

FACULTY OF SCIENCES

SYLLABUS of Bachelor of Science (HOME SCIENCE)

(Semester: II, IV &VI)

(Under Continuous Evaluation Grading System)

Session: 2020-21



**The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)**

Programme Specific Outcomes For Bachelor of Science (HOME SCIENCE)
(Session 2020-2021)

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 counselors, designers, food therapists 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 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/ PHC	C	50	40	-	10	3
BHSM-2102	Communication skills in English	C	50	25	15	10	3+3
BHSL- 2281	Family and Social Welfare	C	50	40	-	10	3
BHSM- 2282	Introduction to Family Resource Management	C	100	60	20	20	3+3
BHSM-2283	Advanced Food and Nutrition	C	100	60	20	20	3+3
BHSL- 2284	Elementary Physiology	C	50	40	-	10	3
BHSM-2125	Applied Computer	C	100	50	30	20	3+3
AECD-2161	*Drug Abuse: Problem, Management and Prevention (Compulsory)	AECC	50	40	-	10	3
SECM-2502	*Moral Education Programme	VBCC	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

E-Elective

Bachelor of Science (Home Science) (Semester – II)
(Session 2020-2021)

FAMILY AND SOCIAL WELFARE

COURSE CODE: BHSL-2281

(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 2020-2021)

FAMILY AND SOCIAL WELFARE

(Theory)

COURSE CODE: BHSL-2281

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 & nonofficial involved in social welfare

Awareness of current laws related to women & child welfare.

References:

1. E. Wilson, Everett E and Convener, Merrill B, The field of social work, Henry Holt and Company, New York 1958.
2. Nagpal, Hans, The study of Indian society, sociological analysis of social welfare and welfare education, S. Chand and Co Pvt Ltd, New Delhi, 1972.

Bachelor of Science (Home Science) (Semester – II)
(Session 2020-2021)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
COURSE CODE: BHSM-2282
(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 2020-2021)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
(Theory)
COURSE CODE: BHSM-2282

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 one question from each unit and fifth question from any 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:

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

Bachelor of Science (Home Science) (Semester – II)
(Session 2020-2021)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
COURSE CODE: BHSM – 2282
(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 2020-2021)
INTRODUCTION TO FAMILY RESOURCE MANAGEMENT
(Practicals)
COURSE CODE: BHSM - 2282

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 2020-2021)

ADVANCED FOOD & NUTRITION

COURSE CODE: BHSM-2283

(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 2020-2021)

**ADVANCED FOOD & NUTRITION
(THEORY)**

COURSE CODE: BHSM-2283

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 2020-2021)

ADVANCED FOOD & NUTRITION

COURSE CODE: BHSM-2283

(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 2020-2021)

ADVANCED FOOD & NUTRITION
(Practical)

COURSE CODE: BHSM-2283

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 tandoori snacks etc.
- c) Sprouting

(2) Preservation - Pickles, Chutney, Jam & Squashes.

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

Bachelor of Science (Home Science) (Semester – II)
(Session 2020-2021)

ELEMENTARY 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 2020-2021)

ELEMENTARY 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.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE
PROGRAMME

B.Sc. Home Science

(Session 2020-2021)

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 2020-2021)

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 2020-2021)
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 2020-2021)

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 2020-2021)

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 wave oven, 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 and surface 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 2020-2021)

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 2020-2021)
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 2020-2021)

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 2020-2021)
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 2020-2021)
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 2020-2021)

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
- 3) Arrange one small party
- 4) Daily and occasional cleaning of kitchen equipments, utensils, counters, floor and cupboards.

Bachelor of Science (Home Science) (Semester – IV)
(Session 2020-2021)

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 2020-2021)
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 2020-2021)
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 2020-2021)
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.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE
PROGRAMME

B.Sc. Home Science

(Session 2020-2021)

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)
(Session 2020-2021)

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 behavior 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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)
(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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)

(Session 2020-2021)

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

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

Unit-II

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

Unit-III

7. 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.
8. Planning and implementation of Nutrition education programme, objective, selecting topic, and audio visual aid for target group.

9. Method of enhancing nutritive value of food - Supplementation, sprouting, fermentation, fortification, enrichment.
10. Food Fadism and Faculty Food habits.
11. 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

12. 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. Swaminathan.

Bachelor of Science (Home Science) (Semester – VI)
(Session 2020-2021)

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)
(Session 2020-2021)

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 receipest and calculate their cost and nutritive value.
 - a) Low cost energy and protein rich receipes.
 - b) Low cost iron rich receipes.
 - c) Low cost calcium rich receipes.
 - 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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)

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)
(Session 2020-2021)
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)
(Session 2020-2021)
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 problem in communication.

Unit-II

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

Unit-III

- Audio-visual Aids – Meaning, types, choice planning and selecting theme, layout and 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)
(Session 2020-2021)
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)
(Session 2020-2021)
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 II, IV & VI)
(Under Continuous Evaluation System)
(12+3 System of Education)



Session: 2020-21

The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

Bachelor of Arts (Session 2020-21)
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	B.A	BARM-2284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts (Home Science) (Semester – II)

(Session 2020-2021)

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 (Home Science) (Semester – II)

(Session 2020-2021)

**FAMILY RESOURCE MANAGEMENT AND PHYSIOLOGY
(THEORY)**

COURSE CODE - BARM - 2284

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.

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 (Home Science) (Semester – II)

(Session 2020-2021)

FAMILY RESOURCE MANAGEMENT

(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 (Home Science) (Semester – II)

(Session 2020-2021)

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 2020-21)
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)	B.A Semester IV	BARM-4284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts (Home Science) (Semester – IV)

(Session 2020-2021)

CLOTHING TEXTILES (PART-II)

(THEORY)

COURSE CODE: BARM-4284

COURSE OUTCOME

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

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

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 (Home Science) (Semester – II)

(Session 2020-2021)

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 colour, 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—Oxidising, reducing bleaches & their suitability to different fabrics.
- 2 Finishing—Sizing, designing, calendaring, sanforising, mercerisation, 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- broken twill, satin, sateen. c) knitting, felting, bonding.

3. Stains: definition, types of stains, general procedure for identification and removal of common stains.

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 – II)

(Session 2020-2021)

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 (Home Science) (Semester – II)

(Session 2020-2021)

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 payjama
- 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

Bachelor of Arts (Session 2020-21)
Scheme of Studies and Examination
(Home Science)

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)	B.A Semester VI	BARM-6284	E	100	60	20	20	3+3

E-Elective

Bachelor of Arts (Home Science) (Semester – VI)

(Session 2020-2021)

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(THEORY)

COURSE CODE: BARM-4284

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 Arts (Home Science) (Semester – VI)
(Session 2020-2021)
FOODS AND NUTRITION & CHILD DEVELOPMENT–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.

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-school children
- 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 (Home Science) (Semester – VI)

(Session 2020-2021)

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(Practical)

COURSE CODE: BARM-4284

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 groups.

Bachelor of Arts (Home Science) (Semester – VI)

(Session 2020-2021)

FOODS AND NUTRITION & CHILD DEVELOPMENT–II)

(Practical)

COURSE CODE: BARM-4284

Time: 3 Hours

Marks:20

Note: One Group will consist of 15 Students.

1. Planning Calculation of Calories, Proteins, Fats and Carbohydrates. Preparation of diets for the following:
 - a) Pre-School child
 - b) School going/packed lunch
 - c) Adolescence
 - d) Adult (Man & Woman) moderate worker pregnancy and lactation diets.
2. Cooking and serving of the following: Invalid cookery: soft, liquid, fluid diets.
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., New Delhi.
2. Principles of Nutrition-Dietetics, Dr. M. Swaminathan, The Bangalore Printing and Publishing Co. Ltd., 88, Mysore Road, Bangalore.
3. Food & Nutrition, By Educational Planning Group, Arya Publishing House, Karol Bagh, New Delhi-5.
4. Normal and Therapeutic Nutrition, By Corinne H. Robinson, Marlyna R. Lowler Macmillan Publishing Co., New York, Collier Macmillan Publishers, London.

FACULTY OF SCIENCES

SYLLABUS

Of

**Diploma in Early Childhood Care and Education
(Semester: II)**

(Under Credit Based Continuous Evaluation Grading System)

Session: 2020-21



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

DIPLOMA IN EARLY CHILDHOOD CARE AND EDUCATION

Session: 2020-21

Semester -II									
Course code	Course type	Course Titles	Hours/ week	Credits L-T-P	Max Marks				Examination time (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
SECM-2502	AC	***Moral Education Programme	2	2-0-0	25	25	-	-	1
Total				23	500				

*****Marks and credits of this paper will not be added in total marks and Total Credits. Only grades will be provided.**

C-Compulsory

AC- Audit course

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

METHODOLOGY 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: 2020-21

SEMESTER II

**METHODOLOGY AND EVALUATION
(THEORY)
COURSE CODE: DECL-2281**

Time: 3 hrs

5hrs/week

L-T-P

4-1-0

Max.Marks:75

Theory: 60

CA: 15

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. Play way
- b. Project method.
- c. Dramatization
- d. Story telling
- 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 play
- d. 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

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

**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.

CO (6):- To develop importance of proper maintenance of school library.

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

SCHOOL ORGANIZATION AND ADMINISTRATION

(Theory)

COURSE CODE: DECL-2282

**Time: 3 hrs
5hrs/week**

Max.Marks:100

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

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

**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 prevention and 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.

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

CHILD HEALTH AND NUTRITION-II

THEORY

COURSE CODE: DECL-2283

**Time: 3 hrs
5hrs/week**

Max.Marks:100

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

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

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: 2020-21

SEMESTER II

SERVICES AND PROGRAMMES FOR CHILDREN-II

(Theory)

COURSE CODE: DECL-2284

Time: 3 hrs
5hrs/week

Max.Marks:75
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

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

METHODOLOGY 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 pres schoolers.

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

METHODOLOGY AND EVALUATION

(Practical)

COURSE CODE: DECP-2285

**Time:3 hrs
4hrs/week**

**Max.Marks:50
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 submitted for the record to COE office , kanya maha vidyalaya , Jalandhar

Contents

1. Preparation of visual teaching aids for pre-scholars
 - Charts
 - Poster
 - Flash card
2. Methods of teaching
3. Type f teaching aids
4. Lesson plan

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

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.

CO(4):- To enable them to prepare material which will enhance their cognitive development.

Diploma in Early Childhood Care and Education (DECCE)
Session: 2020-21

SEMESTER II

PROJECT WORK

COURSE CODE: DECD-2286

Time:3 hrs
6hrs/week
L-T-P
0-0-3

Max.Marks:100
Practical: 80
CA:20

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.

POST GRADUATE DIPLOMA IN NUTRITION AND DIETETICS
(Semester: II)

(Under Continuous Evaluation System)

Session: 2020-21



The Heritage Institution

KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

**PROGRAMME SPECIFIC OUTCOMES OF POST GRADUATE DIPLOMA IN NUTRITION AND
DIETITICS
(Session 2020-21)**

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.

Post Graduate Diploma in Nutrition and Dietetics
(Session 2020-21)
Scheme of Studies and Examination
(Credit Based Continuous Evaluation Grading System)

SemesterII								
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	Entrepreneursh ip & 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 4 experts.

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 P.G.

Post Graduate Diploma in Nutrition and Dietetics

(Semester-II)

(Session 2020-21)

Hygiene and Food Microbiology

COURSE CODE: PNDL-2281

COURSE OUTCOMES

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 displicines of microbiology.

CO4. To develop the knowledge about harmful bacteria, methods of transmission and antimicrobiology 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 2020-21)

Hygiene and Food Microbiology

COURSE CODE: PNDL-2281

Time: 3 Hrs.

4 Hrs/Week

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

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 perfringens 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 2020-21)

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 2020-2021)

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, over nutrition.

UNIT-II

Gastro intestinal diseases – Peptic ulcer spastic and stomic constipation, diarrhoeas, Ulcerative colitis–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 cholelithiasis, and pancreatitis)

Kidney disease – Nephritis, nephrotic syndrome acute and chronic renal failure, Urinary calculi kidney failure and Dialysis. Nutritional requirement during Renal transplant.

UNIT-III

Chronic disorder like gout.

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 2020-21)

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 2020--2021)

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 , glyceamic 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. Micro minerals;
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 , summary of some macro mineral

9. Micro mineral

Iron distribution functions absorption and metabolism factors effecting absorption of non - heme 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, aetiology.

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, pantoic 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. Sri Lakshmi
- Food and Nutritional Science, Pooja Verma
- Food and Nutrition, Dr. M Swaminathan

Post Graduate Diploma in Nutrition and Dietetics
(Semester-II)

(Session 2020-2021)

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 2020-2021)

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, caramalization.

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 2020-2021)

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 2020-2021)

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 2020-2021)

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 2020-2021)

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 recipes for therapeutic conditions e.g. diabetes, hypertension etc.

Post Graduate Diploma in Nutrition and Dietetics (Semester-II)

(Session 2020-2021)

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 2020-2021)

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 2020-2021)

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 2020-2021)

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. Louis, 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 2020-2021)

**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 2020-21)

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 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

**FACULTY OF SCIENCES
SYLLABUS
of
B.SC HOME SCIENCE**

(Semester: VI)

(Under Continuous Evaluation Grading System)

Session: 2020-21



**The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)**

Bachelor of Science (Home Science) (Semester–VI)
(Session 2020-21)

APPLIED ZOOLOGY AND FOOD MICROBIOLOGY
Course Code: BHSM:6487
(THEORY)

Course Outcomes

- CO1.To study useful and harmful insects.
- CO2.To study useful and harmful microorganisms.

Bachelor of Science (Home Science) (Semester–VI)
(Session 2020-21)
APPLIED ZOOLOGY AND FOOD MICROBIOLOGY
Course Code: BHSM:6487
(THEORY)

Max. 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

Elementary study of the following harmful insects Mosquito (Culex, anopheles, beg bugs and louse).

Elementary study of economically important insects – honeybee, silk moth, lac and earthworm.

UNIT-II

Sources of food contamination, food poisoning Symptoms & control.

Control of pest cereals pulses and stored products such as rice weevil lesser grain and borer.

UNIT-III

Introduction to microbiology and its relevance to food standards & safety. General morphology and Characteristics of micro organism-bacteria Virus protozoa.

Beneficial effects of micro organism.

- Role of bacteria in milk and milk products industry.
- Soil fertility (Nitrogen Cycle)

- Economic Importance of moulds, Aspergillus Penicillium and yeast.

UNIT-IV

Microbiology of different food spoilage & Contamination & control of cereals and their products sugar and its products, vegetable and fruits, Meat and its products fish and other sea foods egg and poultry, milk and its products & canned foods.

Reference Books:

- 1) Text Book of Zoology P.S. Dhami, PardeepPublication.
- 2) Food Microbiology Frazier, William C and West off Dannis C. Tata McGraw Hill
Publish Company Ltd

Bachelor of Science (Home Science) (Semester–VI)
(Session 2020-21)

APPLIED ZOOLOGY AND FOOD MICROBIOLOGY

Course Code: BHSM: 6487

(Practical)

Course Outcomes

CO. To make the students aware about economically important specimens (preserved).

CO2. Familiarize about the basic microflora.

Bachelor of Science (Home Science) (Semester–VI)

(Session 2020-21)

APPLIED ZOOLOGY AND FOOD MICROBIOLOGY

Course Code: BHSM: 6487

(Practical)

Time: 3 Hrs.

Marks:20

Instructions for the Practical Examiners: Question paper is to set on the spot jointly by the Internal and External Examiners. Two copies of the same should be submitted for the record to COE Office, KanyaMahaVidyalaya, Jalandhar

1. Identification of insects (same as theory).
2. Identification and economic importance of Honey bee, silk moth, lac and earthworm.
3. Identification of pest with their morphological note (same as theory).
4. Identification of slides of following microbes-bacteria, Virus, protozoa.