, fats and oils.

CO (5) – To understand the knowledge about energy, food as a source of energy, the body need of energy.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
Basic Food & Nutrition
(Theory)
COURSE CODE: BHSM-1285

Time: 3 Hrs. **Max. Marks: 100**
Theory: 60
Practical:20
CA: 20

Instructions for the Paper Setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12 marks.
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CONTENTS

Unit-I

Introduction to nutrition- Food as a sources of nutrients, functions of food, definition of nutrition, nutrients , adequate, optimum and good nutrition, malnutrition.
Brief introduction of food commodities, their types, selection.
Storage & Use: - cereals & pulses, eggs fish poultry, vegetable & fruit sugar, & mild, oil & ghee, spice & condiments.

Unit-II

Food Preparation
Basic terminology used in Cooking.
Different methods of cooking - Dry heat, moist heat, frying and microwave cooking.
Effect of cooking on nutritive value of food.

Unit-III

Carbohydrates - Composition, classification, functions, food sources, requirement, deficiencies.
Fats and Oils- Composition, Classification, Saturated, Unsaturated fatty acids, food sources, functions, requirement and deficiencies.
Protein - Composition, Classification, Essential and Non- essential amino acids, food Sources, functions, deficiencies.

Unit-IV

Energy- Unit of energy, food as a source of energy, energy value of food. The body need of energy. Factors affecting energy requirement

1. Determination of energy value of foods using calorimeter
2. Specific Dynamic action
3. Basal Metabolism
4. Determination of basal metabolism
5. Factors affecting the BMR

References:

1. Guthrie, Hele, Andrews, Intoductory Nutrition, 6th ed. St. Louts, Times Mirror/Mosby College: 1988.
2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd ed.) Wilay Eastern Ltd. 1990.
3. Swaminathan S: Advanced text book on foods Nutrition, Vol. I, II (2nd ed. Revised &enlarged) B. app C-1985.
4. Willson, EVAD Principles of Nutrition 4thed New York John Willey & Sons. 1979.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
BASIC FOOD & NUTRITION
COURSE CODE: BHSM-1285
(Practical)

COURSE OUTCOMES

Co (1) – To identify the different food stuff, weight and measures and cooking.

CO (2) – To distinguish between different types of cooking methods.

CO (3) – To develop the knowledge about cleaning of kitchen equipments, utensils, floor and cupboard.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)

Basic Food & Nutrition
(Practical)
COURSE CODE: BHSM-1285

Time: 3 Hrs. **Max. Marks: 20**

PRACTICAL

1) Identification of different food stuffs, weight and measures and cooking terms.
2) Beverage- e.g. Hot and cold (Tea, Coffee, fruit and milk based, beverage) etc.
3) Prepare 5 dishes using following methods
    (a) Boiling: Pulses, rice, soups, desserts, etc.
    (b) Shallow Frying: Pancakes, snacks, etc.
    (c) Deep Frying: Sweet and savoury snacks, main dishes, etc.
    (d) Fermenting and Steaming: Idli, dosa, dhokla, etc.
4) Daily and occasional cleaning of kitchen equipments, utensils, counter, floor and cupboards.

Note: Paper will be set on the spot by the examiner

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)

APPLIED ART
(Theory)
COURSE CODE: BHSM-1286

COURSE OUTCOMES

CO (1) - To understand the importance of art, its tools and techniques.

CO (2) - To gain knowledge about the types of elements of art- line, form, texture.

CO (3) – To understand the characteristics of colours.

CO (4) – To gain knowledge about the principles of design.

CO (5) - To identify the objectives of art , beauty, functionalism and expressiveness.

CO (6) – To gain knowledge about the materials used for Rangoli.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
Applied Art
(Theory)
COURSE CODE: BHSM-1286

Time: 3 Hrs. **Max. Marks: 100**
Theory: 60
Practical:20
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12 marks.

CONTENTS

Unit- I

Art Introduction

- Definition of Art, fine art & applied art
- Importance of Art
- Different art media like pencils colours crayons etc.
- Tools and techniques in art

Elements of art

- Line: Types of Lines & their effect & optical illusion created by lines
- Form & shape- types & their use
- Texture- types & their use
- Color - use of Color
- Pattern, Light & space

Unit-II

Colour: Source of colour, dimensions of colour characteristics of colours, emotional effects of colours, classification of colour according to pigment color system and color schemes.
Optical illusion created through colour
Principles of design

- Balance
- Harmony
- Rhythm
- Emphasis
- Proportion & scale

Unit-III

Objectives of Art : a) Beauty b) Functionalism c) Expressiveness
Design & motif

- Natural, Geometrical, Stylized and abstract.
- Types of Design: Decorative and structural & their characteristics
- Enlargement & reduction in size of the design

Unit-IV

Rangoli

- Significance of Rangoli
- Rangoli in different states
- Materials used for Rangoli
- Points to be considered in Rangoli

REFERENCE BOOKS:

1. Family Resource Management & Health Science Rajwinder K. Randhawa, Pardeep Publications 2010.
2. Crafts & Drawing Book
3. The Art of flower Arrangement, Rekha Sareen

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
APPLIED ART
COURSE CODE: BHSM-1286
(Practical)

COURSE OUTCOMES

CO (1) - To enable them to draw rangoli designs for different occasions – Diwali, Exhibition Hall, Child's birthday.

CO (2) – To gain knowledge about different colour schemes and use them in design.

CO (3) – To enable them to make articles of fabric painting, glass painting, greeting card.

Bachelor of Science (Home Science) (Semester – I)
(Session 2021-2022)
Applied Art
(Practical)
COURSE CODE: BHSM-1286

Time: 3 Hrs. **Max. Marks: 20**

Practical:

1. Drawing different types of lines and their use
2. Draw different types of shapes & form and draw any object using this form and do pencil shading
3. Make a design through motif.
4. Enlarge any design in size.
5. Draw Rangoli designs for different occasions-Diwali, Exhibition Hall, Entrance, Grah parvesh, and Childs Birthday and draw on floor & fill into colored material.
6. Make pigment color wheel.
7. Draw value scale and tone of primary and secondary colors.
8. Make colour schemes and use them in design.
9. Make different types of texture using different objects.
10. Calligraphy- makes any slogan on poster.
11. Make any flower with water color shading.
12. Make one simple landscape using water shading technique
13. Make an article of each:
    1) Fabric Painting
    2) Glass painting
    3) Menu Card
    4) Collage work.
    5) Greeting card
    6) Flowers from paper and stockings
    7) Pot decoration

Note: Paper will be set on the spot by the examiner

Bachelor of Science (Home Science) Semester-I
Session 2021 - 22
Course Code: BHSM - 1127
COMPUTER BASICS
(Theory)

Course Outcomes:

After passing this course the students will be able to:

CO1: understand the basics knowledge of Computer and its uses.

CO2: find and evaluate information on the Web effectively.

CO3: learn the basics of e-mail, such as sending, forwarding and receiving mail, attaching documents, creating mailboxes, filters, and address books.

CO4: learn basic word processing skills such as text input formatting, editing, cut, copy, paste, spell check, margin, tab controls, keyboard shortcuts, printing, clipart, charts etc.

Bachelor of Science (Home Science) Semester-I
Session 2021-22
COURSE CODE: BHSM - 1127
COMPUTER BASICS
(Theory)

Examination Time: (3 + 3) Hrs

Max. Marks: 100
Theory: 50
Practical: 30
CA: 20

Instructions for Paper Setter -

- Eight questions of equal marks (10 marks each) are to be set, two in each of the four Sections (A-D).
- Questions of Sections A-D should be set from Units I-IV of the syllabus respectively.
- Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT -I

Introduction to computer and its characteristic:
History of computers, Generations of Computers, Types of Computers, input devices, ouput devices, memory devices, software and its types, working with windows, features, desktop, using context menu, creating shortcut, working with dialog box, arranging windows, setting properties of desktop, transfer from CD,DVD. Pen Drive to Hard disk and vice versa, coping files.
Definition of Virus, Malware, Spyware and removal.

UNIT -II

MS Word
How to open MS word document from file and to exit from a document.
How to edit a document.
Formatting the whole text in different fonts and sizes and colors.
Inserting pictures from a file, inserting a Table or a chart.
How to use Mail merge how to copy one document or Text from one document to another.
How to put headers and footers on a document.

UNIT- III

MS-Power Point
Presentation & its features, components, viewing a slide show using blank presentation adding text, saving, closing, opening the presentation, viewing presentation, normal view, Outline view, slide sorter view, slide show, creating a wizard using presentation, editing presentations, adding new slide, changing the new slides, editing text type, deleting the text object, interesting text boxes, formatting text, modifying slides, working with slide outlines, moving objects , copying objects, searching text, replacing text, spell check, using clip art, word Art, auto shapes.

UNIT-IV

Internet and E-mail:
What Internet Provides, Internet terms, Internet requirements, getting started Internet, Surfing
Net, moving about the Web, E-Mail, its features, creating and E-Mail message, Reading Mail, replying mail, draft message, sending mail. Phishing and SPAM mail.

References / Textbooks:

1. Anshuman Sharma, Fundamentals of Information Technology, Lakhanpal Publishers, 5th Edition.
2. Rachhpal Singh & Gurvinder Singh, Windows based computer courses, Kalyani Publisher, 2014.
3. Peter Norton, Introduction to Computers, Tata McGraw-Hill, 2006.
4. P.K. Sinha, Computer Fundamentals, BPB Publications, 2004.
5. Prof. Satish Jain, M. Geetha, Kratika, BPB's Office 2010 Course Complete Book, BPB Publications, 2017.

Note: The latest editions of the books should be followed.

Bachelor of Science (Home Science) Semester-I
Session 2021-22
COURSE CODE: BHSM - 1127
COMPUTER BASICS (PRACTICAL)

Note: Paper will be set on the spot by the examiner.

- Window Basics
- Internet Usage
- MS word
- MS Power Point

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME
Bachelor of Science (Home Science)
(Session 2020-2021)

Semester II							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BHSL- 2421/ BHSL- 2031/ BHSL-2431	Punjabi Compulsory Basic Punjabi Punjab , History and Culture	C	50	40	-	10	3
BHSM-2102	Communication skills in English	C	50	25	15	10	3+3
BHSL- 2283	Family and Social Welfare	C	50	40	-	10	3
BHSL- 2284	Elementary Physiology	C	50	40	-	10	3
BHSM- 2285	Introduction to Family Resource Management	C	100	60	20	20	3+3
BHSM-2286	Advanced Food and Nutrition	C	100	60	20	20	3+3
BHSM-2127	Computer Applications for Home Scientists	C	100	50	30	20	3+3
AECD-2161	*Drug Abuse: Problem, Management and Prevention (Compulsory)	AC	50	40	-	10	3
SECM-2502	*****Moral Education	AC	25	20	-	5	1
Total			**500**				

***Marks of these papers will not be added in total marks and only grades will be provided**.
C-Compulsory
AC: Audit Course

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-2022)
FAMILY AND SOCIAL WELFARE

COURSE CODE: BHSL-2283
(Theory)

COURSE OUTCOMES

Upon completion of this course the students will be able to

CO (1) - To develop awareness about family and social welfare

CO (2) - To develop understanding about meaning and types of adjustments. Problems in adjustments and to overcome them.

CO (3) – To recognize the needs and importance of family plan

CO (5) - TO distinguish between the various types of parenting techniques.

CO (6) - To understand the role of family in socialization

CO (7)- To develop knowledge of family and child welfare programme.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
FAMILY AND SOCIAL WELFARE
(Theory)
COURSE CODE: BHSL-2283

Time=3 Hrs **Max.Marks: 50**
Theory: 40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENTS

Unit-I

Marriage.

- Meaning, Objectives , Types , Adjustments.
- Problems in adjustment.

Family

- Definition, Characteristics, Types, Functions, Changes in the world family, Characteristics of a modern family
- Problems of family.
- Merits & demerits of Nuclear & Joint families.
- Factors disintegrating joint family.

Unit-II

Family Planning

- Need and importance of family planning
- Family planning methods and care.

Parenting techniques

- Authoritarian
- Permissive
- Disciplined

Unit-III

Role of family & Society in Socialization, Social welfare.

- Meaning of Social welfare.
- Social welfare as distinguished from social work, social service, social reform & social action.

Unit-IV

Family and child welfare, Social Welfare agencies involved in family & child welfare

- ICDS
- Balwadi
- Anganwadi
- All India women's conference
- Local organization official & non-official involved in social welfare, Awareness of current laws related to women & child welfare.

References:

1. E. Wilson, Everett E and Convener, Merill B, The field of social work, Henry holt andcompany , New York 1958.
2. Nagpaul , Hans , the study of India society, sociological analysis of social welfare andwelfare education, Chand and Co Pvt Ltd, New Delhi, 1972.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ELEMENTRY PHYSIOLOGY
COURSE CODE: BHSL-2284
(Theory)

COURSE OUTCOMES

CO (1) – To develop h knowledge of human cell, their functions and different organs like skin, tissues.

CO (2) – To develop the elementary knowledge of functions of cardiovascular system.

CO (3) – To develop the elementary knowledge of structure and functions of urinary system.

CO (4) – TO understand the elementary Knowledge of structure and functions of male and female reproductive organs.

CO (5) – To develop the elementary knowledge of location and functions of endocrine glands and structure and functioning of brain.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ELEMENTRY PHYSIOLOGY
(Theory)
COURSE CODE: BHSL-2284

Time: 3 Hrs. **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENT

Unit-I

Physiology elementary knowledge of structure of cell, tissue and organ, Skin
Elementary knowledge of structure and function of digestive system

- Digestion of carbohydrates protein & fats

Unit-II

Elementary knowledge of structure and function of cardiovascular system blood composition and function & blood vessels

- Blood groups and RH factor.
- Heart structure & function
- Basic Knowledge of blood pressure & heart beat.

Elementary knowledge of structure and function of respiratory system Structure and function lungs

Unit-III

Elementary knowledge of structure and function of urinary system Structure & function of nephron & formation of Urine
Elementary Knowledge of structure and function of male and female reproductive organs Menstrual cycle

Unit-IV

Elementary knowledge of location and function of endocrine glands present in body Elementary knowledge of structure & function of Brain.

Reference Books

1) Text book of Biology for 10+2 students (NCERT)

2) Family Resource Management and Health science Rajwinder K Randhawa Pardeep Publications.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
COURSE CODE: BHSM-2285
(Theory)

COURSE OUTCOMES

CO (1) - To know about Resources and there types and to understand how to manage these resources in our daily life.

CO (2) - Understands the basic steps in decision making process and how to resolve the conflicts in family.

CO (3) - The students will be Capable of managing any resource with its process and to know the role of communication in effective management.

CO (4) - Understand the basic management of specific resource and work simplification.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
(Theory)
COURSE CODE: BHSM-2285

Time: 3 Hrs. **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER

- Question paper will have four units.
- Examiner will set a total of 8 questions comprising two questions from each unit.
- Students are required to attempt five questions in all, choosing onequestion from each unit and fifth question fromany unit. Question can have sub unit.
- All question carry equal marks.

CONTENT

Unit-I

Introduction to family resource management

- Definition and importance of family resource Management.
- Challenges of family resource management.
- Family life cycle and its effect on management of resources.
- Managerial responsibilities of families.
- Major Motivating forces-Values, Goals, Standards, Needs and Wants.

Resources.

- Definition and classification of resources.
- Characteristics of resources.
- Factors affecting the use of resources.

Unit-II

Decision Making Process

- Steps in Decision making process.
- Factors affecting Decision Making.
- Problem solving through resolving conflicts.
- Management process
  - Planning
  - Organizing
  - Supervising
  - Controlling
  - Evaluation
  - Role of communication in effective management
  - Application of management process in resource utilization.

Unit-III

Management of specific resources

- Money management – types of income and steps in money management (budgeting), methods of handling money.
- Importance of saving & investment.

- Time management -tools of time management , steps of making time plans
- Energy management-concepts of energy cost of various household activities.
- Fatigue – types ,causes ,effects and remedies
- Steps in reducing energy costs.

Unit-IV

Work simplification

- Interrelationship of time and energy.
- Techniques of studying work -pathway, process & operation chart.
- General principles (Mendel's classes of change of work simplification)

Ergonomics

Definition and importance

Disciplines involved in ergonomics

Use of ergonomics.

REFERENCES:

- Gross, I.H; Crandall, E.W and Knoll .M.M Management for modern families, sterling Publishers, New Delhi, 1967.
- Nickell, P; Dorsey, J.N. Management in Family living, John Willy and sons Inc, New York, 1975.
- Fire baugh & Deacon-Home management concepts and contents.
- Randhawa, Rajwinder K; Family Resource Management and Health Science, Pardeep Publication, Jalandhar, 2009.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
COURSE CODE: BHSM – 2285
(Practical)

COURSE OUTCOMES

CO (1) – At the end of this course the student will be able to make budget or process chart pr time plans.

CO (2) – This course gives an overview of various table setting.

CO (3) - Understand the use of waste materials to make a utility article.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
(Practical)
COURSE CODE: BHSM - 2285

Time- 3 Hrs **Total Marks: 20**

PRACTICAL

1. Planning of budget for different income groups.
2. Preparing time plans of working and non-working homemakers.
3. Simplify any household task using pathway, process & operation chart.
4. Table setting for different meals- Formal, Informal and Buffet and Napkin folding.
5. Make any utility article that will be judged by the external examiner.

(Note: Paper will be set on the spot by the examiner).

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ADVANCED FOOD & NUTRITION
COURSE CODE: BHSM-2286
(Theory)

COURSE OUTCOMES

CO (1):- To develop the knowledge to classify different functions and requirements of fat soluble vitamin and water soluble vitamin.

CO (2):- To identify the bio-availability, requirement and deficiency of different vitamins.

CO (3):- To develop the knowledge of food preservation, food spoilage and principle of food preservation.

CO (4):- To develop the knowledge of food adulteration and standards, toxic effects of food adulteration.

CO (5):- To develop the knowledge of food hygiene in purchasing, preparation, cooking and serving of food.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ADVANCED FOOD & NUTRITION
(THEORY)
COURSE CODE: BHSM-2286

Time-3 hrs **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

Instructions for the Paper Setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENTS

Unit-I

Vitamin- Classification, unit of measurements sources, requirements functions and Deficiency and Toxicities of following vitamins.
(a) Fat Soluble vitamins A, D, E and K
(b) Water Soluble vitamins- C, B1-B2, B3, B6, B12 and Folic acid.
Mineral- Functions, Sources, Bio-availability requirement and deficiency/excess of following minerals calcium, iron, iodine, fluorine , Sodium, Potassium, Phosphorus, and Magnesium.
Importance of water in Nutrition.

Unit-II

Food Preservation
Importance and scope of food preservation.
Causes of food spoilage.
Principles of food preservation.
Household Methods of food preservation.

Unit-III

Food adulteration and standards
Definition.
Common adulterants & their test in different food stuffs.
Toxic Effects of food adulteration.
Food standards.

Unit-IV

Food hygiene
Purchasing
Preparation
Cooking
Serving

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ADVANCED FOOD & NUTRITION

COURSE CODE: BHSM-2286
(Practical)

COURSE OUTCOMES OF

CO1:- To develop knowledge about different nutrients.

CO2:- To develop knowledge about therapeutic diets.

CO3:- To enhance the cooking skills with absorbing more nutrients.

CO4:- To develop knowledge about different food groups.

Bachelor of Science (Home Science) (Semester – II)
(Session 2021-22)
ADVANCED FOOD & NUTRITION
(Practical)
COURSE CODE: BHSM-2286

Time-3 hrs **Max. Marks: 20**

PRACTICAL

(1) Prepare 5 dishes using following methods
   a) Baking- e.g. Cakes & Biscuits, Continental dishes etc.
   b) Grilling- e.g. Pizza and variation of sandwiches, grilled and tandori snacks etc.
   c) Sprouting
(2) Preservation - Pickles, Chutney, Jam & Squashes.

Note: Paper will be set on the spot by the examiner

FACULTY OF SCIENCES

SYLLABUS
of
B.SC HOME SCIENCE (Semester: III)

(Under Continuous Evaluation Grading System)

Session: 2021-22

The Heritage Institution

KANYA MAHAVIDYALAYA

JALANDHAR

(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. HOME SCIENCE

(Session 2021-2022)

Upon successful completion of this Programme, students will be able to:

PSO (1) - To develop holistic understanding about various fields of Home Science including Family Resource Management, Foods and Nutrition, Human Development and Family Relations, Clothing and Textiles

PSO (2) - To understand the fundamentals of house planning, kitchens, laws and terminology used in building of house, kitchen equipments and their applications.

PSO (3) - To develop understanding about developmental stages from infancy to old age and insight into different areas of human development including physical, motor, cognitive, social and emotional development.

PSO (4) - To gain knowledge about different diseases, therapeutic nutrition, food preservation and safety, role of dietician in feeding of patients.

PSO (5) - To develop deep understanding of conversion of textiles fibres into fabric undergoing various spinning, weaving, and finishing techniques.

PSO (6) – To demonstrate skill in using various surface ornamentation techniques as such as dyeing , printing and embroidery as well as garment design and construction.

PSO (7) – To develop Capacity to serve as dietician , child and family counsellors, designers, food therapies, and in many more community services.

PSO (8) – Capable of oral and written communication.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME
Bachelor of Science (Home Science)
(Session 2021-2022)

B.Sc HOME SCIENCE SEMESTER III							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BHSL-3281	Developmental Stages upto Childhood	C	50	40	-	10	3
BHSL-3172	Basic Concepts of Economics	C	50	40	-	10	3
BHSL-3393	Basic Physics	C	50	40	-	10	3
BHSL-3084	Basic Chemistry	C	50	40	-	10	3
BHSM-3285	Housing	C	100	60	20	20	3+3
BHSM-3286	Meal Management	C	100	60	20	20	3+3
BHSM-3287	Textile Science	C	100	60	20	20	3+3
AECE-3221	*Environmental Studies (Compulsory)	AC	100	60	20	20	3
SECP-3512	*Personality Development/ Gender sensitization	AC	25	20	-	5	1
Total			**500**				

C: Compulsory AC:
Audit course
***Marks of these papers will not be added in total marks and only grades will be provided**.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
DEVELOPMENTAL STAGES UPTO CHILDHOOD
(Theory)
COURSE CODE: BHSL- 3281

COURSE OUTCOME

CO (1): To Understand developmental tasks from infancy to childhood

CO (2): To understand developmental stages from infancy to childhood

CO (3): To get insight into the different areas of development across the life span i.e. physical, motor, cognitive, language, social & emotional.

CO (4): To discuss the factors affecting development till childhood.

CO (5): To get insight into the concept of early childhood care and education.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
DEVELOPMENTAL STAGES UPTO CHILDHOOD
(Theory)
COURSE CODE: BHSL- 3281

Time: 3 Hours **Total Marks: 50**
Theory: 40
CA: 10

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 8 marks.

CONTENT

UNIT-I

- Developmental tasks from infancy to childhood.

Domains of development from infancy to childhood and factors affecting and facilitating these developments

- Physical development

a) Body size
b) Skeletal growth
c) Cardio Vascular System
d) Brain and nervous system
e) Factors affecting physical development

UNIT-II

- Motor development

a) Sequence of motor development
b) Some motor skills of childhood
c) Factors affecting motor development and facilitating motor skills.

- Language development

(a) Stages of language development
(b) Factors affecting language development and facilitating language development (c)Speech Defects

UNIT-III

- Psycho Social development from infancy to childhood

1) Social development
   a) Meaning of social development
   b) Agencies of socialization
   c) Factors affecting socialization
   d) Play- its types and importance

Unit IV

- Emotional Development

a) Definition of emotion
b) Different childhood - emotions and their role in development of child
c) Characteristics of children's emotion
d) Factors affecting emotional development

Early childhood care and education
a) Concepts, significance and programs.
b) Infrastructure & curriculum planning for different age groups.

REFERENCE BOOK

1) Essentials of life span development, Johan W santrock Mcgraw Hill publishing company
2) Human Development Thomas L. Crandell MC Graw Hill Publishing Company
3) Human Development Paplia Mc Graw Hill Publishing company
4) Growth and development Hurlock E.B Tata, Mac Graw Hill Company
5) Child Development P. Rajamal & Devads Machmulitan India Ltd.
6) Nutrition and Child development Rajinder Randhawa Pardeep Publications.

Bachelor of Science (Home Science) Semester: III
Session 2021-22
Course Code: BHSL-3172
BASIC CONCEPTS OF ECONOMICS

Course Outcomes:

After passing this course students will be able to:

CO1: To understand some basic economic concepts

CO2: To understand the basic concepts of banking & different saving schemes

CO3: To give guidance regarding credit facilities.

.**CO4:**To understand basic structure of markets in the economy.

Bachelor of Science (Home Science) Semester: III
Session 2021-22
Course Code: BHSL-3172
BASIC CONCEPTS OF ECONOMICS

Time: 3 Hours **Max Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter:
Two questions, each carrying 16 marks, from each of Units I-IV (i.e. a total of eight Questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Basic Economic concepts :- Goods, wealth, economic and non economic activities, utility, Value and price ,Basic concepts in consumer economics.

Human wants and needs , Difference between desire, want, and need, hierarchy of need ,characteristics of needs, classification of wants, forces influencing wants.

UNIT-II

Production & Consumption-definition features, significance laws and their importance. Basic Knowledge of market-definition, features and types of market, E- marketing.

UNIT-III

Consumer Credit : Definition and significance of credit , Need and basis of credit ,Sources of consumer credit, Legal credit instruments , Points to be considered while borrowing, Merits & demerits of credit .

UNIT-IV

Brief Knowledge of banking, insurance schemes, saving & investment.
Banking – Types of account, how to open an account , How to deposit and withdraw money by cheque & cash; Internet banking Insurance-General and life insurance policies terms and conditions &advantages , Savings-Bank saving scheme, Post office saving schemes , Shares & debentures (only introduction) Taxation-Types of Taxes & how to calculate income tax & file income tax return.

REFERENCE BOOKS

1) Consumer Economics by Surinder jit Kaur R.K. Lakhi and Joginder Singh
2) Consumeration Pattern in India B.D Gupta Tata Mcgraw Hill
3) Consumer Buying for better living Fitzrimmons C John willey& sons Inc.
4) Consumer Behaviors Sehiffman Leon Prentice hall Pub.

Bachelor of Science (Home Science) (Semester-III)
BASIC PHYSICS
(Theory)
Course Code : BHSM-3396

External Marks: 40
Internal Marks :10
Pass Marks: 10

Instructions for the Paper Setters:

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. **Each question carries 8 marks.**

Course Outcome- After Completing this course the students will be able to

CO1: to understand the role of physics in working various household devices
CO2: to understand the natural phenomenon in our life.

Unit-I

Measurements: S1 units and their advantages, Dimensions of basic physical quantities, simple idea of velocity, relative velocity, angular velocity, acceleration, angular acceleration, centripetal acceleration, centrifugal acceleration.

Unit-II

Force and Motion. Work, Power and Energy. Types of Energies. Friction and its use in daily life. Simple Machines: Lever, Wheel, pulley, inclined plane, wedges, gears, and their applications like Scissors, tongs, egg beater cork opener.

Unit-III

Concept of Pressure, Fluid pressure, atmospheric pressure and its consequences. Lift pump, gas stove, syringe flush tank, vacuum cleaner. Archimedes Principle. Concept of surface tension and viscosity and their role in daily life.

Unit- IV

Heat: Expansion in solids, transmission of heat- conduction, convection, radiation, heat conductors and insulators (examples only).

Books Recommended:

1. Avery House Physics.
2. Fundamentals of Physics Halliday Resnick, Walker.
3. N.C.E.R.T. Books of Physics For XI and XII

Bachelor of Science (Home Science) (Semester-III)
BASIC PHYSICS
(Practical)

(There Will be No Practical Exam in this Semester)

Pds- 2 pds/ week

1. Concept of least count and precise measurement of different instruments.
2. Measurement of diameter of a metallic share, cylinder, volume of a cube of a small glass slab, determine its density.
3. Measurement of diameter of a knitting needle, sewing needle, thickness of cloth, thickness of a coin using screw gauge.
4. Measurement of height of concave/convex mirror using spherometer.
5. Newton law of cooling of liquids.
6. Measurement of coefficient of friction.
7. Demonstration of centrifugal force in cloth dryer.
8. Verification of Archimedes' Principle.
9. Demonstration of atmospheric pressure and read atmospheric pressure from a barometer in your laboratory

Bachelor of Science Home Science
Session: 2021-22
Course Title: Basic Chemistry
Course Code: BHSL-3084

Course outcomes:

Students will be able to:

CO1: understand various formulae and symbols used in chemistry.

CO1: understand the atomic structure.

CO2: acquire knowledge about various atomic models.

CO3: understand the concept of normality, molarity, molality and strength of solution.

Bachelor of Science Home Science (Semester III)
Session: 2021-22
Course Title: Basic Chemistry
Course Code: BHSL-3084

Examination Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setters: -

Eight questions of 8 marks each are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

UNIT-I

Symbols, formulae, valency, variable valency, elementary idea of mole concept, empirical formulae and molecular formulae, definition of atomic and molecular weight.

Chemical equation and reaction parts, types, essentials, implications and limitations of chemical equation, balancing of equation hit trial method, exothermic, endothermic, catalytic and reversible reaction.

UNIT-II

Atomic structure, elementary idea of electron, proton, neutron arrangement of fundamental particles in an atom. Rutherford atomic model, atomic number, mass number, isotopes, isobars. Bohr's atomic model (postulates)

UNIT-III

Chemical bonding, definition of chemical bond, cause of chemical combination, types of chemical bonds, ionic bonds, covalent bond, coordinate bond, definition and simple examples based on electron dot picture (example include H2, Cl2, 02, NH3, CH4, C2H2, MgF2, CaO, $NH4^{+}$, $H3O^{+}$).

UNIT-IV

Elementary idea about normality, morality, molality and strength of solution.
Structure of fibers (Natural and synthetic).
Elementary idea about pH of water, hard' water, its cause and type, heavy water with its uses.

Books recommended:

1. N.C.E.R.T. Books for XI & XII.
2. Modern Approach to Chemistry by S. P. Johar Vol. I & Vol. II.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
HOUSING
(Theory)
COURSE CODE: BHSM- 3285

COURSE OUTCOME

CO (1): To Understand house related concept.

CO (2): To discuss the selection and principles of house planning.

CO (3): To get insight into the building material used in construction of house.

CO (4): To discuss different housing financing agencies.

CO (5): To get insight into the concept of building by laws used for house construction and terminologies used in house construction

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
HOUSING
(Theory)
COURSE CODE: BHSM- 3285

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

• Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).

• Candidates are required to attempt five questions, selecting at least one question from eachsection.

• The fifth question may be attempted from any Section.

• Each question carry 12 marks.

CONTENT

UNIT-I

House & related concepts
Concept of House & home.
Functions of home.
Housing needs and factors affecting housing needs. Rented/ owned house/ house provided by public or private sector.
Type of houses, row, semidetached, detached, independent house, flats, apartment & multi-storeyed building

UNIT-II

• Selection & principles of house planning

• Selection of Site , soil, locality and neighbourhood

• Principles of planning - Orientation, aspect, prospect, privacy, grouping, circulation, flexibility, roominess future requirement & practical considerations.

• Ventilation.

• Water supply, Drainage and drainage of rainwater, sewage system.

• Provision of light according to the need in different areas.

• Economy in house construction.

UNIT-III

• Building Materials used in construction of house

• Low cost, Eco friendly innovative building materials.

• Materials for foundation.

• Materials for walls & floors.

• Materials for electricity, sewerage & drainage.

UNIT-IV

• Housing financing agencies

• Various government and non-government agencies, general terms & conditions.

• Advantage and disadvantage of taking loan.

• Building by laws used for house construction & terminologies used.

REFERENCE BOOK

1) Randhawa, Rajwinder K family Resource Management and Health Science, Pardeep publication
2) Despande, R.S Modern Ideal Homes for India United book corporation
3) Agan Tessie M.S The house its plan & use Gulab primlani
4) Peett L.J thye, L.S, House hold equipment, Johan villey and sons inc. New York.
5) Indian Home Plans- Jain H.L.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
HOUSING
(Practical)
COURSE CODE: BHSM- 3285

COURSE OUTCOME:

CO 1: To introduce house planning: symbols and terms.

CO 2: To draw different types of floor plans.

CO 3: To draw different type of house plans according to principles of planning.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
HOUSING
(Practical)
COURSE CODE: BHSM- 3285

Time: 3 Hrs. **Max. Marks: 20**

Note: Question paper will be set on the spot by the examiner.

Housing:

1) Symbols and common terms used for house planning
2) Types of floor-plans, elevation structural drawing and perspective view
3) Draw following house plan, considering in mind principle of planning

- Row house- 100- 150 sq yard
- Semi detached house 250-300 sq yard
- Detached house- 500 sq yard and above
- One room apartment
- Flat
- Double story house

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
MEAL MANAGEMENT
(Theory)
COURSE CODE: BHSM- 3286

COURSE OUTCOMES:-

CO (1): To understand the concept of recommended dietary allowances, food groups, exchange list and balanced diet.

CO (2): To discuss principal of meal planning and nutritional requirements of men and women with different conditions

CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.

CO (4): To understand the nutritional requirement during infancy.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
MEAL MANAGEMENT
(Theory)
COURSE CODE: BHSM- 3286

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12 marks.

COURSE CONTENT:

Unit-I

- Balanced diet: Concept of Balanced Diet, Food Groups, Exchange Lists.
- Definition and Objectives of RDA, RDA for different age groups. (ICMR). Calorie consumption units in planning meals for a family.

Unit-II.

- Meal planning: Introduction and Principles of Meal planning.
- Nutritional requirement for adult male & female, Sedentary, moderate & heavy worker.

Unit-III

- Physiological changes and nutritional requirement during pregnancy and lactation.
- Physiological changes during old age and meeting their nutritional requirements.

Unit- IV

- Growth development, food habits and nutritional requirement of preschoolers, school going children & adolescent boy and girl.
- . Growth & development and nutritional requirement during infancy breast feeding /vs bottle feeding and weaning.

References:

1. Guthrie, Hele, Andrews, Intoductory Nutrition, 6th Ed, St. Louts, Times Mirror/Mosby College : 1988
2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd ed.) Wilay Eastern Ltd. 1990.
3. Swaminathan S: Advanced Text Book on Foods Nutrition, Vol. I, II (2nd ed. Revised & enlarged) B. app C-1985
4. Willson, EVAD Principles of Nutrition 4th Ed, New York John Willey & Sons. 1979.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
MEAL MANAGEMENT
(Practical)
COURSE CODE: BHSM- 3286

COURSE OUTCOME:

CO (1): To understand the concept of Standardize Proportion Size.
CO (2): To discuss meal planning and nutritional requirements of men and women with different conditions CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.
CO (4): To understand the nutritional requirement during infancy with their Calculations.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
MEAL MANAGEMENT
(Practical)
COURSE CODE: BHSM- 3286

Time: 3 Hours **Max. Marks: 20**

Note:

- Paper will be set on the spot by the examiner
- Planning of diet
- Cooking of 2 dishes from the diet plan
- Viva
- Files

1. Cook following dishes for different meals. Standardize portion size and calculate their nutritive value.
- Breakfast dishes- Stuffed Paranthas, Pancakes, Poha, Dalia etc.
- Lunch & Dinner dishes- Main Dishes- Dal, Channa, Rajmah, Koftas etc., Rice- Pulaos, Paneer dishes, Side dishes, Dry. Vegetables, Stuffed Vegetables etc. Dessert - Puddings, Kheer etc. Salads, Soups etc.
- Evening Sweet & Salty snacks - at least 5 each.

2. Plan balanced diet for the following age groups calculating calories, protein, one important vitamin and mineral as per requirement for the given age group.
(a) Infancy-Weaning foods
(b) pre-schooler
(c) school going child.
(d) adolescent girl and boy
(e) adult male and female(sedentary moderate and heavy worker)
(f) Pregnant and lactating Women
(g) Geriatric

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
TEXTILE SCIENCE
(Theory)
COURSE CODE: BHSM- 3287

COURSE OUTCOME:-

CO (1). To get the concept of textile fibres and their classification and their properties.

CO (2). To discuss about origin, production and properties of different fibres.

CO (3). To get the insight of concept yarn and its classification.

CO (4). To understand different fabric construction techniques and their method.

CO (5) .To discuss different bleaches, finishes, dyeing and printing.

CO (6).To get the insight of concept laundering and care of textile fabrics.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
TEXTILE SCIENCE
(Theory)
COURSE CODE: BHSM- 3287

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

• Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).

• Candidates are required to attempt five questions, selecting at least one question from each section.

• The fifth question may be attempted from any Section.

• Each question carry 12 marks.

CONTENTS

UNIT- I

• Introduction to textile fibres, classification of fibres based on length and source.

• Primary properties of textile fibres in relation to use for the consumer.

• Origin, Production and Properties of cotton, linen, rayon –viscose and cellulose acetate, Wool and silk, Nylon, polyester, acrylics and elastomeric fibres.

UNIT – II

Yarn manufacturing

• Classification of yarns carded and combed yarn, woollen and worsted yarns, filament and spun yarns.

• Types of yarns simple yarns, novelty yarns, textured yarns and their types & uses.

• Yarn twist

Fabric construction techniques

• Weaving Procedure (description of loom)

• Types: simple weave & its variations, twill , satin ,novelty weaves and their types

• Characteristics of woven fabrics: on grain, off grain, thread count, balance cloth, selvedge.

Other Methods of fabric construction: Felting, Bonding

UNIT -III

Bleaches and finishes

• Types – oxidizing and reducing bleaches and their suitability

• Importance of finishes.

• Classification of finishing process on the basis of method of application, stability, types & purpose.

• Description of some important finishes: preparatory finishes- Brushing and shearing, scouring, degumming, desizing and bleaching

• Stabilizing finishes – Texturing, sanforizing, mercerization,

• Textural finishes – calendering, beetling, glazing, sizing, weighting, napping, moiring and embossing.

• Functional finishes- crease resistance, waterproof and water repellent, flame retardant and flame proof.

UNIT IV

Dyeing

• Types of dyes

• Method of dyeing - Home dyeing (simple) resist dying-tie & dye and batik.

Printing

• Techniques used in printing direct discharge and resist.

• Methods of printing block, stencil ,screen

• Machine Printing, roller, screen.

Laundering & care of textile fabrics

• Principles of washing

• Methods of washing of cotton wool, silk & synthetics, starches & blue

• Dry-cleaning principle & use.

- Storage of clothes.

Reference Books:

1. Randhawa Rajwinder K Clothing Textiles & There care, pardeep publication.
2. Traditional Indian Textiles Gillow Jorn Barnard Nicholas
3. Fundamentals of Textiles and their care sushela dantyagi
4. Household textile and laundry work durga Deulkar
5. Textile Fiber to fabric corbman Bernard
6. Textile, Hollen Nerma & Sadder Jane.
7. Clothing textiles & their care, Rajwinder K. Randhawa.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
TEXTILE SCIENCE
(Practical)
COURSE CODE: BHSM- 3287

COURSE OUTCOMES

CO 1: To make the students familiar with Faber Identification art- Physical, burning, microscopic test.

CO 2 : To experiment with surface ornamentation techniques such as tie & dye , Block , screen and Stencil Printing

CO 3: To learn basic stain removal techniques used in daily life.

CO 4: To learn about informative labels on garments.

Bachelor of Science (Home Science) (Semester-III)
(Session 2021-2022)
TEXTILE SCIENCE
(Practical)
COURSE CODE :BHSM- 3287

Time: 3 Hrs. **Max Marks: 20**

Note: Question Paper will be set on the spot by the examiner

1. Fiber Identification- Physical, burning, microscopic test.
2. Stain removal of basic stains- Tea coffee, Ball pen, ink, ghee & oil haldi, Nail paint, Lipstick, Boot polish.
3. Make sample & an article of each:
   a) Tie & Dye
   b) Block, screen and stencil.

4). Make sample of weaves:
   1) Plain
   2) Twill
   3) Satin

5) Collection of labels of different garment & samples of different weave

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME
Bachelor of Science (Home Science)
(Session 2021-2022)

Semester IV

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
BHSL-4281	Developmental Stages till Old Age	C	50	40	-	10	3
BHSL-4172	Consumer Economics	C	50	40	-	10	3
BHSM-4283	Kitchen design & its Equipment	C	100	60	20	20	3+3
BHSM-4284	Quantity Food Production & Service	C	100	60	20	20	3+3
BHSM-4285	Traditional Embroideries, Textiles & Costumes of India	C	100	60	20	20	3+3
BHSM-4396	Applied Physics	C	50	30	10	10	3+3
BHSM-4087	Applied Chemistry	C	50	30	10	10	3+3
SECS -4522	*Social Outreach	AC	25	-	20	5	3
Total			**500**				

***Marks of these papers will not be added in total marks and only grades will be provided**.
C-Compulsory
AC- Audit course

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
DEVELOPMENTAL STAGES TILL OLD AGE
(Theory)
COURSE CODE: BHSL-4281

COURSE OUTCOMES

CO (1): To understand developmental stages till old age.

CO (2): To discuss the factors affecting development till old age.

CO (3): To get insight into developmental task of different stage.

CO (4): To understand the roles of society and parents in developmental stages.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
DEVELOPMENTAL STAGES TILL OLD AGE
(Theory)
COURSE CODE: BHSL-4281

Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENT

UNIT-I

Adolescence Puberty and related changes
Problems of adolescence

- Physical
- sexual
- social
- emotional
- Role of parents and teachers in helping them

UNIT-II

Adulthood
1. Young adulthood

a) Developmental tasks of adulthood
b) Parenthood and other roles in society
c) Parenting techniques

UNIT -III

2. Middle adulthood Midlife changes in both sexes
3. Late adulthood

a) Grand parenting

UNIT-IV

Old age

a) Retirement – a change in status.
b) Physical and psycho-social aspects of aging.

REFERENCE BOOK

1) Essentials of life span development, Johan W santrock Mcgraw Hill publishing company
2) Human Development Thomas L. Crandell MC Graw Hill Publishing Company
3) Human Development Paplia Mc Graw Hill Publishing company
4) Growth and development Hurlock E.B Tata, Mac Graw Hill Company
5) Child Development P. Rajamal & Devads Machmulitan India Ltd.
6) Nutrition and Child development Rajinder Randhawa Pardeep Publications.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
KITCHEN DESIGN & ITS EQUIPMENT
(Theory)
COURSE CODE: BHSM-4283

COURSE OUTCOME:

CO (1). To understand about different type of kitchen, kitchen geometry and efficient kitchen planning.

CO (2). To discuss about selection and efficient use of different equipment, selection and care of household equipment.

CO (3). To understand the characteristics and care of different material example iron, steel, tin, copper etc CO (4). To understand different finishes of household equipments.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
KITCHEN DESIGN & ITS EQUIPMENT
(Theory)
COURSE CODE: BHSM-4283

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical:20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENT

UNIT-I

Kitchen

- Types of kitchen
- Efficient kitchen planning
- Principles of planning
- Planning of efficient storage areas in the kitchen
- Kitchen Geometry-work heights and space dimensions for different areas.
- Lighting , ventilation & drainage.
- Material specifications for kitchen floors, walls, sink, ceiling & Platform.

UNIT-II

Equipment

- Classification
- Selection & efficient use of equipment.
- Selection, operation and care of household equipment--Toasters, mixer grinder, Juicer, food processor, oven and micro waveoven, Iron, Vacuum cleaner, washing machine, pressure cooker and dishwasher, cutlery.

UNIT-III

- General characteristics, suitability & care of different material used for equipment construction and surface finish Aluminum, Iron. Steel, Stainless steel, Galvanized Iron, Tin, Copper, brass ,Nickel and chromium, monel, glass, earthenware and plastics.

UNIT-IV

Finishes & their suitability

- Classification
- Description of Porcelain Enamel, Synthetic baked Enamel, and Teflon coated non stick andsurface finishes like copper claid, chromium, tin & Electroplated.

REFERENCE BOOKS

1) Randhawa, Rajwinder K family Resource Management and Health Science, Pardeep Publication
2) Despande, R.S Modern Ideal Homes for India United Book Corporation
3) Agan Tessie M.S The house its plan & use Gulab primlani
4) Peett L.J thye, L.S, House hold equipment, Johan Villey and Sons inc. New York.
5) Indian Home Plans- Jain H.L.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
KITCHEN DESIGN & ITS EQUIPMENT
(PRACTICAL)
COURSE CODE: BHSM-4283

COURSE OUTCOME:

CO 1: To draw different type of kitchens with colour scheme.

CO 2: To study the method and material used for cleaning of different utensils.

CO 3: To study the method and material used for cleaning of electrical equipments used in home.

Bachelor of Science (Home Science) (Semester-IV)

SESSION: 2021-22

KITCHEN DESIGN & ITS EQUIPMENT

(Practical)

COURSE CODE: BHSM-4283

Time: 3 Hours **Max. Marks: 20**

Note: Question paper will be set on the spot by the examiner.

1. Draw different types of kitchen

a) One wall b) Two wall c) L Shape d) U shape

2. Make elevation of L shape kitchen on wall & show colour scheme
3. Cleaning of Brass, aluminium, steel, glass, gold, silver and crockery.
4. Cleaning of window panes.
5. Cleaning of wood & leather.
6. Cleaning of refrigerator, mixer, cooking range, microwave etc.
7. Cleaning of kitchen counters, floor and cupboards.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
QUANTITY FOOD PRODUCTION & SERVICE
(Theory)
COURSE CODE: BHSM-4284

COURSE OUTCOME:

CO (1). To understand about different food services.

CO (2). To get the concept of menu planning and importance of personal hygiene of food handlers.

CO (3). To discuss about food management, food purchasing and preparation of different foods.

CO (4). To understand the effective use of leftover food, food production system and effect of cooking method on nutritional quality of food.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22

QUANTITY FOOD PRODUCTION & SERVICE
(Theory)
COURSE CODE: BHSM-4284

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical:20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

COURSE CONTENT:

UNIT- I

- Aims and objectives of different food service and beverage outlets (a) Hospitality industry, (b) institutional/welfare.
- Food and Beverage service methods Table service Assisted service Self service-Types Single point service Specialized service.

UNIT- II

- Menu Planning- importance, factors, construction writing and display.
- Importance of personal hygiene of food handler – clothes, personality, health, attitude towards customers.
- Cost Control- Standardization and portion size of recipe-calculating cost of dish, meal and event. Methods of calculation - Gross profit ratio food cost ratio. Methods of controlling cost.

UNIT- III

- Characteristics of Food- Quality in food service, Quantitative, sensory and nutritional quality.
- Food Management- Food Purchasing, receiving, storage, handling and preparation.
- Food production – Food production system, food production process, effect of cooking methods on the nutritional quality of foods. Some large quantity cooking technique, Effective use of leftover, holding techniques.

UNIT-IV

- Waste product handling: Planning for waste disposal. Solid wastes and liquid wastes
- Control of Infestation - rodent, flies, cockroaches control, use of pesticides.
- Service Areas- Planning of service area, Table sizes and decor of service area.

References:

1. Mohini Sethi, Surjeet Malhan, Catering Management An Integrated Approach. New Age International (P) Limited Publisher Jalandhar.
2. Mohini Sethi, Surjeet Malhan - Institutional food management.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22

QUANTITY FOOD PRODUCTION & SERVICE
(PRACTICAL)
COURSE CODE: BHSM-4284

COURSE OUTCOME:

CO 1: To prepare them for event management.

CO 2: To give hands on training for commercial cooking

CO 3: To make them clear about the nutritive calculations of various recipes.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22

QUANTITY FOOD PRODUCTION & SERVICE
(PRACTICAL)
COURSE CODE: BHSM-4284

Time: 3 Hours **Max. Marks: 20**

Note: Paper will be set on the spot by the examiner.

Course Outline

1) Standardization and cost calculation of a snacks & meals.
2) Preparation of High Teas/Lunches/Dinners for special occasions.
- Kitty party
- New Year
3) Holi/Diwali
4) Lohri
5) Anniversary
6) Birthday
7) Picnic
8) Arrange one small party
9) Daily and occasional cleaning of kitchen equipments, utensils, counters, floor and cupboards.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
TRADITIONAL EMBROIDERIES, TEXTILES AND COSTUMES OF INDIA
(Theory)
COURSE CODE: BHSM-4285

COURSE OUTCOME:-

CO (1). To get the insight of different embroideries of various state of India.

CO (2). To discuss about various traditional fabrics of different states.

CO (3). To understand about different dye and printed fabrics.

CO (4). To understand traditional costumes of different state of India.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22

TRADITIONAL EMBROIDERIES, TEXTILES AND COSTUMES OF INDIA
(Theory)
COURSE CODE: BHSM-4285

Time: 3 Hours **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENTS

UNIT-I

Traditional embroideries of various states in India
- Phulkari of Punjab
- Chikankari of U.P
- Kasida of Kashmir
- Kantha of Bengal
- Kasuti of Karnataka
- Kutch of Gujarat

UNIT -II

Traditional fabrics of different states of India
- Kashmir – Shawl and carpets
- Bengal- Dakha Mulmul, Baluchar and Jamdani.
- U.P -Brocades
- M.P. – Chanderi

UNIT –III

Dyed and printed fabrics of India
- Gujarat – Patola
- Rajasthan - Bandhani
- Andhra Pradesh- Pochampalli and kalamkari
- Orissa - Ikat

UNIT –IV

Traditional costumes of different states of India
- Punjab
- Jammu & Kashmir
- Rajasthan
- Gujrat
- Maharashtra
- Bengal
- Kerala

References:

- Traditional Indian Textiles, John Gillow
- Traditional embroideries of India, Shailaja D Naik
- Costumes and Textile designs of India, Dr Parul Bhatnagar

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
TRADITIONAL EMBROIDERIES, TEXTILES AND COUSTUMES OF INDIA
(Practical)
COURSE CODE: BHSM-4285

COURSE OUTCOME:

CO 1: To study and develop designs for basic embroidery stitches.

CO 2: To study and develop designs for Traditional embroideries.

CO 3: To make use of any traditional embroidery on an article.

Bachelor of Science (Home Science) (Semester-IV)
SESSION: 2021-22
TRADITIONAL EMBROIDERIES, TEXTILES AND COUSTUMES OF INDIA
(Practical)
COURSE CODE: BHSM-4285

Time: 3 Hrs. **Max. Marks:20**

Note: Question paper will be set on the spot by the examiner.

1. Make one sample of basic embroidery stitches: stem, chain, laisy daisy, double laisy daisy, button hole, herring bone, feather, fly, satin, French knot, bullion knot, cross stitch and make two handkerchief using at least 3 stitches in one design.
2. Make samples of traditional embroideries using traditional fabric, thread, colors & design, Phulkari, Chikankari, Kasida, Kantha, Kasuti, Kutch
3. Make one article using any traditional embroidery.

FACULTY OF SCIENCE

SYLLABUS

Of

B.SC HOME SCIENCE (Semester: V)

(Under Continuous Evaluation Grading System)

Session: 2021-22

The Heritage Institution

KANYA MAHA VIDYALAYA

JALANDHAR

(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. HOME SCIENCE

(Session 2021-2022)

Upon successful completion of this Programme, students will be able to:

PSO (1) - To develop holistic understanding about various fields of Home Science including Family Resource Management, Foods and Nutrition, Human Development and Family Relations, Clothing and Textiles

PSO (2) - To understand the fundamentals of house planning, kitchens, laws and terminology used in building of house, kitchen equipments and their applications.

PSO (3) - To develop understanding about developmental stages from infancy to old age and insight into different areas of human development including physical, motor, cognitive, social and emotional development.

PSO (4) - To gain knowledge about different diseases, therapeutic nutrition, food preservation and safety, role of dietician in feeding of patients.

PSO (5) - To develop deep understanding of conversion of textiles fibres into fabric undergoing various spinning, weaving, and finishing techniques.

PSO (6) – To demonstrate skill in using various surface ornamentation techniques as such as dyeing , printing and embroidery as well as garment design and construction.

PSO (7) – To develop Capacity to serve as dietician , child and family counsellors, designers, food therapies, and in many more community services.

PSO (8) – Capable of oral and written communication.

B.SC HOME SCIENCE
(Session: 2021-22)
Scheme of Studies and Examination
(Continuous Evaluation Grading System)

Semester V							
Course Code	**Course Name**	**Course type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**	**CA**		
				L	**P**		
BHSL-5281	Child Psychology	C	50	40	-	10	3
BHSL-5282	Introduction To Extension Education And Community Development	C	50	40	-	10	3
BHSL-5063	Basic Nutritional	C	50	40	-	10	3

	Biochemistry						
BHSM-5284	Interior Space Designing	C	100	60	20	20	3+3
BHSM-5285	Therapeutic Nutrition	C	100	60	20	20	3+3
BHSM-5286	Basic Concepts Of Sewing And Fashion	C	100	60	20	20	3+3
BHSM-5077	Applied Botany And Home Gardening	C	100	50	30	20	3+3
SECI- 5541	*Innovation, Entrepreneurship and Venture development	AC	25	20	-	5	1
	Total		**550**				

C: Compulsory AC:
Audit course
***Marks of these papers will not be added in total marks and only grades will be provided**

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Child Psychology
(Theory)
Course code: BHSL -5281

COURSE OUTCOMES

1. To introduce the concept of psychology and Child psychology.
2. To study the development of aspects such as attention, memory and learning.
3. To study the development phases in childhood with respect to these aspects.
4. To link the study of development with the discipline of psychology in accordance to different theories.
5. To provide systematic knowledge of the foundation of human behaviour.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Child Psychology
(Theory)
Course code: BHSL -5281

Time: 3 Hrs

Max. Marks: 50
Theory:40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four sections (A-D). Questions of sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any section.

CONTENTS

UNIT -I

Psychology related concept
Definition of Psychology
Nature of Psychology
Scope of Psychology
Definition of Child psychology

Attention
Meaning of attention, span of attention, distraction in-attention.
Nature of attention.
Factors affecting attention.

UNIT-II

Memory
Definition
Aspects of Memory
Factors affecting memory and improvement in memory.
Forgetting and its causes.

UNIT-III

Learning and Motivation
Meaning, nature and types of learning.
Primary and secondary motives.
Role of Motivation in learning
Factors affecting learning.

UNIT-IV

Theories related to different development of human life Span.
Cognitive theory- Jean Piaget.
Psycho-Sexual theory – Sigmund Freud
Psycho-Social theory –Erick-Erickson.
Hierarchy of Needs –Maslow.

Reference Books :

Brooks, Flower, D & Shaffer, Laurence F child Psychology".
Developmental Psychology, by Elizabeth B Hurlock.
Child Development and personality by Mussen Conger, Kogan.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Introduction to Extension Education and Community Development
(Theory)
Course code: BHSL -5282

COURSE OUTCOMES:

Outcomes:

CO 1 To understand about the concept of education and its different forms.

CO 2 To gain the knowledge about extension services provided by agricultural universities.

CO 3 To make the students familiar about roles of extension and home science education in rural development.

CO 4 To get the concept of motivation and techniques to motivate village people and extension workers.

CO 5 To learn the concept of community development.

CO 6 To gain the knowledge about different rural development programs.

CO 7 To get the insight into Panchayati Raj System and its functions.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Introduction to Extension Education and Community Development
(Theory)
Course code: BHSL -5282

Time: 3 Hrs
Max. Marks: 50 **Theory:40**
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four sections (A-D). Questions of sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any section.

Contents

Unit-I

- Education, is definition and types.
- Concepts, philosophy, principles and aims and scope extension education.
- Difference between formal, non-formal and extension education.
- Brief history of popular extension activities in India.
- Extension services in Agriculture Universities.

Unit-II

- Role of extension education in rural development.
- Role of Home Science extension in rural development.
- Field covered under extension education.
- Role of extension worker
- Qualities of extension worker

Unit-III

- Motivation in Extension
- Motivating Village people
- Motivating Extension worker
- Techniques of Motivation
- Community development – its definition, work, elements, objectives, philosophy, types, principles and process.

Unit-IV

- Role of voluntary organization in community development
- Panchayati Raj System organization &function
- Co-operative Societies – Organization &function
- The Integrated rural development programme(IRDP).
- Minimum Need programme
- National Rural employment programme. Family planning programme.

References:

Education and communication for development by O. P. Dhama and O.P. Bhatnagar.

Extension Education and Communication by V.K. Dubey.

Bachelor of Science (Home Science) Semester-V
Session: 2021-22
Course Code: BHSL-5063
Basic Nutritional Biochemistry-I
(Theory)

Max. Marks: 50
Theory: 40
CA: 10

Time: 3 Hrs.

Instructions for the Paper Setter
Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

Unit-I

Carbohydrates: Introduction, Monosaccharides: Families of monosaccharides: aldoses and ketoses, trioses, tetroses, pentoses, and hexoses, disaccharides and polysaccharides: storage polysaccharides - starch and glycogen; Structural Polysaccharides - cellulose, and chitin; Heteropolysaccharides: Peptidoglycan, Proteoglycan, glycoproteins. Intermediary

Unit-II

Metabolism of Carbohydrates: Biosynthesis and degradation of carbohydrates, Glycolysis, TCA Cycle, Gluconeogensis. Structural formula of fatty acids, triglycerides and phospholipids. Rancidity of fats & its prevention.

Unit-III

Acid value and sponification value of fat. Essential fatty acid. Study of intermediary metabolism of fat oxidation and biosynthesis of fatty acids.

Unit-IV

Inorganic elements (calcium, phosphorus, magnesium and iron): Dietary source, Daily requirement, Biochemical function and Metabolism.

Books Recommended:

1. Jain, J. L., Jain, S. and Jain. N. (2016). Fundamentals of Biochemistry, S. Chand & Company Ltd., New Delhi.
2. Sharma, D. C. (2017). Nutritional Biochemistry, CBS Nursing Publishers.
3. Voet, D., Voet, J.G. (2012). Fundamentals of Biochemistry, John Wiley and Sons, New York.
4. Nelson, D.L. and Cox, M.M. (2017), Lehninger Principles of Biochemistry, 7th Edition, WH Freeman, New York

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Interior space Designing
(Theory)
Course code: BHSM-5284

COURSE OUTCOMES:

1. To study the objectives and importance of Home Interior Designing.

2. To study and orient the students towards present and future trends in furnishing material, flooring and curtains etc.

3. To plan furniture and color schemes for different rooms, age groups and gender.

4. To build the ability to apply various elements and principles of design in interiors.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Interior space Designing
(Theory)
Course code: BHSM-5284

Time: 3 Hrs **Theory:60**
Max. Marks: 100 **CA: 20**

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four sections (A-D). Questions of sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any section.

Unit–I

Introduction to Interiors

Importance of Home environment
Objectives of Home furnishing.
Factors to be considered while designing interiors.

Unit–II

Furniture

Material used for furniture-wood, iron, plastic etc. constructional features – Type of joints.
Factors to be considered for selecting furniture.
Application of principles of design in furniture arrangement.
Arrangement of furniture in drawing room, dining room, living cum dining room, bedroom master bedroom, children, adolescent boy & girl, guest room and lobby. Care of different type of furniture.

Unit–III

Planning of colour schemes

Factors to be considered while planning colour schemes for different rooms Development of colour schemes
Planning of colour schemes for drawing room, drawing cum dining room bedroom, Master, children adolescent boy & girl and lobby.

Unit – IV

Wall finishes

Wall paper, wood panelling & their care.
Paints – Types &suitability

Floor materials

Hard Material – stone, tile &wood
Resilient Material – Vinyl and Linoleum
Soft material – Carpets and rugs their selection, types, suitability and care.

Reference books

Home furnishing Anna Hong Rutt.
Home furnishing, Butter Winifred.
Home with character, Craig &Rush.
Family Resource Management & Health Science, Rajwinder K .Randhawa.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Interior space Designing
(Practical)

Course code: BHSM-5284

Course outcomes :

1. To acquaint the students with standard measurements of furniture.

2. To enable them to make templates of different furniture items.

3. To plan and execute various color schemes.

4 To develop color scheme samples of drawing room, bedroom, children room etc.

5. To study and collect various furnishing material and develop a scrap book.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Interior space Designing
(Practical)
Course code: BHSM-5284

Max. Marks:20

Note : Question paper will be set on the spot by the examiner :

Measure furniture of home and make templates of different furniture items of standard size.

Plan furniture arrangement and colour schemes. (Use samples) in the following rooms.
Drawing room.
Drawing cum dining room
Bedroom, Master, Children, adolescent boy and girl.
Do market survey of furnishing material and make a scrapbook.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Therapeutic Nutrition
(Theory)
Course code: BHSM-5285

Course outcomes:

1.To gain insight into objectives and concept of therapeutic diet.

2.To develop adaptations of normal diets into therapeutic diets.

3. To understand the concept of therapeutic nutrition in different diseases infections and fevers.

4. To gain knowledge of dietary modifications and management techniques.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Therapeutic Nutrition
(Theory)
Course code: BHSM-5285

Time: 3 Hrs **Max. Marks: 100**
Theory:60
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four sections (A-D). Questions of sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any section.

Contents :-

Unit-I

Basic concept of Therapeutic diet - meaning, importance, objectives, Therapeutic adaptations of the normal diet.

Types of routine hospital diets - normal diet, Soft diet, liquid diet, Special feeding methods Enteral nutrition and Parenteral Nutrition.

Role of Dietitian in feeding of patients. Effect of illness on food acceptance and utilization.

Nutrient and drug interaction. Effect of drug therapy on intake, absorption and utilization of nutrients.

Unit-II

Nutrition during infection and fevers - classification, etiology, symptoms and dietary management in - Typhoid, Tuberculosis and Dengue.

Nutrition in Gastro - intestinal disorders, etiology, symptoms and dietary management in Diarrhoea, constipation, Gastritis, Irritable bowl syndrome peptic ulcer.

Nutrition in disturbances of small and large intestine eitiology, symptoms peptic ulcer, management in Celiac disease, Lactose intolerance, ulcerative colitis.

Nutrition in disease of the liver, gall bladder and pancreas, etiology, symptoms and dietary management in - Jaundice, Hepatitis, cirrhosis of liver, Cholecystitis and Pancreatitis.

Unit-III

Nutrition in Diabetes Mellitus - Types etiology, symptoms metabolic changes, life style modification, Dietary management, Hypoglycemic agents, Medication, Insuline therapy, Acute Complication of diabetes.

Nutrition in Renal disease, etiology, symptoms dialysis - Its type and dietary management in Glumerulonephritis, Nephrosis, Acute Renal failure.

Nutrition in Cardiovascular diseases, etiology, symptoms, life style modification, brief knowledge of Dash Diet and dietary management in Atherosclerosis, Hypertension, Dislipidemia and Acute cardiovascular disease/ Heart attack.

Unit-IV

Nutrition in Cancer, types etiology, stages, symptoms diagnosis, factors inhibiting carcinogenesis, factors enhancing carcinogenesis and dietary management and Chemo& Radiation therapy (Brief Introduction).

Nutrition in obesity - assessment of obesity, Hazards of obesity, etiology, nutritional management and other approaches.

Gout - etiology, symptoms & dietary management.

Food Allergy - Causes, symptoms & dietary management.

Reference books

Food and Nutrition - by Dr. M. Swamination

Text book of Nutrition & Dieteties - by Kumud Khanna &others.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Therapeutic Nutrition
(Practical)
Course code: BHSM-5285

Course outcomes

1. To develop therapeutic diets according to special requirements of nutrients.

2.To calculate the nutritive value of diets.

3. To study the nutritive value of diets given in different diseases.

4. 4.To develop entrepreneurship skills in students.

5.To encourage the students to set up a diet clinic.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Therapeutic Nutrition
(Practical)
Course code: BHSM-5285

Marks: 20

Note :- Paper will be set on the spot by the examiner.

Prepare following therapeutic recipes and calculate their nutritive value.
Prepare 5 recipes of liquid and soft diet.
Prepare 5 high protein and high energy recipes.
Prepare 5 high carbohydrate, moderate protein & low fat recipes.
Prepare 5 high fiber and low glycemic index recipes.
Prepare 5 low sodium, low fat and high fiber diet.
Plan and calculate nutritive value of diet for the following diseases. Typhoid, Diarrhoea, Constipation, Jaundice, peptic ulcer, Diabetes, Hypertension, atherosclerosis, renal disease and obesity.
Students are required to run Diet Clinics in the college

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Basic concepts of sewing and fashion
(Theory)
Course code: BHSM-5286

Course outcomes:

1. To impart knowledge about sewing, it's equipment's and supplies.

2. To develop an understanding of basic sewing techniques.

3. To study various concepts of fashion, theories and terminology.

4. To study the cycle of fashion and importance to consumer.

5. To develop an understanding of fashion merchandising and its process.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Basic concepts of sewing and fashion
(Theory)
Course code: BHSM-5286

Time: 3 Hrs **Max. Marks: 100**
Theory:60
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set, two in each of the four sections (A-D). Questions of sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any section.

Contents :-

Unit-I

Sewing equipments

- classification.
- Parts, function and care and sewing machine.
- common stitching faults, their causes and remedies.

Unit-II

Sewing techniques

- Basic hand stitches – types and use.
- Seams and seam finishes – Type &use
- Fullness – Darts, tucks, pleats, gathers, shirring, their definition, types and application. o Trimming & Frills types and use
- Sleeves types and uses o Pockets types and uses.
- Neck finishes types and uses

Unit -III

- Collars types and uses
- Yokes and skirt - types and use
- Plackets - Types and uses
- Fasteners – Types and uses

Fashion Terminology
Apparel, Fashion, Fad, Craze, High fashion, Mass fashion, style, change, classic, boutique, Croquet, Silhouette, designer, collection, adaptation.

Unit-IV

Fashion Trend, Fashion Cycle
Sources of fashion, factors favouring fashion, selecting fashion, for casting fashion, fashion show Fashion merchandising

Advertising and Display

Reference books:

Basic process of clothing construction by Doongaji S Deshpande Clothing, Textile & their care – by Dr. Rajwinder K. Randhawa

Ministry of Fashion – by Manmeet Sodhia

Design Studies – by Manmeet Sodhia

Zarapkar System of Cutting- K.R Zarapkar. Navneet Publications.

Bachelor of Science (Home Science) (Semester –V)
(Session 2021-22)
Basic concepts of sewing and fashion
(Practical)
Course code: BHSM-5286

Time: 3 hrs. **Marks:20**

Note :- Paper will be set on the spot by the examiner.

Demo of machine parts and operation.
Make sample of the followings.
Even, uneven, diagonal and machine basting.
Running stitch, back stitch, button hole stitch
Visible and invisible hemming
run and fell seam, counter hem, french and mantuamaker. Seam finishes – hand overcast, turned and stitch and binding. Pleats – knife, box, inverted pleat Gathers with band and shirring.
Tucks – Pin tucks, cross tucks, shell tucks, space tucks, release tucks.
Frill and piping attachment.
Patchwork.
Plackets – continuous, two piece and extended placket
Fastner – hook & eye, button and button hole Press button, skirt hook & velcro tape (Attach fasteners on plackets only).
Pocket – Patch, in seam and cross pocket.
Makedraftofchildisbodiceblackandmakesampleofneckfinishesonbodiceblock– bias piping bias facing and shaped facing.
Make draft and sample of plain sleeve, cape Magyar using the neck finishes block.
Make draft and sample of peter pan, raised, peter pan (only draft) on child's bodice block.
Draft and stitch A-Line frock.
Draft and stitch baby frock with collar and puff sleeve.
Draft and construct child's bloomer.

Bachelor of Science (Home Science) (Semester-V)
Session 2021-22
Course Code: BHSM-5077
APPLIED BOTANY AND HOME GARDENING
(Theory)

Course outcome: -

After passing this course the course the student will be able to:

CO:1 Identify different plants.

CO:2 Learn art of home gardening.

CO:3 Understand the art of soil preparation for gardening.

CO:4 Understand different means of plant propagation.

Bachelor of Science (Home Science) (Semester-V)
Session 2021-22
Course Code: BHSM-5077
APPLIED BOTANY AND HOME GARDENING
(Theory)

Time: 3 Hrs. **Theory: 50**

Instructions for the Paper Setters:
Eight questions of equal marks (12 marks each) are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

Unit-I

Gardening
- Layout of a Garden
- Soil preparation – digging, tillage, drainage, watering and weeding.
- Manures and fertilizes

Unit-II

Propagation of plants
- Seed propagation
- Vegetative propagation by natural and artificial methods (Bulbs Rhizomes suckers Runners Tubers Budding and grafting)

Unit-III

Kitchen Garden
- Principle of planning and cultivation of vegetables with reference to potato tomato radish cauliflower brinjal, pea and spinach.

Unit-IV

Lawn and Hedges
- Principle of planning of lawn and hedges
- Brief description of care and cultivation of ornamental plants.
- Care and cultivation of seasonal flowers
- Care and cultivations of common indoor plants.

General characteristics, morphology and economic importance: algae, fungi and moulds

REFERENCE BOOK:

1) Basic Gardening Gemmell Alam Penguin books publication.
2) B. Choudhary: Vegetables (National Book of India, New Delhi 1979)
3) Breikell C. 1993, Step by Step Gardening Technique (Royal Horticultural Society's Encyclopedia of Practical Gardening).
4) Dutta A.C. Botany for Degree Students (Oxford University Press, New Delhi 1970)
5) Gangullee H.C. Dass, K.S. Dass, K.S. Dutta C: College Botany Vol. I (New Central Book Agency Calcutta 1991)
6) Gopalaswamianger K.S. 1991 Complete Gardening in India (Messers Nagaraj and Co., Madras).
7) H.T. Harman and D Keter: Plant Propagation, Principles and Practices (Prentice Hall of India Pvt. Ltd. New Delhi 1979).
8) Hind Book of Agriculture: ICAR, New Delhi 1987.
9) J.L. Shreemali Economic Botany (Har Anand Publication, New Delhi 1995)
10) O.P. Sharma: Hill's Economic Botany 2006 Tata McGraw-Hill Publishing Co. Ltd.

Bachelor of Science (Home Science) (Semester-V)
Session 2021-22
Course Code: BHSM-5077(P)

APPLIED BOTANY AND HOME GARDENING
(Practical)

Course outcome: -

After passing this course the course the student will be able to:

CO:1 Identify different tools to be used in soil preparation.

CO:2 Understand the use of different plant parts for plant propagation.

CO:3 Maintain different plants in the garden.

CO:4 Identify ornamental plants.

Bachelor of Science (Home Science) (Semester-V)
Session 2021-22
Course Code: BHSM-5077(P)
APPLIED BOTANY AND HOME GARDENING
(Practical)

Time: 3 Hrs. **Marks: 30**

Note: Paper will be set on the spot by the examiner.

1. Study of garden tools and accessories.
2. Identification of different types of plants i.e. vegetable flowers, ferns and ornamental plants.
3. Preparation of soil digging tillage drainage watering and weeding.
4. To prepare and manuring a seed bed for raising seedlings.
5. To prepare a bed for sowing potatoes and cultivate them.
6. To prepare a plot for raising seedlings.
7. To prepare a pot for repotting.
8. To prepare a plot and cultivate seasonal vegetable (as in theory).
9. Plant propagation.

a) From seeds guiding rules for seed sowing.

b) Vegetative propagation by cutting and grafting.

c) Maintenance of plants

d) Use of pesticides and fungicides

e) Identification of slides of algae fungi and moulds.

Project: Prepare Herbarium file Collection of specimen of ornamental plants flower.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME
Bachelor of Science (Home Science)
(Session 2021-2022)

Semester VI

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
BHSM-6281	Behavioural Psychology	C	50	25	15	10	3
BHSM-6282	Interior Decoration	C	100	60	20	20	3+3
BHSM-6283	Community Nutrition	C	100	60	20	20	3+3
BHSM-6284	Garment Designing & Construction	C	100	60	20	20	3+3
BHSM-6285	Communication and Audio-visual in Extension Work	C	50	25	15	10	3+3
BHSM- 6066	Applied Nutritional Biochemistry	C	50	25	15	10	3+3
BHSM-6487	Applied Zoology and Food Microbiology	C	100	60	20	20	3+3
Total			**550**				

***Marks of these papers will not be added in total marks and only grades will be provided**.
C-Compulsory
AC- Audit course

Bachelor of Science (Home Science) (Semester-VI)
BEHAVIOURAL PSYCHOLOGY
Course Code: BHSM-6281
(Theory)

COURSE OUTCOMES

1. To study the concept of intelligence and its measurement.

2. To gain knowledge about personality, its social factors and assessment.

3. To identify the behaviour disorders, its factors and ways of preventing.

4. To study the concept of disability.

5. To classify various impairments and their causes, prevention, education and rehabilitation.

Bachelor of Science (Home Science) (Semester-VI)
BEHAVIOURAL PSYCHOLOGY
Course Code: BHSM-6281
(Theory)

Time: 3 Hrs. **Max. Marks: 50**
Theory: 25
Practical: 15
CA: 10

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Content :-

Unit-I

Intelligence

a) Nature of Intelligence
b) Measurement of Intelligence

Unit-II

Personality

a) Definition and concepts of personality.
b) Social factors of personality.
c) Assessment of personality.

Unit-III

Behaviour disorders

a) Definition & types of Behaviour disorders.
b) Factors leading to behaviour disorders.
c) General way of preventing behaviour disorders.

Unit-IV

Person with disabilities

a) Concept of disability and classification system.
b) Definition, classification, cause, prevention, education and rehabilitation.

- Physical impairments.
- Visual impairments.
- Speech and hearing impairments
- Learning disabilities
- Behaviour disabilities
- Nail biting, thumb sucking, bed wetting, Temper Tantrum, Stealing.
- Dealing with Gifted children.

Reference Books

1) Child Development by Hurlock.
2) Educational Psychology by J.Walia.

Bachelor of Science (Home Science) (Semester-VI)
BEHAVIOURAL PSYCHOLOGY
Course Code: BHSM-6281
(Practical)

COURSE OUTCOMES

1. To conduct a case study on a child to study socio-psychological dimension.

2. To assess personality using two different techniques.

3. To assess intelligence using two different techniques.

4. A visit to guidance/counselling cell.

Bachelor of Science (Home Science) (Semester-VI)
BEHAVIOURAL PSYCHOLOGY
Course Code: BHSM-6281
(Theory)

Time: 3 Hours **Practical: 15**

Note :- Question paper will be set on the spot by the examiner.

1) To conduct a case study on a child to study and Socio-psychological dimension of socialization in one of the following situations and submit report.
   a) Slum child b) Single parent child
2) Assessment of personality using any two different techniques.
3) Assessment of intelligence using any two different techniques.
4) Visit to guidance/counselling centre.

Reference Books :-

1) Brooks, flower D. & Shaffer Laurence F. Child Psychology.
2) Developmental Psychology by Elizabeth B. Hurlock child Development and personality by Mussen, Conger, Kagan

Bachelor of Science (Home Science) (SEMESTER-VI)
INTERIOR DECORATION
(Theory)
Course Code: BHSM:6282

COURSE OUTCOMES

1. To understand the concept of Decorative and false ceiling.

2. To gain knowledge about good lighting and lighting needs for various activities and rooms.

3. To study different types of windows.

4. To study different types of curtains and draperies and their suitability.

5. To understand the importance of flower arrangement and its types.

6. To gain knowledge about equipments and accessories needed for flower arrangement.

7. To study the importance, types and selection of accessories used in rooms.

Bachelor of Science (Home Science) (SEMESTER-VI)
INTERIOR DECORATION
(Theory)
Course Code: BHSM:6282

Time: 3 Hrs **Max. Marks: 100**
Theory: 60
Practical: 20
CA: 20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Content :

Unit-I

- Ceiling Treatment and lighting
- Decorative and false ceiling.
- Types of lights.
- Characteristics of good lighting.
- Lighting needs for various activities & room.
- Effects of lighting on interior.
- Selection of lamps shade & fixture.

Unit-II

Window Treatment

- Terms used for describing window.
- Types of window.
- Types of curtain, draperies and their suitability.
- Treatment of problematic window.
- Venetian blinds and rollers.
- Window accessories – Certain rods, rings frills, cords swag etc.

Unit-III

Flower Arrangement

- Importance
- Types with Special reference to I- Kebana.
- Equipments & accessories needed.
- Points to be considered for plucking & making flower arrangement.
- Application of elements & principles of design in flower arrangement.

Unit-IV

Accessories

- Importance, types and selection of accessories in different room.
- Pictures types, selection and framing.
- Selection of household furnishing towel, bed sheets, pillow cover, blankets, quilts upholstery slipcovers, cushions etc.

Reference books

1. Home furnishing – Anna Hong Rutt
2. Home furnishing – butter winifred
3. Home with character, Craig & Rush
4. Interior design & decoration. Ferguson
5. Family Resource Management & health Science

Bachelor of Science (Home Science) (SEMESTER-VI)
INTERIOR DECORATION
(Practical)
Course Code: BHSM: 6282

COURSE OUTCOMES

1. To make elevation on walls, show lighting, windows and accessories in rooms.

2. To make fresh flower arrangement.

3. To make any furnishing article.

Bachelor of Science (Home Science) (SEMESTER-VI)
INTERIOR DECORATION
(Practical)
Course Code: BHSM: 6282

Practical : 20

1) Make elevation on walls of following room and show lighting, windows and accessories.
   a) Drawing room
   b) Master is bedroom
2) Make flower Arrangement :- with fresh flowers.
3) Make any one furnishing article.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNITY NUTRITION
Course code: BHSM: 6283
(Theory)

COURSE OUTCOMES

1. To understand the concept of community, health and related terms.
2. To gain knowledge about methods of enhancing nutritive value of food.
3. To assess the nutrition status using different methods.
4. To study the channels of nutrition education in the community.
5. To understand the concept of planning and implementation of nutrition education programme.
6. To study different national nutrition programme and policies.
7. To gain knowledge about role of national and international agencies in community nutrition.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNITY NUTRITION
Course code: BHSM: 6283
(Theory)

Time : 3 hrs. **Max. Marks: 100**
Theory: 60
Practical: 20
CA:20

INSTRUCTION FOR THE PAPER SETTER:

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Unit-I

Concept of community, health, malnutrition, maternal and infant mortality, morbidity, nutritional status.
Major nutritional problems prevalent in India - Protein - energy malnutrition, iron deficiency anaemia, Vit - A deficiency, iodine deficiency disorder, Vit - D and calcium deficiency, flurosis.
Malnutrition and Infection - Nutritionally relevant infection and infestation.
Effect of malnutrition on defense mechanism.
Effect of infection on nutritional status and growth and development.

Unit-II

Assessment of nutritional status using different methods
Anthropometric measurement, standards for comparison age assessment, weight, height, skin folds, arm, head and chest circumference, use of growth chart.
Clinical sign and symptoms of malnutrition, classification of clinical sign and symptoms methods of reporting results.
Biochemical assessment - most commonly used biochemical methods and their standard ranges.
Diet Surveys - Population sampling, methods of dietary survey points requiring special attention, adult consumption unit analysis of diet survey data

Unit-III

Channels of nutrition education in the community, Nutrition education method - lectures and Demonstration, workshops, films, posters, charts, exhibition, books, pamphlets, newspaper, radio & television, power point-presentations.
Planning and implementation of Nutrition education programme, objective, selecting topic, and audio visual aid for target group.

Method of enhancing nutritive value of food - Supplementation, sprouting, fermentation, fortification, enrichment.
Food Faddism and Faculty Food habits.
National Nutrition programme & policies.

a) Integrated Child Development Services. (ICDS)
b) Applied Nutrition Programme. (ANP)
c) Special Nutrition Programme. (SNP)
d) Mid-day meal Programme. (MMP)
e) Balwadi Nutrition Programme. (BNP)

Unit-IV

Role of National and international agencies in community Nutrition.

a) Indian council of Agriculture Research. (ICAR)
b) Indian council of Medical Research. (ICMR)
c) Central Food Technological Research Institute, Mysore. (CFTRI)
d) National Institute of Nutrition, Hyderabad. (NIN)
e) Food and Agriculture organization. (FAO)
f) World Health organization. (WHO)
g) United Nations Children's Fund. (UNICEF)
h) CARE.

Reference Book :

1. Food and Nutrition by Dr. M. Swaninathan.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNITY NUTRITION
Course code: BHSM: 6283
(Practical)

COURSE OUTCOMES

1. To cook recipes and calculate their cost and nutritive values.

2. To assess the nutritional status of different vulnerable groups.

3. To develop different audio-visual aids for imparting knowledge.

4. To plan, implement and evaluate the nutrition education for target groups.

5. To visit school to see the functioning of mid day meal programme.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNITY NUTRITION
Course code: BHSM: 6283
(Practical)

Marks: 20

Instruction for the paper setter.

Note :- Paper will be set on the spot by the examiner.

1. Cook following recipes and calculate their cost and nutritive value.
    a) Low cost energy and protein rich rec`ipes.
    b) Low cost iron rich recipes.
    c) Low cost calcium rich recipes.
    d) Value addition of cereal & pulses.
    e) Weaning foods
2. Assessment of nutritional status of vulnerable group using anthropometry/dietary surveys.
   Project report will be judged by the external examiner.
3. Development of audio-visual aids for imparting nutrition education- eg. charts, posters, flashcards and power-point presentation.
4. Planning, implementation and evaluation of nutrition education for specific target groups.
5. Visit to see the functioning of mid-day meal programme in schools or any health oriented programme.

Bachelor of Science (Home Science) (SEMESTER-VI)
GARMENT DESIGNING & CONSTRUCTION
Course Code: BHSM-6285
(Theory)

COURSE OUTCOMES

1. To identify different types of fabrics.

2. To understand the importance of labels.

3. To study the factors affecting selection of clothes for different age groups.

4. To study the use of lines in improving human figure.

5. To provide knowledge about anthropometry.

6. To gain knowledge about common fitting problems and methods of correcting them.

7. To get insight into pattern manipulation and its principles.

Bachelor of Science (Home Science) (SEMESTER-VI)
GARMENT DESIGNING & CONSTRUCTION
Course Code: BHSM-6285
(Theory)

Time: 3 Hrs **Max. Marks: 100**
Theory: 60
Practical: 20
CA:20

INSTRUCTION FOR THE PAPER SETTER:
• Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
• Candidates are required to attempt five questions, selecting at least one question from each section.
• The fifth question may be attempted from any Section.

Content :-

Unit-I

- Identification of different types of fabrics suitable for different garment.
- Intelligent buying of fabrics and readymade garment.
- Importance of label-terminology, care, symbols & their usage.

Unit-II

- Importance of clothing.
- Factors affecting selection of clothing for different age groups infant's, toddler's pre schooler's school going, adolescent's adult and elderly person.
- Anthropometry – definition points to be considered while taking body measurements.

Unit-III

- Application of elements of art and principles of design in clothing.
- Use of lines in improving human figure.
- Common fitting problem and methods of correcting them.

Unit-IV

- Different methods of developing design.
- Flat pattern making techniques. Drafting and paper pattern.
- Important terms used in pattern production.
- Pattern making principles.
- Pattern manipulation.
- Terms related to dart & seam.
- Difference between drafting, pattern making & draping.

Reference Books

1. Basic Process of clothing construction – by Doongaji S. Deshpande.
2. Clothing Textile & their care – by Dr. Rajwinder K. Randhawa.

Bachelor of Science (Home Science) (SEMESTER-VI)
GARMENT DESIGNING & CONSTRUCTION
Course Code: BHSM-6285
(Practical)

COURSE OUTCOMES

1. To introduce basic sketching techniques.

2. To draft and stitch different dresses like frock, ladies blouse, ladies shirt, ladies salwar, ladies kurta, ladies nighty etc.

Bachelor of Science (Home Science) (SEMESTER-VI)
GARMENT DESIGNING & CONSTRUCTION
Course Code: BHSM-6285
(Practical)

Time : 3 hours **Marks: 20**

Note : Paper will be set on the spot by the examiner.

1. Pattern Making – dart manipulation by flat pattern

- Shifting of darts
- Combining darts
- Converting darts into gathers
- Converting darts into seam lines

2. Drafting and Construction

- Draft and stitch petticoat (Drafting should be done directly on cloth).
- Draft and stitch ladies blouse.
- Draft and stitch ladies shirt.
- Draft and stitch ladies Salwar/churidar (Drafting should be done directly on cloth).
- Draft and stitch ladies nighty.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK
Course code : BHSM: 6286
(Theory)

COURSE OUTCOMES

1. To understand the concept of communication, its importance, scope, functions and problems.
2. To study the selection of channel and teaching tools.
3. To get insight into audio-visual aids.
4. To study different audio-visual aids.
5. To gain knowledge about programme planning.
6. To develop and plan of work, its importance and selection of subject matter.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK
Course code : BHSM: 6286
(Theory)

INSTRUCTION FOR THE PAPER SETTER:

• Eight questions of equal marks are to be set; two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
• Candidates are required to attempt five questions, selecting at least one question from each section.
• The fifth question may be attempted from any Section.

Course Content :-

Unit-I

- Communication-definition, importance process model, scope, function and problemin communication.

Unit-II

- Selection of channel and teaching tools.
- Feedback in communication.

Unit-III

- Audio-visual Aids – Meaning, types, choice planning and selecting theme, layoutand design.
- Brief introduction of commonly used aids, posters, charts, flipcharts, exhibition, power-point presentation, bulletin, puppet, drama & talks, power-point presentation.

Unit-IV

- Programme planning – meaning and principles.
- Development & plan of work, importance format & elements, selection of subject matter.

Reference Book :-

1. Education and Communication for development by O.P. Dhama and O.P. Bhatnagar.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK
Course Code : BHSM: 6286
(Practical)

COURSE OUTCOMES

1. To prepare different audio-visual aids like charts, posters, flash cards, pamphlet etc.

2. To prepare lesson plan.

3. A visit to impart extension education.

Bachelor of Science (Home Science) (SEMESTER-VI)
COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK
Course code : BHSM: 6286
(Practical)

Note :- Paper will be set on the spot by the examiner.

1. Preparation of Visual Aid.

Posters, charts, flash cards, pamphlets , power-point presentation.

2. Prepare a lesson plan on any subject matter to impart knowledge to the rural people.
3. Field visit to imparting extension education to rural people, submit the report that will be judged by the external examiner.

FACULTY OF SCIENCES

SYLLABUS

For

Bachelor of Arts (Semester I-VI)

(Under Continuous Evaluation System)

(12+3 System of Education)

Session: 2021-22

The Heritage Institution

KANYA MAHA VIDYALAYA

JALANDHAR

(Autonomous)

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE PROGRAMME

Bachelor of Arts (HOME SCIENCE)

(Session: 2021-2022)

Semester I

Course Name	Program Name	Course Code	Course Type	Marks				Examination time (in Hours)
				Total	Ext.		CA	
					L	P		
Home Science(Family Resource Management & Hygiene)	Bachelor of Arts	BARM-1284	E	100	60	20	20	3+3

E- ELECTIVE

Bachelor of Arts
SEMESTER–I
HOME SCIENCE
(Theory)

FAMILY RESOURCE MANAGEMENT & HYGIENE
COURSE CODE: BARM-1284

Time: 3 Hours **Max. Marks: 100**
Theory Marks: 60
Practical Marks: 20
CA: 20

Instructions for the Paper Setter: Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question is of 12 marks.

CONTENT

Unit–I

- Home **:** Meaning and importance of Home Science
- Functions of Home: Renting v/s owning
- Selection of site, soil, locality for a house
- Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.

Unit –II

- Elements of Art: line, form, shape, texture, size.
- Principles of Art in relation to interior decoration, Harmony, Balance, Rhythm, Proportion and Emphasis.
- Color
  a) Characteristic of color
  b) Color wheel
  c) Color schemes
  d) Use of color in Int. Decoration for various rooms.

Unit –III

- Hygiene
  a) Definition of hygiene.
  b) Definition of infection, sources, carrier and control.
  c) Definition and types of Immunity
- Causes and Spread of following Diseases
  a) Caused by insects–malaria, dengue.
  b) Conveyed by ingestion–Enteric fever, Jaundice, Dysentery, and Diarrhoea.
  c) Spread by droplet infection, chicken pox, measles, and mumps, tuberculosis.
  d) Sexually transmitted diseases–AIDS.

Unit–IV

- Food Hygiene
  a) Food Hygiene – Definition
  b) Hygiene during preparation, service and storage of food.
  c) Food poisoning, causes and prevention.
  d) Purification and storage of Water for home.

Book References:

- Family Resource Management & Health Science by Dr. Rajwinder K. Randhawa.
- Family Resource Management by Dr. Sushma Gupta, Amita Aggarwal, Neeru Garg.
- Textbook of Home Science by Mrs. Harinderpal Kaur , Mrs. Sudesh Sehgal(AP Publishers)

SEMESTER-I

FAMILY RESOURCE MANAGEMENT

(Practical)

COURSE CODE : BARM-1284

COURSE OUTCOMES

Co (1) - To enable them clean and unpolished households metals

Co (2) - To enable them to use color schemes for preparing texture sheets.

CO (3) - To Give Practical knowledge about floor decoration of alpana, rangoli for different occasions.

SEMESTER–I

HOME SCIENCE

FAMILY RESOURCE MANAGEMENT

(Practical)

COURSE CODE:BARM-1284

Time: 3 Hours **Marks:20**

- Cleaning & polishing of household metals, brass, copper, silver, gold, aluminum, iron, steel, non stick pans, plastic.
- Color Wheel.
- Color Schemes– Monochromatic, Analogous, Complementary. Prepare any five texture sheets using Fevicol, Spray, Stencil, Thread, Pulling, Crayons marbling etc.
- Floor decoration of Alpana & Rangoli for different Occasions.

Instruction for the practical examiner:

There will be three questions from the following topics:

Cleaning of metal.

Color schemes/textured sheet.

Rangoli/alpana

File and viva

Note: One Practical group will consist of 15 students.

Bachelor of Arts

Scheme of Studies and Examination

Home Science

Home Science **Semester II**								
Course Name	**Program Name**	**Course Code**	**Course Type**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
Home Science	Bachelor of Arts	BARM-2284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts

SEMESTER-II

FAMILY RESOURCE MANAGEMENT AND PHYSIOLOGY (THEORY)

COURSE CODE: BARM-2284

COURSE OUTCOMES

Upon completion of this course the student should be able to

CO (1) – To understand the steps involved in management process.

CO (2) - To understand the basic considerations while selecting furniture.

CO (3) – To understand the different types of income, budget, its advantages and limitations.

CO (4) – To understand the principles of work simplification.

CO (5) – To develop understanding about circulatory system and digestive system its structure and working.

CO (6) – To understand the working of male and female sex organs and there functions.

CO (7) – To develop understanding about the structure and functions of lungs, kidney and skin.

Bachelor of Arts

SEMESTER–II

HOME SCIENCE

(THEORY)

FAMILY RESOURCE MANAGEMENT AND PHYSIOLOGY

COURSE CODE - BARM - 2284

Max. Marks: 100

Time: 3 Hours **Theory Marks: 60**

Practical Marks: 20

CA: 20

INSTRUCTIONS FOR THE PAPER SETTER

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

CONTENTS

Unit - I

Meaning & Definition of Home Management. Steps in management process
Furniture: Basic considerations while selection of furniture.
Flower Arrangement: Types, Essential equipment used in flower arrangement, Selection of material, Application of elements and principles of Art in Flower Arrangement

Unit - II

Resources: Classification of resources, Human & Nonhuman, Factors affecting the use of resources.
Money Management: Types of income, Budget, its advantages and limitations. Planning of Budget. Means of supplementing family income.
Time: Steps in making plans, tools in time management—peak loads, work curves, rest periods.
Energy Management:

- Introduction
- Fatigue—types causes and effects of fatigue
- Principles of work simplification

Unit-III

Circulatory System

- Blood and its composition
- Coagulation of blood
- Structure and functions of heart.

Digestive System: Structure and functions of the alimentary canal.

Unit-IV

Reproduction system–male and female sex organs and their functions.
Structure & Functions of lungs, kidney & skin.

Bachelor of Arts.

SESSION (2021-22)

SEMESTER-II

FAMILY RESOURCEMANAGEMENT

(PRACTICAL)

COURSE CODE: BARM-2284

COURSE OUTCOMES

CO (1) - To demonstrate the working and cleaning of household equipments

CO (2) - To arrange (flowers fresh and dry) according to the principles and elements of design

CO (3) - To develop artistic techniques in glass, pot paintings and utility articles

Bachelor of Arts

SESSION (2021-22)

SEMESTER–II

HOME SCIENCE

FAMILY RESOURCE MANAGEMENT

(PRACTICAL)

COURSE CODE - BARM - 2284

Time: 3 Hrs. **Marks: 20**

1. Cleaning of window pane, Refrigerator, Food Processor, Microwave, and Gas Burner, cooking range.
2. Flower Arrangements– Fresh & Dry Arrangement.
3. Table Manners, Table setting and Napkin Folding.
4. Craft workshop – Glass Painting, pot painting, utility article like bag, magazine holder pot holder etc.
5. To prepare any article using the above techniques.

Instructions for the Practical Examiner:

There will be 2 questions from the following topics:

a. Fresh flower arrangement

b. Preparation of utility/decorative article

c. Files and schemes

d. Viva

Bachelor of Arts (Session 2021-22)

Scheme of Studies and Examination

Home Science

Home Science Semester III								
Course Name	**Program Name**	**Course Code**	**Course Type**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
Home Science (Clothing Textiles Part I)	Bachelor of Arts Semester III	BARM-3284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts (Home Science)

SEMESTER–III

(SESSION: 2021-2022)

CLOTHING TEXTILES (PART–I)

(THEORY)

COURSE CODE: BARM-3284

COURSE OUTCOMES

CO (1): the discuss different equipments for fabric construction.

CO (2): to get the insight of sewing machine, its care and common defects.

CO (3): To understand the classification and manufacturing of textile fibers.

CO (4): To get the concept of application of color on fabric.

CO (5): To discuss different types of printing and method of washing.

Bachelor of Arts

SEMESTER–III (SESSION: 2021-2022)

HOME SCIENCE

CLOTHING TEXTILES (PART–I)

(THEORY)

COURSE CODE: BARM-3284

Time: 3 Hours **Max. Marks:100**

Theory Marks: 60

Practical Marks: 20

CA: 20

- **Instructions for the Paper Setters**: Eight questions of equal marks are to be set, two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question is of 12 marks.

CONTENTS

UNIT-I

- Equipments& supplies in clothing: Construction—their use & care
- Sewing Machine:
  (a) Parts of Sewing Machine and its accessories
  (b) Common defects in sewing machine and their remedies
  (c) Care of Sewing Machines

UNIT II

- Recording of Body measurements. Care to be taken while taking body measurement.
- Different methods of developing a design—Drafting, Pattern making, Draping (in brief) their advantagesand disadvantages.

UNIT III

- Classification of textile fibers
- Manufacture (in Brief) & properties of different fibers. a) Cotton b) Linen c) Silk d) Wool e) Nylon f) Polyester g) Rayon Viscose & Acetate

UNIT IV

- Application of color on fabric Dyeing–simple dyeing of cotton Resist Dyeing–Tie Dye and Batik Printing. a) Block Printing. b) Screen Printing. c) Roller Printing
- Methods of Laundry/Washing.

References:

- Sushma Gupta, Neeru Garg – Textbook of clothing, textiles and laundry
- Dr. Rajwinder K. Randhawa – Clothing, textiles and their care

Bachelor of Arts (Home Science)

SEMESTER–III (SESSION: 2021-2022)

CLOTHING TEXTILES (PART–I)

(Practical)

COURSE CODE: BARM-3284

COURSE OUTCOMES

CO (1): To make basic hand and machine stitches and seams.

CO (2): To learn and make embroidery samples using 10 fancy stitches.

CO (3): To draft and stitch child bloomer and frock.

CO (4): To identify fibers through burning test.

CO (5): To design and make articles by tie and dye and block printing.

Bachelor of Arts SEMESTER–III

(SESSION 2021- 2022)

HOME SCIENCE

CLOTHING TEXTILES (PART–I)

(PRACTICAL)

COURSE CODE: BARM-3284

Time: 4 Hours **Marks: 20**

Clothing Practical:

Make samples of the following:

a) Tacking, hemming, buttonhole stitch, fasteners.

b) Seams-counter seam, run and fell, French seam.

c) Processes- continuous wrap, two piece placket opening, pleats, gathers into band, tucks.

d) Embroidery-10 fancy embroidery stitches.

Drafting of the following:

a) Childs bodice block.

b) Sleeves- plain and puff sleeve.

c) Collars-flat and raised peter pan, cape collar, baby collar.

Drafting and Stitching of:

a) Bloomer

b) Childs frock gathered.

Textile Practical:

1. Testing of Cotton, Wool & Silk, Nylon by Burning test.
2. Simple house hold dyeing of cotton fabric 12"x12".
3. Preparation of an article of Tie and Dye.
4. Preparation of article of block printing.

Instructions for the Practical Examiner:

There will be one practical exam consisting of two parts i.e clothing and textiles.

Clothing- 2 hrs 30 min.

Textiles Practical -1 hr 30 min

Bachelor of Arts (Session 2021-22)

Scheme of Studies and Examination

Home Science

Home Science Semester IV								
Course Name	**Program Name**	**Course Code**	**Course Type**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
Home Science (Clothing Textiles Part II)	Bachelor of Arts Semester IV	BARM-4284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts

SEMESTER–IV (SESSION: 2021-22)

CLOTHING TEXTILES (PART–II)

(THEORY)

COURSE CODE: BARM-4284

COURSE OUTCOMES

CO (1): To understand the concept of design.

CO (2): To discuss about clothing, care and storage of garments for different age groups.

CO (3): To get the concept of bleaching and finishing of different fabrics.

CO (4): To get the insight about different types of yarns.

CO (5): To discuss fabric construction on different weaves.

CO (6): To make them understand about different types of stains and there removal.

Bachelor of Arts

SEMESTER–IV HOME SCIENCE

CLOTHING TEXTILES, PART–II

(THEORY)

COURSE CODE: BARM-4284

Time: 3 Hours **Max. Marks: 100**

Theory Marks: 60

Practical Marks: 20

CA :20

Instructions for the Paper Setters:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

CONTENT

UNIT-I

1. Principles of design such as harmony, balance, rhythm, emphasis, and proportion.

2. Elements of design such as color, line, form, texture, light and pattern.

UNIT II

1. Selection of suitable clothes for the following groups a) Infants b) Toddlers c) School going children d) Adolescents e) Adults f) Elderly.

2. Care and storage of garments: cotton wool and silk.

UNIT III

1 Bleach—Oxidizing, reducing bleaches & their suitability to different fabrics.

2 Finishing—Sizing, designing, calendaring, sanforising, mercerization, crease resistant, water proofing & water repellent, flame resistant & flame proofing.

UNIT IV

1. Different types of yarns- simple, novelty and bulk yarn in brief.

2. Fabric construction- a brief study of basic weaves a) simple weaves- basket, rib b) twill , satin, sateen. c) novelty weaves- Pile ,leno, dobby , swivel,jacquard d) felting, bonding.

3. Stains: definition, types of stains, general procedure for identification and removal of common stains.- - tea, rust, curry, oil, ball pen, boot polish, lipstick, nail polish, juice

References:

- Sushma Gupta, Neeru Garg – Textbook of clothing, textiles and laundry
- Dr. Rajwinder K. Randhawa – Clothing, textiles and their care

Bachelor of Arts
SEMESTER–IV
HOME SCIENCE
CLOTHING TEXTILES (PART–II)

(Practical)

COURSE CODE: BARM-4284

COURSE OUTCOME

CO (1): To draft and stitch ladies garments- suit and nighty.

CO (2): To design and prepare article by stencils and fabric painting.

CO (3): To study basic stain removal techniques for common stains.

Bachelor of Arts
SEMESTER–IV
HOME SCIENCE

CLOTHING TEXTILES, PART–II

(PRACTICAL)

COURSE CODE: BARM-4284

Time: 4 hours **Marks: 20**

Clothing Practical

1. Drafting and stitching of the following

a) ladies shirt (kameez)

b) salwar

c) chooridar payjami

d) nightie.

Textile Practical

1. Preparation of article by

a) stencil printing

b) fabric painting

2. stain removal- tea, rust, curry, oil, ball pen, boot polish, lipstick, nail polish, juice

Instructions for the Practical Examiners:

Clothing Practical Time: 2hrs 30 min

Textile Practical Time: 1 hrs 30 min

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE PROGRAMME

Bachelor of Arts (HOME SCIENCE)

(Session 2021-2022)

Semester V								
Course Name	**Program Name**	**Course Code**	**Course Type**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
Home Science (Food and Nutrition and Child Development)	Bachelor of Arts	BARM-5284	E	100	60	20	20	3+3

E- ELECTIVE

Bachelor of Arts (HOME SCIENCE)

Semester V

HOME SCIENCE

(Theory)

Food and Nutrition and Child Development

COURSE CODE: BARM-5284

COURSE OUTCOMES

CO (1) – To develop the knowledge about introduction to nutrition and storage methods of cereals, pulses, eggs, poultry, vegetables and fruit.

CO (2) – To distinguish between the different types of cooking methods- dry heat, moist heat, frying and microwave cooking.

CO (3) – To understand the knowledge about classification, functions and food sources, requirement, deficiencies of carbohydrates.

CO (4) – To develop the knowledge about classification. Food sources, functions and deficiencies of proteins, fats and oils.

CO (5) – To understand the knowledge about energy, food as a source of energy, the body need of energy.

CO(6) To study the development of aspects such as attention, memory and learning.

CO(7)To study the development phases in childhood with respect to these aspects.

CO(8) To link the study of development with the discipline of psychology in accordance to different theories.

Bachelor of Arts (HOME SCIENCE)

(Theory)
Semester V

FOOD AND NUTRITION AND CHILD DEVELOPMENT

COURSE CODE: BARM-5284

Time: 3 Hours **Max. Marks: 100**

Theory Marks: 60

Practical Marks: 20

CA: 20

Instructions for the Paper Setter: Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question is of 12 marks.

CONTENT:

UNIT-I

1. Importance and functions of food:
a) Physiological
b) Psychological
c) Social
2. Essential food Constituents: Carbohydrates, Proteins and Fats; functions, sources, requirements and Deficiency and excess.
3. Methods of cooking: Boiling, steaming, frying, baking, roasting and micro-wave cooking.

UNIT-II

4. Food nutrients: Functions, recommended allowances, deficiency and sources of:
a) Vitamins– B-1, B-2, Niacin, A, C, D
b) Minerals–Calcium, Iron, Iodine
5. Food Preservation: Definition, Importance & Principles. Causes of food spoilage. Household methods of preservation. Sun drying, use of salt, oil, spices, sugar & chemical preservatives.

UNIT-III

1. Definition and importance of Child Development.
2. a) Differences between growth and development.
   b) Principles of development.
3. Physical development of the child from infancy to late childhood and factors affecting the same.

UNIT-IV

4. Motor Development from infancy to late childhood.
a) Pattern of motor development.
b) Factors affecting motor development.
5. Emotional Development
a) Characteristics of children emotions.
b) Common childhood emotions fear, anger, jealousy, love and affection, anxiety and curiosity.
6. Language Development
a) Stages of language development.
b) Factors affecting language development.

Bachelor of Arts (HOME SCIENCE)

(Practical)
Semester V

FOOD AND NUTRITION AND CHILD DEVELOPMENT

COURSE CODE: BARM-5284

COURSE OUTCOMES

Co (1) – To identify the different food stuff, weight and measures and cooking.

CO (2) – To distinguish between different types of cooking methods.

CO (3) – To develop the knowledge about cleaning of kitchen equipments, utensils, floor and cupboard.

Bachelor of Arts (HOME SCIENCE)
(Practical)
Semester V

FOOD AND NUTRITION AND CHILD DEVELOPMENT

COURSE CODE: BARM-5284

Time: 3 hours **Marks: 20**

1. Preparation of minimum of three dishes by using various methods of cooking (e.g. boiling, steaming, baking), frying (deep & shallow) and roasting with different food groups e.g. cereal, pulses & vegetables groups and their combinations.
2. Food preservation-Pickle, chutneys, jams, squashes, sherbets, sauce (at least two each).

Bachelor of Arts (HOME SCIENCE)

(Session 2021-2022)

Home Science Semester VI								
Course Name	**Program Name**	**Course Code**	**Course Type**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
Home Science (**FOODS AND NUTRITION & CHILD DEVELOPMENT–II**)	Bachelor of Arts Semester VI	BARM-6284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts

SEMESTER-VI

HOME SCIENCE

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(THEORY)

COURSE CODE: BARM-6284

COURSE OUTCOMES

CO (1):- To develop the knowledge to classify different functions and requirements of fat soluble vitamin and water soluble vitamin.

CO (2):- To identify the bio-availability, requirement and deficiency of different vitamins.

CO (3):- To develop the knowledge of food preservation, food spoilage and principle of food preservation.

CO (4):- To develop the knowledge of food adulteration and standards, toxic effects of food adulteration.

CO (5):- To develop the knowledge of food hygiene in purchasing, preparation, cooking and serving offood.

Bachelor of Arts SESSION (2021-2022)

SEMESTER–VI

HOME SCIENCE

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)
(THEORY)

COURSE CODE: BARM-6284

Time: 3 Hours **Max. Marks: 100**
Theory Marks: 60
Practical Marks: 20
CA :20

Instructions for the Paper Setters:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Unit- I

1. **Food Adulteration:**
   i) Definition
   ii) Common Adulteration
   iii) Food standards
2. Concept of balanced diet.
3. Classification of food based on the five/seven food groups.
4. Principles of Meal planning.

a) **Planning of Balanced Diets for the Middle Income Group for the following**
   i) Pre-schoolchildren
   ii) School going
   iii) Adolescents
   iv) Adult-male and female (only moderate worker)
   v) Old age
   vi) Pregnancy
   vii) Lactation

Unit- II

5. **Therapeutic Diets & Modification of Normal Diets:**
   a) Principles of Therapeutic Diets
   b) Concept of Soft, Bland, Liquid Diets with examples.
6. **Therapeutic diets in the following conditions with principles involved:**
   a) Fever
   b) Constipation
   c) Diarrhea
   d) High Blood Pressure/Hypertension
   e) Diabetes Mellitus

Unit- III

7. **Social Development:**
   a) Stages of Social Development
   b) Pattern of Social Development
   c) Role of Family and School in the Development of the Child.
8. **Play:**
   a) Significance of Play
   b) Types of Play
   c) Play Materials/Equipment required for various age group.

9. Common Behavior Problems and their Remedies–Bed Wetting, Thumb Sucking, Nail Biting, Temper-Tantrums.

Unit- IV

10. Pregnancy:

a) Signs and Symptoms of Pregnancy
b) Discomforts
c) Complications
d) Care During Pregnancy
e) Methods of Family Planning in Brief

11. Pre Natal-Development:

a) Stages of Pre Natal-Development
b) Factor Affecting Pre Natal-Development

12. Feeding of the Infant

a) Importance and Process of Breast Feeding
b) Bottle Feeding
c) Weaning
d) Important Weaning Foods
e) Importance of Weaning

Bachelor of Arts SESSION (2021-2022)

SEMESTER–VI

HOME SCIENCE

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(Practical)

COURSE CODE: BARM-6284

Course Outcomes:

CO1:- To develop knowledge about different nutrients.

CO2:- To develop knowledge about therapeutic diets.

CO3:- To enhance the cooking skills with absorbing more nutrients.

CO4:- To develop knowledge about different food group

Bachelor of Arts SESSION (2021-2022)

SEMESTER–VI

HOME SCIENCE

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(Practical)

COURSE CODE: BARM-6284

Time: 3 Hours **Marks:20**

Note: One Group will consist of 15 Students.

1. Planning Calculation of Calories, Proteins, Fats and Carbohydrates. Preparation of dietsfor thefollowing:
   a) Pre-Schoolchild
   b) School going/packedlunch
   c) Adolescence
   d) Adult (Man & Woman) moderate worker pregnancy and lactationdiets.
2. Cooking and serving of the following: Invalid cookery: soft, liquid, fluiddiets.
3. Low calories recipe(five)
4. Low cost recipe (five)
5. Enhancing Nutritive value(five).

List of Books:

1. Applied Nutrition, R. Rajalakshmi, Oxford & IBH Publishing Co. Pvt. Ltd., NewDelhi.
2. PrinciplesofNutrition-Dietetics,Dr.M.Swaminathan,TheBangalorePrintingandPublishing Co. Ltd., 88, Mysore Road,Bangalore.
3. Food&Nutrition,By Educational Planning Group,Arya Publishing House,KarolBagh,New Delhi-5.
4. Normal and Therapeutic Nutrition, By Corinne H. Robinson, Marlya R. Lowler Macmillan Publishing Co., New York, Collier Macmillan Publishers,London.

POST GRADUATE DIPLOMA IN NUTRITION AND DIETETICS

(Semester: I & II)

(Under Continuous Evaluation System)

Session: 2021-22

The Heritage Institution

KANYA MAHA VIDYALAYA JALANDHAR
(Autonomous)

PROGRAMME SPECIFIC OUTCOMES OF POST GRADUATE DIPLOMA IN NUTRITION AND DIETITICS
(Session 2021-22)

PSO1. To recognize different systems including cardiovascular, urinary system, digestive system in our body.

PSO2. Work and communicate with people who are vulnerable those who are able to have food at proper time and educate them about malnutrition, nutrition and benefits of current nutrition programmes run by government.

PSO3. To understand the issues regarding meal planning in hospital , its organization , management , personal management , principle resources and equipments used in catering industry.

PSO4. To understand the industrial hygiene, environment, sanitation, public health and to control of infection in catering establishment. To gain knowledge about microbiology bacterial food poisoning and food preservation.

PSO5. To understand the basic principle of therapeutic diets, different types of diets to be given in different diseases.

PSO6. To understand the concept of social welfare, its agencies and institution involved in social welfare.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

SCHEME AND CURRICULUM OF EXAMINATION OF ONE YEAR DIPLOMA
Post Graduate Diploma in Nutrition and Dietetics Session
2021-2022

Post Graduate Diploma in Nutrition and Dietetics Semester I							
Course Code	**Course Type**	**Course Titles**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
PNDL-1281	C	Physiology	100	80	-	20	3
PNDL-1282	C	Community Nutrition and Social Welfare (Theory)	100	80	-	20	3
PNDL-1283	C	Institutional Food Administration (Theory)	100	80	-	20	3
PNDM - 1284	C	Nutritional Biochemistry	100	60	20	20	3
PNDP-1285	C	Community Nutrition and Social Welfare (Practical)	50	-	40	10	3
PNDP-1286	C	Institutional Food Administration (Practical)	50	-	40	10	3
PNDL-1287	D	Basic Nutrition	40	40	-	-	3
Total			**500**				

C : Compulsory

D: Deficient

Post Graduate Diploma in Nutrition and Dietetics Semester –I
(Session 2021-2022)
PHYSIOLOGY
(Theory)
COURSE CODE: PDNL – 1281

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge of cell structure and functions of inclusion bodies.

CO2. To understand the elementary knowledge of structure and functions of cardiovascular system.

CO3. To develop the knowledge of different types of endocrine glands and its functions.

CO4. To develop the knowledge about digestive system and its structure, function, digestion and absorption of carbohydrates, proteins and fats.

CO5. To develop the knowledge of structure and function of urinary system. CO6.

To develop the knowledge of respiratory system and reproductive system.

Post Graduate Diploma in Nutrition and Dietetics

Semester - I Session 2021-2022

PHYSIOLOGY

(Theory)

COURSE CODE: PDNL - 1281

Time:3 Hours **Max. Marks: 100**

Theory:80

CA:20

Instructions for the Paper Setter

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 16marks.

UNIT-I

1. Review of cell structure and functions of inclusion bodies.
2. Blood and Cardio Vascular System:
   - Composition of blood: haemoglobin, plasma, platelets and leucocytes
   - Erythropoiesis and coagulation of blood.
   - ABO blood group and Rh blood group.
   - Basic structure of heart, cardiac output.
   - Brief overview of cardiac cycle.
   - Blood pressure and factors affecting it
   - Hypertension
   - ECG

UNIT-II

3. Physiology of Kidneys:
   - Structure and function of kidney
   - Mechanism of urine formation.
   - Regulatory functions of the kidney.
   - Acid Base balance.
   - Role of kidney in homeostasis.
   - Role of kidney in regulation of body temperature.
4. Physiology of nervous system
   - Nervous System:
   - Structure and functions of nerve and receptor cells.
   - Transmission of nerve impulse
   - Synapse formation.
   - Autonomic Nervous System: Sympathetic and parasympathetic nervous system.
   - Concept of neurotransmitters.
   - Regulatory functions of the kidney.

- Acid Base balance.
- Role of kidney in homeostasis.
- Role of kidney in regulation of body temperature.

5. Physiology of nervous system
   - Nervous System:
   - Structure and functions of nerve and receptor cells.
   - Transmission of nerve impulse
   - Synapse formation.
   - Autonomic Nervous System: Sympathetic and parasympathetic nervous system.
   - Concept of neurotransmitters.

UNIT –III

6. Physiology of respiratory system
   - Structure of respiratory system.
   - Mechanism of respiration and its regulation.
   - Oxygen and carbon dioxide transport in blood.
   - Lung volume and capacity
7. Physiology of the digestive system:
   - Structure
   - Functions and regulation of the salivary glands, stomach, pancreas, liver and the intestines.
   - Mechanism of digestion and absorption of carbohydrates, proteins and fats.
   - Role of enzymes in digestion of carbohydrates, proteins and fats.

UNIT -IV

8. Physiology of endocrine glands:
   - Definition, functions and kinds of hormones.
   - Structure and functions of the following glands: Thyroid, parathyroid, adrenal, pancreas, pituitary and pineal gland.
9. Physiology of reproductive system
   - Structure & function of male and female sex glands and organs.
   - Ovarian and menstrual cycle.
   - Role of hormones in reproduction: FSH, LH, Estrogen, Progesterone, Testosterone and Human Chorionic Gonadotropic hormone(HCG).
   - Placenta.
   - Physiology of pregnancy, parturition, lactation and menopause.

References:

1. Bloom, W. And Fawceitt, D.W.A. Text Book of Histology W.B.Saunders of Company,1968.
2. Guyton, AC, Text Book of Medical Physiology W.B. Saunders &Company.
3. Strand, F.L. Modern Physiology. Macmillan Publication.
4. Davidson, B. And Smith E., Text Book of Physiology and Biochemistry,1970

Post Graduate Diploma in Nutrition and Dietetics

Semester - I

Session 2021-2022

COMMUNITY NUTRITION AND SOCIAL WELFARE

(Theory)

COURSE CODE: PNDL - 1282

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To understand the factors affecting food consumption and malnutrition.

CO2. To gain knowledge about agricultural production and socio- economic and psychological factors related to malnutrition and family size and composition.

CO3. To understand the measures to overcome malnutrition and to apply basic principle of nutrition to improve the dietary practices of community.

CO4. To gain knowledge about economics of sanitation of food nutrition.

CO5. To understand the national and international organization engaged in food and nutrition activity.

CO6. To understand the role of voluntary agencies their state programmes community development and extension programmes.

CO7. To understand the principles of planning, executing and evaluating the nutrition education programme.

CO8. To develop the knowledge about concept of social welfare.

CO9. To understand the knowledge about broad fields of social welfare, family and social welfare.

CO10. To distinguish social welfare from social work, social service, social reform and social action.

CO11. To develop the knowledge about social welfare agencies and institutions involved in social welfare.

CO12. To understand the knowledge about local organization, Home Science Association Of India, Women Voluntary Service.

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session 2021-2022

COMMUNITY NUTRITION AND SOCIAL WELFARE

(Theory)

COURSE CODE: PNDL - 1282

Time:3 Hours **Max. Marks:100**

Theory: 80

CA: 20

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 16marks.

UNIT -I

1. Major Nutritional Problem. Economic of Nutrition.
2. Factors Affecting Food Consumption, Malnutrition.
    - Measures to overcome malnutrition. Application of basic principles of nutrition to improve the dietary practices of communities.
    - Nutrition adaptation.
3. Nutritional measures to overcome malnutrition:
    - Germination, Fortification, Supplementation
    - Enrichment, Parboiling
    - GM foods, Unconventional foods
    - Green revolution and white revolution.
4. Health care system:-Health care service providers (primary, secondary and tertiary system).
5. Concept of Social Welfare:
    - Meaning, Importance.
    - Social welfare as distinguished from social work, social service, social reform and social action.

UNIT-II

6. Nutrition and infection.
7. Economic of sanitation of food nutrition – loss of food nutrients on contamination with chemical poisons, parasitic and microbial.
8. National and international organization engaged in foods and nutrition activities.
    (a) National: Role of voluntary agencies and state programmes, contribution of ministries of agriculture and health, ICMR, NIN, CSIR, CFTRI and ICAR.
    (b) International: FAO, WHO,UNICEF.
9. Broad fields of social welfare.
    - Family and child welfare
    - Medical and psychiatric welfare
    - Correctional service
10. Food and nutrition security:
    - Concept of food security
    - Factors underlying food and nutrition security
    - Right to food act2009
    - Laws related to food safety – HACCP, FSSAI

UNIT-III

(a) Assessing the food and nutritional problems in the community. Methods for assessment of Direct Assessment: Clinical sign, nutritional anthropometry, biochemical tests, and biophysical methods.

(b) Indirect Assessment: Vital statistics nutritionally relevant diseases, assessmentof ecological survey, technique of diet and nutrition survey.

11. Objectives and operations of feeding programmes in the country:-9th five year plan.
    - Pre-School feeding programmes.
    - School lunch programmes.
12. Social welfare agencies and institutions involved in social welfare:
    - Social welfare administration
    - Functioning of central and state government.
    - Ministries and departments of social welfare
    - Trends in social welfare administration
    - Central social welfare board
    - Kasturba Gandhi National Memorial Trust

UNIT-IV

13. Nutrition Education:
    - Study of existing daily dietary pattern in relation to socio-economic and Psychological aspects, importance of nutrition education for the community, technique, nutrition education through reading programmes.
    - Training workers in nutrition education and feeding integration of nutrition education with extension work.
    - Principles of planning, executing and evaluating the nutrition education programmes.
14. Food Adulteration:
    - Laws governing the food standards.
    - Common methods of detecting food adulteration at home
15. Social welfare agencies and institutions involved in social welfare:
    - Bhartiya Grameen Mahila Sangh
    - All India women's conference
    - Women's voluntary service
    - The All India Conference Of Social Work
    - The Home Science Association Of India
    - Local Organization – Official and non-official, involved in social welfare.

Reference Books:

- Community Nutrition, Textbook of Public nutrition IGNOU
- Institutional Food Administration, Mohini Sethi
- Bloom, W. And Fawceitt, D.W.A. Text Book of Histology W.B. Saunders of Company,1968.
- 2. Guyton, AC, Text Book of Medical Physiology W.B. Saunders &Company.
- Clarke, Helen, Principles and Practices of Social work, Acolaton, Century-crofts, Ince, New York,1947.
- Young Husband, Eileon, Social work and Social Change, George Allan and Unwin Ltd.,Ruskin House Museum Street, London,1964.
- Fariodlander, Walter, A Concept and Methods of Social Work, Prentice Hall of India (Pvt).Ltd., New Delhi,1964.
- E. Wilson, Everett, E. and Convener, Merrill B. The Field of Social work, Henry Holt and Company, New York,1958.
- Nagpaul, Hans, The study of India society, Sociological Analysis of Social Welfare and Social Work Education, S. Chand and Co. Pvt. Ltd., New Delhi

Post Graduate Diploma in Nutrition and Dietetics

(Semester-I)

Session 2021-2022

INSTITUTIONAL FOOD ADMINISTRATION

(Theory)
COURSE CODE: PNDL - 1283

COURSE OUTCOMES
Upon Completion of this Course the student should be able to

CO1. To review of different types of institutional food service operation – commercial and non – commercial.
CO2. To develop the knowledge about meal planning in institution , menu types and standardization of common food preparation.

CO3. To understand the knowledge about management, organization and communication process and method.

CO4. To develop the knowledge about personnel management, methods of recruitment, welfare provision for employees- health, safety and recreation.

CO5. To understand the knowledge about types of equipment, kitchen unit, storage units, serving units and dishwashing.

Post Graduate Diploma in Nutrition and Dietetics (Semester -I)

Session 2021-22

INSTITUTIONAL FOOD ADMINISTRATION

(Theory)

COURSE CODE: PNDL - 1283

Time:3 Hours **Max.Marks:100**

Theory: 80

CA: 20

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**
- Each question carry 16marks.

UNIT -I

1. Meal Planning in Institution**:** Basic factors in institutional meal planning.
   - Menu types of service portion control.
   - Maintenance of standard serving methods
   - Techniques of preparation of food in large quantity,
   - Food habits, food costs, maintenance, use of waste foods.
   - Standardization of common food preparation
2. Staff training and development
   - Training: Definition, Importance
   - Staff development: Principles, Process.
3. Food cost analysis
   - Pricing: Definition, factors affecting pricing
   - Basic concepts in accountancy: Cash memo, Receipt, Pay-in-slip, Cheques, Vouchers
   - Books of Account: Journal, Sales Return Book, Purchases Return Book, Sales Book, Purchase Book, Cash Book, Ledger.

UNIT -II

4. Organization: Theories of organization, different types.
   - Commercial and Non Commercial Institutions.
5. Staffemployment:
   - Advertising
   - Recruiting: Process and sources-Internal and External
   - Selecting: Interview, tests
   - Employment and wages
   - Orientation: Importance, Types: Formal, Informal.
6. Financial management:
   - Importance of Financial Management in a food based enterprise
   - Budgets and Budgeting process
   - Costing: Concept, Types, Control
   - Records: Menu, Purchase, Store, Production, Sales, Personnel, Utilities
   - Cost analysis: Concept of Trial Balance, Profit and Loss Account, Balance sheet

UNIT-III

7. Personnel Management:
    - Definition and scope
    - Approaches: Autocratic, Bureaucratic, Democratic, Scientific, and Technological
    - Personnel policies
    - Functions of a personnel manager

8. Principal Resources: Money – use of money, factors affecting cost control – cost concepts, types, element. Importance of cost control, methods of purchasing and requisition and inventory. Use of ledgers and basic knowledge of trading (profit and loss account and balance sheet).

UNIT- IV

9. Physical Plant**:** Location floor plans space allowances, kitchen unit, storageunits, serving unit and dish washing etc. work simplification.

10. Catering equipment:
    - Types of Equipment
    - Factors affecting selection of Equipments
    - Equipment design, installation and operation
    - Care and maintenance of Equipments.

11. Employee benefits:
    - Physical needs
    - Physiological needs
    - Social- psychological needs
    - Principles of employee benefits
    - Employee welfare schemes in India

Referencs:

- Nutrition in India – Patwardhan V.N.
- Nutrition and physical fitness – Bougert L.J.
- Nutrition evaluation of food processing, Roberts Haris, John Wiley and Sons, New Yorkand London.
- Community Nutrition, Textbook of Public nutrition IGNOU
- Institutional Food Administration, Mohini Sethi

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session: 2021-2022

NUTRITIONAL BIOCHEMISTRY

COURSE CODE: PNDM – 1284

COURSE OUTCOMES:

CO (1): To Understand the knowledge of Classification and properties of bio molecules.

CO (2): To Understand the concept of Intermediary Metabolism of Carbohydrates, Proteins and lipids

CO (3): To review the knowledge of Enzymes, Hormones and Inborn errors of metabolism CO (4): to Understand the Concept of Vitamins, Minerals and Antioxidant

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session 2021-2022

NUTRITIONAL BIOCHEMISTRY

(Theory)

COURSE CODE: PNDM - 1284

Time:3 Hours **Max.Marks:100**

Theory: 60

Practical: 20

CA: 20

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**
- Each question carry 1 mark.

UNIT I

1 Classification and properties of bio molecules:

- Carbohydrates- Classification and importance of Monosaccharides, Disaccharides and Polysaccharides (without structures)
- Classification of lipids (without structures)
- Classification of amino acids and proteins- Essential and non-essential amino acids (without structures)

UNIT II

2. Intermediary Metabolism: Overview (no structures)

- Carbohydrates- Glycolysis, Gluconeogenesis, TCA cycle, Blood sugar regulation
- Proteins- Urea cycle
- Lipids- β-oxidation and de novo synthesis of fatty acids, ketone bodies

UNIT III

3. Enzymes:

- Definition and classification of enzymes; Coenzymes
- Factors affecting enzyme catalysis

4. Hormones:

- Introduction to hormones
- Mechanism of hormone action; Biological role of Insulin and Glucagon

5. Inborn errors of metabolism

UNIT IV

6. Vitamins: Vitamins- Biochemical role

- Fat soluble vitamins – A, D, E & K
- Water soluble vitamins– (B1 and B2 only) and C

7. Minerals (elementary aspects):

- Macro minerals– Calcium, Sodium, Potassium, Magnesium
- Microminerals– Iron, Copper, Zinc, Iodine.

8. Antioxidants

References:

- Textbook of Biochemistry IGNOU

- Berg JM, Tymoczko JL and Stryer L. (2002) Biochemistry 5th ed. W.H. Freeman.
- West ES, Todd WR, Mason HS and Van Bruggen JT: Textbook of Biochemistry, 4th Ed. Amerind Publishing Co. Pvt. Ltd.
- Murray RK, Granner DK, Mayes PA and Rodwell VW, (2003) Harper's Illustrated biochemistry, 26th ed. McGraw-Hill(Asia).
- Nelson DL and Cox MM. (2005) Principles of Biochemistry, 4th ed. Freeman and Company.
- Voet D and Voet JG. (2004) Biochemistry 3rd ed. John Wiley and Sons.
- Principles of Biochemistry by Lehninger
- Biochemistry by U. Satyanarayana and U. Chakrapani

Post Graduate Diploma in Nutrition and Dietetics
(Semester-I)
Session 2021-2022
NUTRITIONAL BIOCHEMISTRY
(Practical)
COURSE CODE: PNDM – 1284

COURSE OUTCOMES:

CO (1): Qualitative analysis of monosaccharide, disaccharide and polysaccharide. CO (2):

Quantitative estimation of glucose.

CO (3): To test the reaction of protein fats and carbohydrate in bread, milk and egg.

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session 2021-2022

NUTRITIONAL BIOCHEMISTRY

(Practical)

COURSE CODE: PNDM-1284

Time:3 Hours **Max. Marks: 20**

CONTENTS:

1. Qualitative analysis of monosaccharide, disaccharide and polysaccharide.
2. Quantitative estimation of glucose.
3. To test the reaction of protein fats and carbohydrate in bread, milk and egg.

Post Graduate Diploma in Nutrition and Dietetics
(Semester-I) Session 2021-2022

COMMUNITY NUTRITION AND SOCIAL WELFARE
(Practical)
COURSE CODE: PNDP-1285

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To understand the planning and conducting nutrition education programmes.

CO2. To develop the knowledge about standardization of cheap, nutritious recipes using food suitable for vulnerable groups.

C03. To enable them to conduct survey regarding vulnerable groups.

CO4. To understand the preparation of teaching aids for imparting nutrition education programmes.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-I)

Session 2021-2022

COMMUNITY NUTRITION AND SOCIAL WELFARE

(Practical)

COURSE CODE: PNDP-1285

Time:3 Hours **Max. Marks: 50**

Practical: 40

CA: 10

Contents:

1. Planning and conducting nutrition education programmes (Project).
2. Evolving and standardization of cheap, nutrition recipes using various food suitable for vulnerable groups.
3. Surveys (class project).
4. Preparation and use of projected and non-projected teaching aids for imparting nutrition Education programmes.

Books Recommended:

1. Biology of Nutrition – Elements 1972, Plenium Press.
2. Applied Nutrition – Rajalakshmi R.
3. Nutrition in India – Patwardha V.N.
4. Nutrition and physical fitness – Bougert L.J.
5. Nutrition evaluation of food processing, Roberts Haris, John Wiley and Sons, New Yorkand London.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-I)

Session 2021-2022

INSTITUTIONAL FOOD ADMINISTRATION

(Practical)

COURSE CODE: PNDP-1286

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To knowledge about preparation of recipes suitable for cafeteria.

CO2. To develop the knowledge about standardization and cost calculation of recipes selected for cafeteria.

CO3. To enhance the supervising quality of a student in which they have to plan cafeteria and calculate its cost.

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session: 2021-2022

INSTITUTIONAL FOOD ADMINISTRATION

(Practical)

COURSE CODE: PNDP-1286

Time:3 Hrs. **Marks:50**

Practical:40

CA:10

Contents:

i. Preparation of recipes suitable for Cafeteria.
ii. Standardization and Cost calculation of recipes selected for Cafeteria.
iii. Each student will run a Cafeteria and perform assigned duty in each cafeteria that will be evaluated. Manager will submit a report of each cafeteria.

Note: There will be no external exam. Each cafeteria and duty will carry marks and marks will be sending by concerned teacher.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-I)

Session 2021-2022

BASIC NUTRITION

COURSE CODE: PNDL-1287

COURSE OUTCOMES

CO (1) – To develop the knowledge about introduction to nutrition and storage methods of cereals, pulses, eggs, poultry, vegetables and fruit.

CO (2) – To distinguish between the different types of cooking methods- dry heat, moist heat, frying and microwave cooking.

CO (3) – To understand the knowledge about classification, functions and food sources, requirement, deficiencies of carbohydrates.

CO (4) – To develop the knowledge about classification. Food sources, functions and deficiencies of proteins, fats and oils.

CO (5) – To understand the knowledge about energy, food as a source of energy, the body need of energy.

Post Graduate Diploma in Nutrition and Dietetics (Semester-I)

Session 2021-2022
BASIC NUTRITION COURSE
CODE: PNDL-1287

Time:3 Hrs. **Marks: 40**

Instructions for the Paper Setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 8marks.

Contents

Unit-I

Introduction to nutrition- Food as a sources of nutrients, functions of food, definition of nutrition, nutrients , adequate, optimum and good nutrition, malnutrition.

Brief introduction of food commodities, their types, selection.

Storage & Use: - cereals & pulses, eggs fish poultry, vegetable & fruit sugar, & mild, oil & ghee, spice & condiments.

Unit-II

Food Preparation

Basic terminology used in Cooking.

Different methods of cooking - Dry heat, moist heat, frying and microwave cooking.

Effect of cooking on nutritive value of food.

Unit-III

Carbohydrates - Composition, classification, functions, food sources, requirement, deficiencies.

Fats and Oils- Composition, Classification, Saturated, Unsaturated fatty acids, food sources, functions, requirement and deficiencies.

Protein - Composition, Classification, Essential and Non- essential amino acids, food Sources, functions, deficiencies.

Unit-IV

Energy- Unit of energy, food as a source of energy, energy value of food. The body need of energy.

Factors affecting energy requirement

1. Determination of energy value of foods using calorimeter
2. Specific Dynamic action
3. Basal Metabolism
4. Determination of basal metabolism
5. Factors affecting the BMR

References:

1. Guthrie, Hele, Andrews, Intoductory Nutrition, 6th ed. St. Louts, Times Mirror/MosbyCollege:1988.
2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd ed.) Wilay Eastern Ltd. 1990.
3. Swaminathan S: Advanced text book on foods Nutrition, Vol. I, II (2nd ed. Revised &enlarged) B. appC-1985.
4. Willson, EVAD Principles of Nutrition 4thed New York John Willey & Sons.1979

Post Graduate Diploma in Nutrition and Dietetics (Session 2021-22)

Scheme of Studies and Examination

(Credit Based Continues Evaluation Grading System)

Semester II								
Course Code	**Course Type**	**Course Title**	**Hrs/ Week**	**Marks**				**Examination time (in Hours)**
				Total	**Ext.**		**CA**	
					L	**P**		
PNDL-2281	C	Hygiene and Food Microbiology	4	75	60	-	15	3
PNDL-2282	C	Diet Therapy and Applied Nutrition (Theory)	4	75	60	-	15	3
PNDL - 2283	C	Nutritional science	4	75	60	-	15	3
PNDM - 2284	C	Principles of Food Science	8	100	60	20	20	3
PNDP-2285	C	Diet Therapy and Applied Nutrition (Practical)	6	50	-	40	10	3
PNDP – 2286	C	Entrepreneurship & Diet Counselling	4	50	-	40	10	3
PNDD-2287	C	Project	8	75	-	60	15	3
PNDM – 2288	D	Meal Management	-	100	60	40	-	3
Total	500							

C:Compulsory

D: Deficient

Project: Based on Diet Therapy and Community nutrition theory. Marks will be given by a panel of 4experts**.**

Internship: Students are required to undergo 3 months training in a hospital.

Completion certificate compulsory for obtaining PG Diploma.

Deficient Paper (D): Students opting for P.G. Diploma in Nutrition & Dietetics with B.Sc. (Medical) to appear in deficient paper of Basic Nutrition & Meal Management & marks not be added to the paper

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-22)
Hygiene and Food Microbiology
COURSE CODE: PNDL-2281

COURSE OUTCOME
Upon Completion of this Course the student should be able to

CO1. To knowledge about brief introduction to industrial hygiene, sanitation , public health. CO2. To knowledge about types of disinfection and different surfaces and materials.

CO3. To knowledge about brief history of microbiology and sub discipline of microbiology.

CO4. To develop the knowledge about harmful bacteria, methods of transmission and anti microbiology agents : antibiotics, germicides.

CO5. To understand the knowledge about types of food spoilage and food preservation

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II) (Session 2021-22)

Hygiene and Food Microbiology

COURSE CODE: PNDL-2281

Time:3 Hrs. **Max. Marks:75**
4Hrs/Week **Theory:60**
CA: 15

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

UNIT-I

1. **Hygiene:** A brief introduction to industrial hygiene, environment, sanitation and public health.
2. Hygiene
   a) Personal hygiene
   b) Procedure of hand hygiene
   a) Food hygiene (purchasing, preparation ,cooking and serving).
3. Control of infection in catering establishment.
   (a) Immunity types and their effect.
   (b) Disinfecting types of disinfection – Concurrent and terminal : methods of disinfection and different surfaces and materials – floor, walls, utensils, crockery, cutlery, clothing, wedding rooms, water closets, physical, chemical and mechanical methods.

UNIT-II

Microbiology:

1. Discovery and brief history of microbiology, sub disciplines of microbiology.
2. Ant microbiology Agents: Antibiotics, germicides, antiseptics, qualification of antimicrobial action.
3. Food hazard of microbial origin and occurrence and growth of micro organism in food

UNIT-III

4. Sources of harmful bacteria and their methods of transmission.
   (a) Bacterial food poisoning characteristics of bacteria, sources of infection in susceptible, food, sign and symptoms of the following:-Salmonella FP, Staphylococcal FP, Clostridium perfringes FP, Clostridium botulinum FP
   (b) Micro-organisms used in food biotechnology. Prebiotics and Probiotics.
5. Food contaminants: - naturally occurring toxicants, environmental contaminants and miscellaneous contaminants.

UNIT-IV

6. General types of food spoilage and food preservation according to following food groups:-
   - Cereal And Pulses
   - Milk And Meat Products
   - Fruits And Vegetables
7. (a)Food additives: classification , functional role and safety issues
   (c) Food packaging , concepts significance and functions , classification of packaging material and packaging methods.

References:

- Food Microbiology – William c .Frazier
  Microbiology –pelzar.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-22)

Diet Therapy and Applied Nutrition
COURSE CODE: PNDL- 2282

COURSE OUTCOME

Upon Completion of this Course the student should be able to

CO1. To knowledge about principles of therapeutic diets.

CO2. To develop the knowledge about diet in metabolic and chronic disorder – diabetes, gout, cardiovascular disease.

CO3. To develop the knowledge about nutrition and cancer.

CO4. To develop the knowledge about AIDS and skin disease.

CO5. To develop the knowledge about Drug – Nutrient interaction.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II)

(Session: 2021-2022)

Diet Therapy and Applied Nutrition
COURSE CODE: PNDL- 2282
(Theory)

Time:3 Hrs. **Max. Marks:75**
Theory: 60
CA: 15

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**

UNIT -I

Drug – Nutrient interaction.

1. Principles of therapeutic diets.
   (a) Introduction – Intravenous feeding, soft, liquid and post operative feedings. Modifications of Diet. Surgical conditions.
   (b) Diets in Fever and Infections–Types, metabolism in fevers, general dietary considerations. Diet in Typhoid, Tuberculosis
   (c) Calories – Under nutrition, overnutrition.

UNIT-II

Gastro intestinal diseases – Peptic ulcer spastic and stomic constipation, diarrhoea , Ulcerative cotitis–symptoms and dietary treatment, Sprue-coeliac diseases, Lactose intolerance dietary treatment and Crohn disease.
Liver disease – jaundice, cirrhosis and hepatic coma, gall bladder disease (cholecystitis and cholelithesis, and pancreatitis)
Chronic disorder like gout.

UNIT-III

Kidney disease – Nephritis, nephrotic syndrome acute and chronic renal failure, Urinary calculi kidney failure and Diet for Dialysis and non dialysis patient. Nutritional requirement during ESRD, Renal transplant.
Organ transplant

Cardiovascular disease – Hypertension and heart disease (Artherosclerosis, Hyperlipidemia) Elimination diets in allergy.

UNIT-IV

Introduction to Diabetes: Definition of diabetes, Types of diabetes –Type 1, Type II, Prediabetes, Gestational Diabetes. Risk factors for diabetes: primary and secondary risk factors
Causes and symptoms of diabetes Insulin and its Types.
Treatment plan for diabetes patient
Nutrition and Cancer.
Nutrition and AIDS and skin diseases.

References:

(i) Davidson and Passmor – Human Nutrition and Dietetics.

(ii) Whole and Good Heart – Modern Nutrition in Health and Disease.
(iii) Cooper, Barber and Micholl – Nutrition in health and disease.
(iv) Anita – Nutrition in health and disease.

Post Graduate Diploma in Nutrition and Dietetics
(Semester-II) (Session 2021-22)

Nutritional Science

COURSE CODE: PNDL- 2283

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To knowledge about Nutrition Science

CO2. To develop the knowledge about Carbohydrates, lipids, fiber, macro minerals and micro minerals.

CO3. To develop the knowledge about vitamins – fat soluble and water soluble vitamins.

CO4. To develop the knowledge about antioxidants.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)
Nutritional Science
COURSE CODE: PNDL- 2283

Time:3 Hrs. **Max. Marks:75**
Theory: 60
CA: 15

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**

CONTENTS:

Unit I

1. Introduction of Nutrition Science
2. RDA: Factor Effecting RDA, Determination of RDA of Different Nutrients , General Principal Of Driving RDA , Requirement Of RDA, References Men And women, Indian standards of height and weight.
3. CHO : Classifications , function , digestion , absorption , glycemic index , metabolism , maintenance of blood glucose levels , rapidly available glucose values, RDA ,sources.
4. Components of dietary fiber, physiological and metabolic effect, role of fiber in prevention of disease ,RDA, sources , understanding nutritional labeling of fiber
5. Lipids :classification , chemical composition fats in the body fats in the foods , functions, digestion and absorption , transport and metabolism , essential fatty acid , RDA ,sources , dietary fats and coronary heart disease

Unit II

6. Energy balance : units , direct and indirect calorimeter extermination of energy value of foods , total energy requirement , measuring total energy requirement , resting energy expenditure , factor effecting physical activity , factor effecting basal metabolic rate , factor effecting thermic effect of food , RDA sources
7. Protein : chemical composition , properties, classification of proteins ,nutritional classification of amino acids, functions digestion and absorption , metabolism , quality of proteins , protein digestibility corrected amino acid score , complementary value of proteins, requirements , RDA sources
8. Microminerals;
   Calcium functions absorptions metabolism ,osteoporoses , reproductive status, hypocalcaemia, pre menstrual syndrome , high blood pressure colon cancer hypercalemia , RDA , sources , phosphorous , function , adsorption and metabolism and deficiency , RDA , calcium phosphorus ration, sources , magnesium , summery of some macro mineral
9. Micromineral

Iron distribution functions absorption and metabolism factors effecting absorption of non - hyme iron overload requirement, RDA , sources , nutritional anemia prevalence , iron deficiency anemia bio nutrition

Unit III

10. Iodine functions absorption and metabolism , RDA , sources , iodine deficiency disease, incidence , etiology , the spectrum of iodine deficiency disorder, etiology.
11. Copper, fluorine , zinc and chromium
12. Fat soluble vitamin : functions, conversion factors , absorption , transport and metabolism , carotene , RDA, sources
13. Vitamin – A deficiency disorders: epidemiology, etiology, level of vitamin A status, clinical features, evaluation of vitamin a status, treatment and prevention.
14. Fat soluble vitamin – E, D, and K : deficiency

Unit IV

15. Water soluble vitamin : thiamine, riboflavin and niacin , pharmacological uses of thiamine , drug induced pellagra
16. Water soluble vitamin : folic acid and vitamin b 12 , megaloblastic anemia and folic acid and b 12 deficiency , prevention of anemia
17. Water soluble vitamin : vit B6, pentatonic acid, biotin and vitamins c , role of b vitamin in energy metabolism , vit C and disease , vitamin like substance
18. Water and electrolyte balance : distribution of water and electrolyte , functions , requirement , sources water balance , electrolyte balance , water depletion , water excess, edema , requirement of salt.
19. Antioxidants : sources of free radicals and reactive oxygen and species , disease process by free radicals and reactive oxygen species , antioxidants defense system , antioxidant and disease , requirement and sources.

References:

- Textbook of nutritional Science, IGNOU
- Nutrition Science, B. SriLakshmi
- Food and Nutritional Science, PoojaVerma
- Food and Nutrition, Dr. MSwaminathan

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

PRINCIPLES OF FOOD SCIENCE

COURSE CODE: PNDM- 2284

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To knowledge about principal of food science.

CO2. To develop the knowledge about starchy food, flours, fats and oils.

CO3. To develop the knowledge about meat structure, egg, milk and milk products. CO4.

To develop the knowledge about pulses, legumes, fruits and vegetables.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II) (Session: 2021-2022)

PRINCIPLES OF FOOD SCIENCE
COURSE CODE: PNDM- 2284

Time:3 Hrs. **Max. Marks:100**
Theory:60
Practical:20
CA: 20

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**

CONTENTS:

Unit I

Relation of cookery to colloidal chemistry
Definition of colloidal system, hydrophobic and hydrophilic colloids, stabilization of colloidal properties, surface tension, adsorption, foam formation, Rheology gel formation and emulsion
Methods of cooking and effect of cooking and processing on digestibility and nutritive value of foods Sugar cookery- sources, uses and properties crystallization of sugar, caramelization.

Unit II

Starchy cookery –sources and uses of starch, gelatinization
Flours - composition and baking qualities, batters and dough, leavening agents. Cooking and parboiling of rice
Fats and oils; - sources and extraction of edible oils and fats, changes in fats during storage and cooking, uses of fats.

Unit III

Meat structure, constituents of meat, post mortem changes, methods of cooking and changes in meat during cooking, tenderness, and juiciness
Egg; - structure, composition and selection coagulation of egg protein, eggs cooked in shells and parched eggs.
Milk and milk products; - composition and constituents of milk, coagulation of milk protein, curd cream, butter and cheese

Unit IV

Pulses and legumes, composition, method of processing and cooking, effect of processing such as, roasting, parching, soaking, germination and fermentation
Fruits and vegetables ;- structure , texture, pigments and acid and fruits and vegetables, browning reactions , pectin's substances theory of pectin gel formation, testing of pectin factors effecting gel formation

References:

- Food Science, B.Srilakshmi
- Food Science, Sumati R. Mudambi, Shalini M.Rao
- Food Microbiology, William C. Frazier

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II)

(Session: 2021-2022)

PRINCIPLES OF FOOD SCIENCE

(Practical)

COURSE CODE: PNDM- 2284

COURSE OUTCOME

Upon Completion of this Course the student should be able to

CO1. To knowledge about evaluation of food grains.

CO2. To develop the knowledge about chemistry of cereals.

CO3. To develop the knowledge about chemistry of colloidal particles.

CO4. To develop the knowledge about food colours, preservation of food and new product development.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II) (Session 2021-2022)

PRINCIPLES OF FOOD SCIENCE

(Practical)

COURSE CODE: PNDM- 2284

Time:3 Hrs. **Max. Marks:20**

Contents:

- Evaluation of Food grains for their physical appearance
- Experiment on the chemistry of cereals
- Evaluation of milk samples
- Chemistry of colloidal particles
- Food colors
- Preservation of food
- Honey, fats and oil
- New product development.

Post Graduate Diploma in Nutrition and

Dietetics (Semester-II)

(Session 2021-2022)

DIET THERAPY AND APPLIED NUTRITION
(Practical)
COURSE CODE:PNDP-2285

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge about planning, preparation and serving diets for all the conditions.

CO2. To develop knowledge functioning of hospital in patient care and to plan diet for different patients.

CO3. To develop the knowledge of preparing innovative recipes for therapeutic conditions such as diabetes, hypertension.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

Diet Therapy and Applied Nutrition (Practical)
COURSE CODE: PNDP-2285

Time:3 Hrs **Marks:50**
Practical: 40
CA: 10

1. As related to theory planning preparation and serving diets for all the conditions mentioned in the theory keeping in mind the economic, regional and cultural factors. Family nutrition counseling.
2. Students are required to undergo 3 months training in a multispecialty hospital certificate to be obtained from the hospital.
3. Innovation of at least 2 recopies for therapeutic conditions e.g. diabetes, hypertension etc

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

Entrepreneurship and Diet Counselling (Practical)
COURSE CODE: PNDP-2286

Time:3 Hrs. **Max. Marks:50**
Practical: 40
CA: 10

- Operation of diet clinic and diet counseling
- Computer application in use of nutrition related to software:
- Diet cal
- Online software
- Report and presentations of case study
- Seminars will be based on the topics covering recent advances in the field of nutrition, community nutrition, Public health and allied areas
- Reports on visits to food industry.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

Project

COURSE CODE: PNDD -2287

Time:3 Hrs. **Max. Marks:75**
Practical:60
CA: 15

Based on Diet Therapy and Community Nutrition Theory.

Marks will be given by a panel of 4 experts.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session: 2021-2022)

MEAL MANAGEMENT

(Theory)

COURSE CODE: PNDM: 2288

COURSE OUTCOME:-

CO (1): To understand the concept of recommended dietary allowances, food groups, exchange list and balanced diet.

CO (2): To discuss principal of meal planning and nutritional requirements of men and women with different conditions

CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.

CO (4): To understand the nutritional requirement during infancy.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

Meal management
COURSE CODE: PNDM -2288

Time:3 Hrs. **Max. Marks:100**
Theory: 60
Practical:40

Instructions for the Paper Setter

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section**.**

Content:

Unit-I

Balanced diet: Concept of Balanced Diet, Food Groups, Exchange Lists, Definition and Objectives of RDA, RDA for different age groups. (ICMR). Calorie consumption units in planning meals for a family.

Unit-II

Meal planning: Introduction and Principles of Meal planning.

Unit-III

1. Physiological changes and nutritional requirement during pregnancy and lactation.
2. Growth & development and nutritional requirement during infancy breast feeding /vs bottle feeding and weaning.

Unit IV

3. Growth development, food habits and nutritional requirement of preschoolers, school going children & adolescent boy and girl.
4. Nutritional requirement for adult male & female, Sedentary, moderate & heavy worker.
5. Physiological changes during old age and meeting their nutritional requirements.

References:

1. Guthrie, Hele, Andrews, Introductory Nutrition, 6th Ed, St. Louts, Times Mirror/Mosby College:1988

2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd Ed.) Wilay Eastern Ltd. 1990.

3. Swaminathan S: Advanced Text Book on Foods Nutrition, Vol. I, II (2nd ed. Revised & enlarged) B. app C-1985 4. Willson, EVAD Principles of Nutrition 4th Ed, New York John Willey & Sons.1979.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2021-2022)

Meal management
(Practical)

COURSE CODE: PNDM -2288

COURSE OUTCOME:

CO (1): To understand the concept of Standardize Proportion Size.
CO (2): To discuss meal planning and nutritional requirements of men and women with different conditions
CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.
CO (4): To understand the nutritional requirement during infancy with their Calculations.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II)

(Session: 2021-22)

Meal management

COURSE CODE: PNDM -2288

Time:3 Hrs. **Practical:40**

Note:

- Paper will be set on the spot by the examiner
- Planning of diet
- Cooking of 2 dishes from the diet plan
- Viva
- Files

1. Cook following dishes for different meals. Standardize portion size and calculate their nutritive value.

- Breakfast dishes- Stuffed Paranthas, Pancakes, Poha, Dalia etc.
- Lunch & Dinner dishes- Main Dishes- Dal, Channa, Rajmah, Koftas etc., Rice- Pulaos, Paneer dishes, Side dishes, Dry. Vegetables, Stuffed Vegetables etc. Dessert - Puddings, Kheer etc. Salads, Soups etc.
- Evening Sweet & Salty snacks - at least 5each.

2. Plan balanced diet for the following age groups calculating calories, protein, one important vitamin and mineral as per requirement for the given age group.

(a) Infancy-Weaning foods

(b) pre-schooler

(c) school going child.

(d) adolescent girl and boy

(e) adult male and female(sedentary moderate and heavy worker)

(f) Pregnant and lactating Women

(g) Geriatric

FACULTY OF SCIENCES

SYLLABUS

Of

Diploma in Early Childhood Care and Education
(Semester: I- II)

(Under Credit Based Continuous Evaluation Grading System)

Session: 2021-22

The Heritage Institution

KANYA MAHA VIDYALAYA JALANDHAR
(Autonomous)

PROGRAMME SPECIFIC OUTCOMES OF DIPLOMA IN EARLY CHILDHOOD CARE AND EDUCATION

PSO (1) - To gain knowledge about the contribution of eminent educationists in preschool education and to enable them to understand the psychology of students.

PSO (2) - To develop knowledge about the psychology and characteristic of gifted children, backward children, handicap children and mentally retarded.

PSO (3) - To give practical knowledge about the teaching aids.

PSO (4) - To develop awareness regarding government services and programmes.

PSO (5) - To gain knowledge about the methods of teaching and teaching aids.

PSO (6)- To enable them to plan activities to enhance their motor skills, reading, writing and counting skills

PSO (7) – To enable them to conduct case studies

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

SCHEME AND CURRICULUM OF EXAMINATION OF ONE YEAR DIPLOMA PROGRAMME
DIPLOMA IN EARLY CHILDHOOD CARE AND EDUCATION
(SESSION: 2021-2022)

Semester-I									
Course code	Course type	Course Titles	Hours/ week	Credits L-T-P	Marks				Examination time (in Hours)
					Total	Ext.		CA	
						L	P		
DECL-1281	C	Foundation of Education (Th.)	4	4-0-0	75	60	_	15	3
DECL-1282	C	Child Psychology and Child Development (Th.)	4	4-0-0	100	80	_	20	3
DECL-1283	C	Child Health and Nutrition-I (Th.)	4	4-0-0	100	80	_	20	3
DECL-1284	C	Services and Programe for Children –I (Th.)	4	4-0-0	75	60	_	15	3
DECP- 1285	C	Child Psychology and Child Development (Pr.)	6	0-0-3	50	-	40	10	3
DECP-1286	C	Art and Craft (Practical)	6	0-0-3	100	_	80	20	3
Total				22	500				

C-Compulsory

(Session 2021-22)
FOUNDATION OF EDUCATION(Theory)

COURSE CODE: DECL-1281

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To gain the knowledge about the historical perspective of early childhood education.

CO(2):- To gain understanding about the contribution of eminent education in pre –school education.

CO(3):- To understand the meaning of education, the nature and significance of primary education.

CO(4):- To gain knowledge about the programe and schemes in E.C.C.E.

CO(5):- To gain knowledge about the major contribution of different institutes in development of E.C.C.E.

(Session 2021-22)

FOUNDATION OF EDUCATION (Theory)
COURSE CODE: DECL-1281

Time:3hrs **Max.Marks:75**
4hrs/week **Theory: 60**
L-T-P **CA:15**
4-0-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12marks.

Contents

Unit-I

Historical Perspective of E.C.C.E.

Contribution of Eminent Educationists in Pre School Education.

a. Mahatma Gandhi

b. John Dewey

c. Rabindra Nath Tagore

d. Pestalozzi

e. Maria Montessori

UNIT-II

Introduction to Early Childhood Care and Education

Meaning of Education

a. Narrow, Broader and Derivative.

b. Types of Education: Formal, Informal &Non-Formal.

Nature and Significance of Primary Education.

UNIT-III

Programme or Schemes in E.C.C.E.

a. Integrated Child Development Services.

b. Balwadis.

c. SOS Villages.

d. Mobile crutches.

UNIT-IV

Childhood Education in India.

Major Contribution of different Institutes in the development of E.C.C.E.

a. Central Social Welfare Board(CSWB)

b. Indian Council for Child Welfare(ICCW)

c. National Council of Educational Research & Training(NCERT)

d. National Institute of Public Cooperation & Child Development(NIPCCD).

References:

- Introduction to Early Childhood Care Education by JO ANNBreveer
- The Early Years Matters By Marry Love
- Early childhood Education by V.Casper

(Session: 2021-2022)

CHILD PSYCHOLOGY AND CHILD DEVELOPMENT (THEORY)

COURSE CODE: DECL-1282

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO (1):- To understand the meaning, nature and child psychology.

CO (2):- To understand the difference between child psychology and general psychology. CO (3):- To gain knowledge about the stages of development of childhood.

CO (4):- To understand the intelligence level of children.

CO (5):- To assess the personality of the children by using observation and case study method.

CO (6):- To under the effect of heredity and environment on the growth and development of the child.

CO (7):- To develop understanding about the exceptional children, backward children and mentally retarded.

(Session: 2021-2022)

CHILD PSYCHOLOGY AND CHILD DEVELOPMENT (THEORY)

COURSE CODE: DECL-1282

Time:3hrs **Max.Marks:100**
4hrs/week **Theory: 80**
L-T-P **CA:20**
4-0-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 16marks.

Contents

Unit-I

Child Psychology

a. Meaning, Nature, Scope and Importance of Child Psychology.

b. Difference between Child Psychology and General Psychology.

Child Development

a. Meaning of Growth & Development, Principles of Child Development.

b. Stages of Development (Childhood Stage)

UNIT-II

Intelligence:

a. Meaning

b. b. Types of intelligence tests, characteristics of a good intelligence test.

Personality

a. Meaning of Personality, Factors affecting Personality.

b. b. Assessment of Personality:-

1. Observation. 2. Case History.

Heredity and Environment

a. Meaning of Heredity and Environment.

b. Relative Importance of Heredity & Environment in the Growth & Development of a child.

UNIT-III

Learning

a.Meaning and Characteristics of Learning.
b. Factors affecting Learning
c. Methods of Learning,
d. Difference between Child Psychology and General Psychology.

Child Development

a. Meaning of Growth & Development, Principles of Child Development.

b. Stages of Development (Childhood Stage)

UNIT-IV

Exceptional Children.

A. Gifted Children.

1. Meaning and characteristics.
2. 2. Educational programme for gifted children.

B. Backward Children.

1. Meaning and characteristics.
2. 2. Educational programme for backward children.

C. Handicapped Children (Mentally retarded)

1. Meaning and characteristics.
2. 2. Educational programme for handicapped children.

Mental Health

1. Concept and elements of mental health.
2. Mental health of students and teachers.
3. 3. How to improve mental health?

References:

- Introduction to Early Childhood Care Education by JO ANNBreveer
- The Early Years Matters By Marry Love
- Early childhood Education by V.Casper

CHILD HEALTH AND NUTRITION-

I(Theory) COURSE CODE:

DECL-1283

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To gain knowledge about the importance and functions of food, nutrition and malnutrition.

CO(2):- To gain knowledge about the care during pregnancy and planning meals for lactating women.

CO(3):- To develop understanding about the nutrition and health care during infancy and early childhood.

CO(4):- To understand the working of child line services and mid day meal schemes.

CO(5):- To gain the knowledge about carbohydrates, protein, fats, vitamin and minerals.

(Session 2021-2022)

CHILD HEALTH AND NUTRITION-I(Theory)
COURSE CODE: DECL-1283

Time:3hrs **Max.Marks:100**
4hrs/week **Theory:80**
L-T-P **CA:20**
4-0-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 16marks.

Contents

Unit-I

Introduction to Nutrition
Nutrition
Malnutrition (under nutrition, over nutrition) Causes of malnutrition.
Factors affecting the nutritional status.
Importance and function of food.

Unit-II

Basic concept in nutrition and health
Carbohydrates
Protein
Fats
Vitamins(A,B,C,D,E And K)

Minerals (calcium, phosphorus, iron, anaemia , sodium, iodine)

Unit-III

Nutrition and health care during pregnancy and lactating
Health care during pregnancy
Meal planning for pregnant and lactating women.

Unit-IV

Nutrition and health care during infancy and early childhood nutrition Status during infancy and early childhood.

References:

- Nutrition and Child Development by Dr. R Randhawa

SERVICES AND PROGRAMMES FOR CHILDREN-I

(Theory)

COURSE CODE: DECL-1284

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To understand the needs of special children with disability and impairment.

CO(2):- To understand the different programes run by government.

CO(3):- To enable them to counsel parents and care givers to understand the psychology of special children.

CO(4):- To develop understanding about the behavioural problems of special needs.

CO(5):- To gain knowledge about the services for special children run by government and N.G.O .

Session 2021-22

SERVICES AND PROGRAMMES FOR CHILDREN-I

(Theory)

COURSE CODE: DECL-1284

Time:3hrs **Max.Marks:75**

4hrs/week **Theory:60**

L-T-P **CA:15**

4-0-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12marks.

Contents

Unit-I

Services for children

Early childhood care and education in perception.

Some theoretical orientations in early childhood care education. Organization for children.

Unit-II

Children with Special Needs -1

Introduction to special needs

- Disability
- Impairment
- handicapped

Services for special children (by government and NGOs). Problems faced by parents and caregivers.

Counselling of parents and caregivers (educating them how to deal with special children). Role of parents teachers and caregivers.

Unit-III

Children with Special Needs -2

- Children with mental retardation
- Children with physical disabilities
- Children with behavioural problems
- Children with visual impairment

Unit-IV

Programmes Run By Government

- Integrated child development services.
- Balika Samriddhi Yojana(BSY)
- Kishore Shakti Yojana(KSY)
- Child line services.
- Mid-day meal scheme.
- National crèche fund

References:

- Introduction to Early Childhood Care Education by JO ANNBreveer
- The Early Years Matters By MarryLove
- Early childhood Education by V.Casper

(Session: 2021-2022)

CHILD PSYCHOLOGY AND CHILD DEVELOPMENT
(PRACTICAL)
COURSE CODE : DECP-1285

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To understand the concept of practical skills of intelligence

CO(2):- To understand the concept of measurement of attention

CO(3):- To enable them to understand about the practical process of memory

CO(4):- To develop understanding about measuring scales

CHILD PSYCHOLOGY AND CHILD DEVELOPMENT (PRACTICAL)

COURSE CODE : DECP-1285

Time:3hrs **Max.Marks:50**
6hrs/week **Practical:40**
L-T-P **CA:10**
0-0-3

Instruction for the paper setter:

- Question paper is to be set on the spot jointly by the internal and external examination. Two copies of the same may be submitted for the record to COE office , Kanya Maha Vidyalaya ,Jalandhar
- Contents

1. EPI
2. Maze Learning
3. Division Of Attention
4. Verbal Test Of Intelligence
5. Non-Verbal Test Of Intelligence

Diploma in Early Childhood Care and Education (DECCE)

(Session 2021-2022)

SEMESTER- II

ART ANDCRAFT
(Practical)
COURSE CODE: DECP-1286

COURSE OUTCOME

Upon Completion of this Course the student should be able to

CO (1):- To give the knowledge about free hand sketches in pencil, pen, and pastel and water color.

CO (2):- To enable them to prepare small flannel boards.

CO (3):- To enable them to write letters and for preparing flash cards.

CO (4):- To give them proper knowledge of colors and color wheel.

CO (5):- To enable them to make art sheets including letters and sketches

SEMESTER-I

ART ANDCRAFT

(Practical)

COURSE CODE: DECP-1286

Time:3hrs **Max.Marks:100**
6hrs/week **Practical:80**
L-T-P **CA:20**
0-0-3

Instruction for the paper setter:

- Question paper is to be set on the spot jointly by the internal and external examination. Two copies of the same may be sub mitted for the record to COE office , kanya maha vidyalaya ,Jalandhar

Contents

Unit-I

Simple free hand sketches in Pencil, Pen, Poster, and Pastel or in water colors.

Unit-II

Preparing Small Flannel-Board aids of 10" + 6" (two) either with flannel cloth or with cardboard with Sand-paper pasted on its back

Unit-III

Letter writing (in ink or color) Punjabi/Hindi/English for preparing Flash Cards.

Unit-IV

Proper knowledge of colors Color
Wheel Primary
Secondary
Tertiary
Warm and cool color etc.

15 (Fifteen)Art sheets included Letter writing and sketching.

DIPLOMA IN EARLY CHILDHOOD CARE AND EDUCATION

(Session: 2021-2022)

Semester -II									
Course code	**Course type**	**Course Titles**	**Hours/ week**	**Credits L-T-P**	**Max Marks**				**Examinationtion (in Hours)**
					Total	**Ext.**		**CA**	
						L	**P**		
DECL-2281	C	Methodology and Evaluation (Th.)	4	4-0-0	75	60	_	15	3
DECL-2282	C	School Organization and Administration (Th.)	4	4-0-0	100	80	_	20	3
DECL-2283	C	Child Health and Nutrition-II (Th.)	4	4-0-0	100	80	_	20	3
DECL-2284	C	Services and Programmes for Children –II (Th.)	4	4-0-0	75	60	_	15	3
DECP- 2285	C	Methodology and Evaluation (Pr.)	4	0-0-2	50	-	40	10	3
DECD-2286	C	Project Work	Full semester project	0-0-5	100	-	80	20	3
Total				**23**	**500**				

C-Compulsory

(Session: 2021-2022)

SEMESTER II

METHOODOLOGY AND EVALUATION
(Theory)
COURSE CODE: DECL-2281

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To gain knowledge about the concept of teaching and learning.

CO(2):- To gain understanding about the various methods of teaching.

CO(3):- To give knowledge about the meaning and classification of teaching aids.

CO(4):- To enable them to construct curriculum and to understand the meaning and difference between curriculum and syllabus.

CO(5):- To enable them to plan co- curricular programmes for school children.

CO(6):- To understand the meaning, importance and steps for lesson planning.

Diploma in Early Childhood Care and Education (DECCE)

(Session: 2021-2022)

SEMESTER II

METHOODOLOGY AND EVALUATION

(Theory)

COURSE CODE: DECL-2281

Time:3hrs **Max.Marks:75**

5hrs/week **Theory: 60**

L-T-P **CA:15**

4-1-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Contents

UNIT – I

Concept of teaching and learning

a. Meaning and nature of teaching and learning

b. Relationship between teaching and learning

c. Principles and maxims of teaching

UNIT – II

Methods of teaching

a. Playway
b. Projectmethod.
c. Dramatization
d. Storytelling
e. Field trips
f. Puppetry

Teaching Aids

a. Meaning and classification of teaching aids
b. Uses and importance of various audio visual aids.

UNIT –III

Curriculum

a. Meaning, difference between curriculum and syllabus.
b. Principles of curriculum construction

Co-curricular Programmes for school children.

a. Play and guidelines for nursery/pre-nursery programme for various age groups
b. Free play, guided play, indoor and outdoor play.
c. Individual and group playd.

Celebration of National and Social festivals

UNIT –IV

Evaluation and Measurement

a. Meaning, Objectives and Purposes of evaluation.
b. Characteristics of a good evaluation test.
c. Tools of evaluation
   i) Observation
   ii) Cumulative record card
   iii) Short answer/ Objective type test

Lesson Planning

a. Meaning and importance of lesson planning.
b. Steps for lesson planning

References:

- Evaluation Methodology Basics by E. Jane Davidson
- Quality Research and Evaluation Methods by M. Q. Patton

SCHOOL ORGANIZATION AND ADMINISTRATION

(Theory)

COURSE CODE: DECL-2282

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO (1):- To gain understanding about the meaning and importance of early childhood education.

CO (2):- To enable them to organise co- curricular activities for annual functions, fairs, sports and games.

CO (3):- To understand the meaning and types of time table.

CO (4):- To enable them to school records and register.

CO (5):- To give knowledge about the agencies in child education.

(Session: 2021-2022)
SEMESTER II
SCHOOL ORGANIZATION AND ADMINISTRATION
(Theory)
COURSE CODE: DECL-2282

Time:3hrs **Max.Marks:100**
5hrs/week **Theory: 80**
L-T-P **CA:20**
4-1-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Contents

UNIT – I

1. Planning of early childhood education: Meaning and importance
2. Institutional planning: - Meaning, Objectives, Characteristics and role of principal in planning.

UNIT –II

1. School Administration
   a. Needs and Objectives of school administration.
   b. Democratic and authoritarian administration.
   c. Head of Pre-Primary school: qualifications, duties and responsibilities.
   d. Teachers of Pre-primary schools: qualifications, duties and Responsibilities

UNIT- III

1. Agencies in childhood education.
   a. State department of Education
   b. Centre Social Welfare Board
2. Organisation of co-curricular activities.
   a. Annual function of school.
   b. Fairs c. Sports/Games d. Picnics

UNIT –IV

1. Time Table: Meaning and types.
2. Maintenance of school records and registers.
3. School Library: Importance and proper maintenance

References:

- Introduction to Early Childhood Care Education by JO ANN Breveer
- The Early Years Matters By Marry Love
- Early childhood Education by V. Casper

e.

CHILD HEALTH AND NUTRITION-II

(Theory)

COURSE CODE: DECL-2283

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To develop the knowledge about the common childhood illness their preventionand management.

CO(2):- To gain knowledge about the nutrition and child program.

CO(3):- To enable them to assess the nutritional status of children.

CO(4):- To develop knowledge about the common diseases of skin their prevention and management.

CO(5):- To enable them to care sick children, children with eye problem and infections.

SEMESTER II

CHILD HEALTH AND NUTRITION-II

Session:2020-21
(Theory)
COURSE CODE: DECL-2283

Time:3hrs **Max.Marks:100**

5hrs/week **Theory: 80**
L-T-P **CA:20**
4-1-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Contents

UNIT – I

Common childhood illness, their prevention and management Caring for the sick child
Disorder of the alimentary system Disorder of the respiratory system

UNIT – II

Infection of the mouth and throat Problem of the eyes

Common childhood illness, their prevention and management

UNIT – III

Common disease of the skin Fever
Lumps and swelling First aid

UNIT-IV

Nutrition and Health Programmes

Major Nutrition Programmes Assessment of nutritional status

References:

- Nutrition and Child Development by Dr. R Randhawa

(Session: 2021-2022)

SEMESTER II

SERVICES AND PROGRAMMES FOR CHILDREN-II
(Theory)
COURSE CODE: DECL-2284

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO (1):- To enable them to communicate with parents and community.

CO (2):- To give them the knowledge about the methods and concept of communication.

CO (3):- To create understanding about the communicating aids.

CO (4):- To develop knowledge about the basics of management.

CO (5):- To give them knowledge about ICDS programmes and crèches.

Diploma in Early Childhood Care and Education
(DECCE) (Session: 2021-2022)

SEMESTER II

SERVICES AND PROGRAMMES FOR CHILDREN-II
(Theory)
COURSE CODE: DECL-2284

Time:3hrs **Max.Marks:75**
5hrs/week **Theory:60**
L-T-P **CA:15**

4-1-0

Instruction for the paper setter:

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Contents

UNIT – I

Communicating With Parents and the Community Concept of Communication

UNIT – II

Methods of Communication Communication Aids

Themes and Messages in ECCE

UNIT – III

Basics of Management

Obtaining Funds and Formulating a Budget

UNIT – IV

A Case Study-ICDS Programme. Case Study-Creches

References:

- Children with Special Needs By Usha Ram
- Educating Expectation Children by S. A.Kirk
- The Child with Special Needs By Stavley Green Span

SEMESTER II METHOODOLOGY AND EVALUATION

(Practical)

COURSE CODE: DECP-2285

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO (1):- To enable them to communicate with parents and community.

CO (2):- To give them the knowledge about teaching aids

CO (3):- To create understanding about the reparations of visual teaching aids

CO (4):- To develop knowledge about the basics of lesson plannings for preschoolers.

Diploma in Early Childhood Care and Education

(DECCE) (Session: 2021-2022)

SEMESTER II

METHOODOLOGY AND EVALUATION
(Practical)
COURSE CODE: DECP-2285

Time:3hrs **Max.Marks:50**

4hrs/week **Practical: 40**

L-T-P **CA:10**

0-0-2

Instruction for the paper setter:

- Question paper is to be set on the spot jointly by the internal and external examination. Two copies of the same may be sub mitted for the record to COE office , kanya maha vidyalaya ,Jalandhar

Contents

1. Preparation of visual teaching aids for pre-scholars
   - Charts
   - Poster
   - Flashcard
2. Methods of teaching
3. Type of teaching aids
4. Lesson plan

SEMESTER II -PROJECT WORK
COURSE CODE: DECD-2286

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO(1):- To enable them to plan activities which will enhance their motor skills.

CO(2):- To enable them to plan activities which enhance their reading, writing and counting skills.

CO(3):- To give knowledge teaching materials.

Diploma in Early Childhood Care and Education (DECCE)

(Session: 2021-2022)

SEMESTER II

PROJECT WORK

COURSE CODE: DECD-2286

Time:3hrs **Max.Marks:100**

6hrs/week **Practical: 80**

L-T-P **CA:20**

0-0-3

Contents

For the project work the students has to work at the nursery school/preschool for 30 days and carry out play activities with the children there.

I. Plan play activities which will enhance their motor skills
II. Plan activities which will enhance their reading writing and counting skills

Prepare teaching material and introduce to the pre- schoolers which will help in their cognitive development.