

FACULTY OF SCIENCES
SYLLABUS
Of
Bachelor of Science (HOME SCIENCE)
(Semester: I to VI)
(Under Continuous Evaluation Grading System)
Session: 2020-21



The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. 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 counsellors, designers, food therapies, and in many more community services.

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

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

**SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE
PROGRAMME**

Bachelor of Science (Home Science)

(Session 2020-2021)

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

C : Compulsory

E: Elective

AC : Audit Course

1: Special paper in lieu of Punjabi (compulsory)

2: Special paper in lieu of Punjabi (compulsory) for those students who are not domicile of Punjab

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

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

Session-2020-21

Semester I

Punjabi (Compulsory)

Course Code-BHSL-1421

COURSE OUTCOMES

CO1:nksw nBksw' g[[[;se d/ eftsk Gkr Bz{ gVQkT[D dk wB'oE ftfdnkoEhnK nzdo eftsk gqsh fdbu;gh, ;{M Bz{ g?dk eoBk j? sK fe T[j nkX[fBe d"o ftu uZb ojhnK ekft XkokoK ns/ ethnK pko/ frnkB jkf;b eo ;eD.

CO2:fJ; dk j'o wB'oE eftsk dh ftnkfynk, ftPb/PD s/ w[bzeD dh gqfefonk s'A ikD{ eokT[Dk th j? sK fe T[j ;wekbh ;wki dhnK ;wZf;nktK Bz{ ;wM ;eD ns/ nkb'uBkswe fdqPNh pDk ;eD.

CO3: rZd gqtkj (o/yk fusq s/ jbe/ b/y) g[[[;se B{z f;b/p; ftu PkfwB eo e/ ftfdnkoEhnK nzdo gVQD dh o[uh Bz{ g?dk eoBk j? ns/ w[ZbtkB fJfsjk; s'A ikD{ eotkT[Dk j?.

CO4:g?oQk ouBk ns/ g?oQk gVQ e/ gqPBK d/ T[so d/D dk wBo'E ftfdnkoEhnK dh p[ZXh B{z shyD eofdnK T[BK dh fbyD gqfsGk B{z T[iKro eoBk j?.

CO5:X[Bh ftT[As gVQD Bkb ftfdnkoEh X[BhnK dh T[ukoB gqDkbh s'A tke| j'Dr/.

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

Session-2020-21

Semester I

Punjabi (Compulsory)

Course Code-BHSL-1421

;wK L 3 xzN/

Maximum Marks:

50 Theory :

40

CA : 10

gkm eqw ns/ gkm g[;seK

: {fBN-I

nksw nBksw (eftsk Gkr), (;zgH ;[fjzdo pho ns/ tfonkw f;zx ;zX{) r[o{ BkBe d/t
:{Bhtof;Nh, nzfwqs;o.

(vkHi;tzs fz;zx B/eh,vkHirsko f;b/p; dk fjZ;k BjhA j?)

(ਸਾਰ,ftPk t;s{) 08 nze

: {fBN-II

rZd gqtkj (o/yk fusq s/ jbe/ b/y), ;zgkH fpeow f;zx x[zwD, i;gkb f;zx
ozXktk,r[o{ BkBe d/t :{Bhtof;Nh,nzfwqs;o.

(o/yk fusq 1 s'A 5) (Bzrh w[;ekB o/yk fuZso f;b/p; dk fjZ;k BjhA j?)

(ਸਾਰ,ftPk t;s{)

08 nze

: {fBN-III

(ੳ)g?oQk ouBk(ਅ)g?oQk gVQ e/ gqPBK d/ T[so.

08 nze

: {fBN-IV

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

Session-2020-21

Semester I

Punjabi (Compulsory)

Course Code-BHSL-1421

(T) gzikph X[Bh ftT[As L gfoGkPk s/ T[ukoB nzr

(n)
8 nze

;to,

ftnziB

nze tzv ns/ gohfyne bJh jdkfJsK

1H gqPB gZso d/ uko ;?ePB j'Dr/.;?ePB A-D sZe d/ gqPB :{fBN I-IV ftu'A
g[ZS/ ikDr/. jo ;?ePB ftu d' gqPB g[ZS/ ikDr/.

2H ftfdnkoEh B/ e[b gzi gqPB eoB/ jB. jo ;?ePB ftu'A fJe gqPB bkIwh j?.
gzitK gqPB fe;/ th ;?ePB ftu'A ehsk ik ;edk j?.

3H jo/e gqPB d/ 08 nze jB.

4H g/go ;?ZN eoB tkbk i/eo ukj/ sK gqPBK dh tzv nr'A tZX s'A tZX uko
T[g gqPBK

ftu eo ;edk j?.

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

SESSION 2020-21

SEMESTER-I

BASIC PUNJABI

In lieu of Punjabi (Compulsory)

COURSE CODE - BHSL-1031

Course outcomes

CO1:w[ZYbh gzikph gVQkT[D dk wB'oE ftfdnkoEhnK B{z gzikph GkPk B{z f;ykT[D dh gqfefonk ftu gk e/ fJe j'o GkPk f;ZyD dk w"ek gqdkB eoBk j?.

CO2:fJ; ftu ftfdnkoEh B{z pkohephBh Bkb GkPk dk nfXn?B eotkfJnk ikt/rk.

CO3:ftfdnkoEhnK B{z gzikph Ppd ouBk s'A ikD{ eotkfJnk ikt/rk.

CO4:w[ZYbh gzikph gVQkT[D dk wB'oE ftfdnkoEhnK B{z fBZs tos'A dh gzikph Ppdktbh pko/ dZ;Dk j?.

CO5:w[ZYbh gzikph gVQkT[D dk wB'oE ftfdnkoEhnK dk Ppd x/ok ftPkb eoBk j?.

CO6:ftfdnkoEhnK B{z gzikph ftu j|s/ d/ ;Zs fdBK d/ BK, pkoQK wjhfbnK d/ BK, oZ[sK d/ BK, fJe s'A ;" sZe frDsh PpdK ftu f;ykT[Dk j?.

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

SESSION 2020-21

SEMESTER-I

BASIC PUNJABI

In lieu of Punjabi (Compulsory)

COURSE CODE - BHSL-1031

;wK L 3 xzN/

Maximum Marks:
50

Theor : 40

y

CA : 10

gkm eqw

: {fBN-I

g?Ash nZyoh, nZyo eqw, g?o fpzdh tkb/ toD ns/ g?o ftu g?D tkb/ toD ns/
wksqtK (wZ[Ybh

ikD gSkD) brkyo (fpzdh, fNZgh, nZXe) L gSkD ns/ tos'A .

08nze

: {fBN-II

gzikph Ppd pDso L wZ[Ybh ikD gSkD (;kXkoB Ppd, ;z:[es Ppd, fwPos Ppd, w{b

Ppd, nr/so ns/ fgS/so)

08nze

: {fBN-III

fBZs tos'A dh gzikph Ppdktbh L pkIko, tgko, foPs/Bks/, y/sh ns/ j'o
XzfdnK nkfd Bkb

;zpzXs.

08 nze

:{fBN-IV

j|s/ d/ ;Zs fdBK d/ BK, pkoQK wjhfbnK d/ BK, oZ[sK d/ BK, fJe s'A ;" se
frDsh PpdK ftu .

nze tzv ns/ gohfyne bJh jdkfJsK

1H gqPB gZso d/ uko ;?ePB j'Dr/.;?ePB A-D sZe d/ gqPB :{fBN I-IV ftu'A
g[ZS/ ikDr/. jo ;?ePB ftu d' gqPB g[ZS/ ikDr/.

2H ftfdnkoEh B/ eZ[b gzi gqPB eoB/ jB. jo ;?ePB ftu'A fJe gqPB bkiwh
j?. gzitK gqPB fe;/ th ;?ePB ftu'A ehsk ik ;edk j?.

3H jo/e gqPB d/ 08 nze jB.

4H g/go ;?ZN eoB tkbk i/eo ukj/ sK gqPBK dh tzv nZr'A tZX s'A tZX uko
T[g gqPBK

ftu eo ;edk j?.

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

COMMUNICATION SKILLS IN ENGLISH
(Theory)

Course Code: BHSL-1102

COURSE OUTCOMES

At the end of this course, the students will develop the following Skills:

CO 1: Reading skills that will facilitate them to become an efficient reader

CO 2: The ability to realise not only language productivity but also the pleasure of being able to articulate well

CO 3: The power to analyse, interpret and infer the ideas in the text

CO 4: The ability to have a comprehensive understanding of the ideas in the text and enhance their critical thinking

CO 5: Writing skills of students which will make them proficient enough to express ideas in clear and grammatically correct English

CO 6: Ability to plan, organise and present ideas coherently on a given topic

CO 7: The skill to use an appropriate style and format in writing letters (formal and informal)

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

Session 2020-21

**COMMUNICATION SKILLS IN ENGLISH
(Theory)**

Course Code: BHSL-1102

Time: 3 Hours

Max. Marks: 50

Theory: 40

Continuous Assessment: 10

Instructions for the paper setter and distribution of marks:

The question paper will consist of four sections. The candidate will have to attempt five questions in all selecting one from each section and the fifth question from any of the four sections. Each question will carry 8 marks.

Section-A: Two questions of theoretical nature will be set from Unit I.

Section-B: Two comprehension passages will be given to the students based on Unit II.

Section-C: Two questions will be given from Unit III.

Section-D: Two questions will be set from Unit IV.

(8 x 5 = 40)

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

Session 2020-21
COMMUNICATION SKILLS IN ENGLISH
(Theory)

Course Code: BHSL-1102

The syllabus is divided in four units as mentioned below:

Unit I

Reading Skills: Reading Tactics and strategies; Reading purposes—kinds of purposes and associated comprehension; Reading for direct meanings.

Unit II

Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

Activities:

- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

Unit III

Writing Skills: Guidelines for effective writing; writing styles for application, personal letter, official/ business letter.

Activities

- Formatting personal and business letters.
- Organising the details in a sequential order

Unit IV

Resume, memo, notices etc.; outline and revision.

Activities:

- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/ boards

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

Session 2020-21
COMMUNICATION SKILLS IN ENGLISH
(Theory)

Course Code: BHSL-1102

Recommended Books:

1. *Oxford Guide to Effective Writing and Speaking* by John Seely.
2. *Business Communication*, by Sinha, K.K. Galgotia Publishers, 2003.
3. *Business Communication* by Sethi, A and Adhikari, B., McGraw Hill Education 2009.
4. *Communication Skills* by Raman, M. & S. Sharma, OUP, New Delhi, India (2011).
5. *English Grammar in Use: A Self Study Reference and Practice Book Intermediate Learners Book* by Raymond Murphy, Cambridge University Press.

Bachelor of Science (Home Science) (Semester – I)
(Session 2020-2021)
INTRODUCTION TO HUMAN DEVELOPMENT
(Theory)
COURSE CODE: BHSL-1283

COURSE OUTCOMES

Upon Completion of this Course the student should be able to

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

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

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

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

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

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

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

Bachelor of Science (Home Science) (Semester – I)
(Session 2020-2021)
INTRODUCTION TO HUMAN DEVELOPMENT
(Theory)
COURSE CODE: BHSL-1283

Time: 3 Hrs

Max. Marks: 50
Theory: 40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

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

CONTENTS

Unit-I

Introduction to the field of Human development.

- Definition
- Scope and opportunities.
- Brief historical perspective.

Growth and development

- Definition
- Principles of Development
- Factors affecting growth & development, heredity, environment, learning and maturation.
- General Characteristics of various stages of Human life.

Unit- II

Pre-natal Development

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

Unit-III

Birth of a Baby

- Birth Process
- Complications during birth.
- Types of Delivery.
- Preterm babies – Characteristics and care

New born.

- Reflexes of a new born.
- Characteristics of new-born.
- Breast feeding & weaning.
- Immunization schedule of new born.

Unit – IV

Care of the new born

- Equipments for nursery
- Bathing of child

- Sleeping schedules & making beds.
- Sterilization of feeders & other equipments.

Psychological aspects of parenthood.

- Psychological fatigue after birth symptom and care
- Role of father during pregnancy & after birth

REFERENCES:

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

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

(Session 2020-2021)

Hygiene

COURSE CODE: BHSL-1284

(Theory)

COURSE OUTCOMES

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

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

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

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

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

(Session 2020-2021)

Hygiene (Theory)

COURSE CODE: BHSL-1284

Time: 3 Hrs.

Max. Marks: 50

Theory: 40

CA: 10

INSTRUCTIONS FOR THE PAPER SETTER

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

CONTENT

Unit-I

Health & Hygiene

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

Unit-II

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

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

Unit-III

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

Unit-IV

Water supply

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

Reference Books:

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

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

(Session 2020-2021)

BASIC FOOD & NUTRITION

COURSE CODE: BHSM-1285

(Theory)

COURSE OUTCOMES

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

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

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

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

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

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

(Session 2020-2021)

Basic Food & Nutrition

(Theory)

COURSE CODE: BHSM-1285

Time: 3 Hrs.

Max. Marks: 100

Theory: 60

Practical:20

CA: 20

Instructions for the Paper Setter:

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

CONTENTS

Unit-I

Introduction to nutrition- Food as a sources of nutrients, functions of food, definition of nutrition, nutrients , adequate, optimum and good nutrition, malnutrition.

Brief introduction of food commodities, their types, selection.

Storage & Use: - cereals & pulses, eggs fish poultry, vegetable & fruit sugar, & mild, oil & ghee, spice & condiments.

Unit-II

Food Preparation

Basic terminology used in Cooking.

Different methods of cooking - Dry heat, moist heat, frying and microwave cooking.

Effect of cooking on nutritive value of food.

Unit-III

Carbohydrates - Composition, classification, functions, food sources, requirement, deficiencies.

Fats and Oils- Composition, Classification, Saturated, Unsaturated fatty acids, food sources, functions, requirement and deficiencies.

Protein - Composition, Classification, Essential and Non- essential amino acids, food Sources, functions, deficiencies.

Unit-IV

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

Factors affecting energy requirement

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

References:

1. Guthrie, Hele, Andrews, Intoductory Nutrition, 6th ed. St. Louts, Times Mirror/MosbyCollege: 1988.

2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd ed.) Wilay Eastern Ltd. 1990.
3. Swaminathan S: Advanced text book on foods Nutrition, Vol. I, II (2nd ed. Revised &enlarged) B. app C-1985.
4. Willson, EVAD Principles of Nutrition 4thed New York John Willey & Sons. 1979.

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

(Session 2020-2021)

BASIC FOOD & NUTRITION

COURSE CODE: BHSM-1285

(Practical)

COURSE OUTCOMES

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

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

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

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

(Session 2020-2021)

Basic Food & Nutrition

(Practical)

COURSE CODE: BHSM-1285

Time: 3 Hrs.

Max. Marks: 20

PRACTICAL

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

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

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

(Session 2020-2021)

APPLIED ART

(Theory)

COURSE CODE: BHSM-1286

COURSE OUTCOMES

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

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

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

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

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

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

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

(Session 2020-2021)

Applied Art

(Theory)

COURSE CODE: BHSM-1286

Time: 3 Hrs.

Max. Marks: 100

Theory: 60

Practical:20

CA: 20

INSTRUCTIONS FOR THE PAPER SETTER

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

CONTENTS

Unit- I

Art Introduction

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

Elements of art

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

Unit-II

Colour

Source of colour, dimensions of colour characteristics of colours, emotional effects of colours, classification of colour according to pigment color system and color schemes.

Optical illusion created through colour

Principles of design

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

Unit-III

Objective of Art

a) Beauty b) Functionalism c) Expressiveness

Design & motif

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

Unit-IV

Rangoli

- Significance of Rangoli
- Rangoli in different states

- Materials used for Rangoli
- Points to be considered in Rangoli

REFERENCE BOOKS:

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

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

(Session 2020-2021)

APPLIED ART

COURSE CODE: BHSM-1286

(Practical)

COURSE OUTCOMES

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

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

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

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

(Session 2020-2021)

Applied Art

(Practical)

COURSE CODE: BHSM-1286

Time: 3 Hrs.

Max. Marks: 20

Practical:

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

1) Fabric Painting

2) Glass painting

3) Menu Card

4) Collage work.

5) Greeting card

6) Flowers from paper and stockings

7) Pot decoration

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

Bachelor of Science (Home Science) Semester-I

Session 2020 - 21

Course Code: BHSM - 1127

COMPUTER BASICS

(Theory)

Course Outcomes:

After passing this course the students will be able to:

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

CO2: find and evaluate information on the Web effectively.

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

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

Bachelor of Science (Home Science) Semester-I

Session 2020-21

COURSE CODE: BHSM - 1127

COMPUTER BASICS

(Theory)

Examination Time: (3 + 3) Hrs

Max. Marks: 100

Theory: 50

Practical: 30

CA: 20

Instructions for Paper Setter -

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

UNIT -I

Introduction to computer and its characteristic:

History of computers, Generations of Computers, Types of Computers, input devices, output devices, memory devices, software and its types, working with windows, features, desktop, using context menu, creating shortcut, working with dialog box, arranging windows, setting properties of desktop, transfer from CD,DVD. Pen Drive to Hard disk and vice versa, coping files.

Definition of Virus, Malware, Spyware and removal.

UNIT -II

MS Word

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

UNIT- III

MS-Power Point

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

UNIT-IV

Internet and E-mail:

What Internet Provides, Internet terms, Internet requirements, getting started Internet, Surfing

Net, moving about the Web, E-Mail, its features, creating and E-Mail message, Reading Mail, replying mail, draft message, sending mail. Phishing and SPAM mail.

References / Textbooks:

1. Anshuman Sharma, Fundamentals of Information Technology, Lakhanpal Publishers, 5th Edition.
2. Rachhpal Singh & Gurvinder Singh, Windows based computer courses, Kalyani Publisher, 2014.
3. Peter Norton, Introduction to Computers, Tata McGraw-Hill, 2006.
4. P.K. Sinha, Computer Fundamentals, BPB Publications, 2004.

5. Prof. Satish Jain, M. Geetha, Kratika, BPB's Office 2010 Course Complete Book, BPB Publications, 2017.

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

Bachelor of Science (Home Science) Semester-I

Session 2020-21

COURSE CODE: BHSM - 1127

COMPUTER BASICS (PRACTICAL)

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

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

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME

Bachelor of Science (Home Science)

(Session 2020-2021)

Semester II							
Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
BHSL- 2421/ BHSL- 2031/ BHSL-2431	Punjabi Compulsory/ Basic Punjabi/ 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-2127	Computer Applications for Home Scientists	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 2020-21)

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 & non-official 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 India 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 2020-21)

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 2020-21)

INTRODUCTION TO FAMILY RESOURCE MANAGEMENT

(Theory)

COURSE CODE: BHSM-2282

Time: 3 Hrs.

Max. Marks: 100

Theory: 60

Practical: 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, sterlingPublishers, New Delhi, 1967.
2. Nickell, P; Dorsey, J.N. Management in Family living, John Willy and sons Inc, NewYork, 1975.
3. Fire baugh & Deacon-Home management concepts and contents.
4. Randhawa, Rajwinder K; Family Resource Management and Health Science, PardeepPublication, Jalandhar, 2009.

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

(Session 2020-21)

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 or 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 2020-21)

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 2020-21)

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 2020-21)

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 2020-21)

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 2020-21)

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 2020-21)

ELEMENTRY PHYSIOLOGY

COURSE CODE: BHSL-2284

(Theory)

COURSE OUTCOMES

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

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

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

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

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

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

(Session 2020-21)

ELEMENTRY PHYSIOLOGY

(Theory)

COURSE CODE: BHSL-2284

Time: 3 Hrs.

Max. Marks: 50

Theory: 40

CA: 10

Instructions for the Paper Setter:

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

CONTENT

Unit-I

Physiology elementary knowledge of structure of cell, tissue and organ, Skin

Elementary knowledge of structure and function of digestive system

□□ Digestion of carbohydrates protein & fats

Unit-II

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

□□ Blood groups and RH factor.

□□ Heart structure & function

□□ Basic Knowledge of blood pressure & heart beat.

Elementary knowledge of structure and function of respiratory system

Structure and function lungs

Unit-III

Elementary knowledge of structure and function of urinary system

Structure & function of nephron & formation of Urine

Elementary Knowledge of structure and function of male and female reproductive organs

Menstrual cycle

Unit-IV

Elementary knowledge of location and function of endocrine glands present in body

Elementary knowledge of structure & function of Brain.

Reference Books

- 1) Text book of Biology for 10+2 students (NCERT)
- 2) Family Resource Management and Health science Rajwinder K Randhawa Pardeep Publications.

BACHELOR OF SCIENCE (HOME SCIENCE) SEMESTER II
(Session 2020-21)
Course Code: BHSM - 2127
COMPUTER APPLICATIONS FOR HOME SCIENTISTS
(Theory)

Examination Time: (3+3) Hrs.

Max. Marks: 100

Theory: 50

Practical: 30

CA: 20

Instructions for Paper Setter -

Eight questions of equal marks (10 marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided 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

Spreadsheet Software

Workbook and worksheet, entering data, editing cell contents, Inserting and deleting rows, column, using auto-fill, creating list, formatting data, using formula

Internet

Introduction to internet, searching information on internet.

UNIT-II

WWW: Introduction , working of WWW, Web browsing (opening, viewing, saving and printing a web page and bookmark).

E-Commerce

Basics, Architecture, Types, Applications.

UNIT-III

Payment gateway: Popular payment methods (Net-banking, m-Banking, UPI, Debit/Credit Card, Mobile Wallets)

Multimedia & its Applications

Introduction to Multimedia and its usage, record sound using devices, using scanner, Web Camera.

UNIT IV

YouTube Studio: Navigating studio, Uploading videos, Edit Video settings, Analytics, Copyright and Monetization.

Blog Writing: Blog Domain, choice of CMS, Register a domain or subdomain with a website host.

Social Media Marketing: Social Media, Importance of Social Media, SMO Strategy for Business, Business Profile Creation, Viral Marketing, Application of Facebook and Twitter for social media marketing.

References/Textbooks:

1. Prof. Satish Jain, M. Geetha, Kratika, BPB's Office 2010 Course Complete Book, BPB Publications (2017).
2. Rachhpal Singh, Gurvinder Singh, Windows based computer courses, Kalyani Publishers (2011).
3. Anshuman Sharma, A book of Fundamentals of Information Technology, Lakhanpal Publishers (2016), 5th ed.
4. Ramesh Bangia, Introduction To Multimedia, Laxmi Publications Pvt. Ltd.(2015).
5. Laudon, E-Commerce,Pearson Education India (2016), 10th ed.
6. https://www.tutorialspoint.com/social_media_marketing/
7. <https://blog.hubspot.com/marketing/how-to-start-a-blog>

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

(Under Continuous Evaluation Grading System)

Session: 2020-21



The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. 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 counsellors, designers, food therapies, and in many more community services.

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

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE PROGRAMME

Bachelor of Science (Home Science)

(Session 2020-2021)

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

C: Compulsory

AC: Audit course

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

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

(Session 2020-2021)

DEVELOPMENTAL STAGES UPTO CHILDHOOD

(Theory)

COURSE CODE: BHSL- 3281

COURSE OUTCOME

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

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

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

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

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

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

(Session 2020-2021)

DEVELOPMENTAL STAGES UPTO CHILDHOOD

(Theory)

COURSE CODE: BHSL- 3281

Time: 3 Hours

Total Marks: 50

Theory: 40

CA: 10

INSTRUCTION FOR THE PAPER SETTER:

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

CONTENT

UNIT-I

- Developmental tasks from infancy to childhood.

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

- Physical development
 - a) Body size
 - b) Skeletal growth
 - c) Cardio Vascular System
 - d) Brain and nervous system

- e) Factors affecting physical development

UNIT-II

- Motor development

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

- Language development

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

UNIT-III

- Psycho Social development from infancy to childhood

1) Social development

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

Unit IV

- Emotional Development

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

Early childhood care and education

- a) Concepts, significance and programs.
- b) Infrastructure & curriculum planning for different age groups.

REFERENCE BOOK

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

Bachelor of Science (Home Science) Semester:III

Session 2020-21

Course Code: BHSL-3172

BASIC CONCEPTS OF ECONOMICS

Course Outcomes:

After passing this course students will be able to:

CO1: To understand some basic economic concepts

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

CO3: To give guidance regarding credit facilities.

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

Bachelor of Science (Home Science) Semester:III

Session 2020-21

Course Code: BHSL-3172

BASIC CONCEPTS OF ECONOMICS

Time: 3 Hours

Max Marks: 50

Theory: 40

CA: 10

Instructions for the Paper Setter:

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

UNIT-I

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

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

UNIT-II

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

UNIT-III

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

UNIT-IV

Brief Knowledge of banking, insurance schemes, saving & investment.

Banking – Types of account, how to open an account , How to deposit and withdraw money by cheque & cash; Internet banking

Insurance-General and life insurance policies terms and conditions & advantages , Savings-Bank saving scheme, Post office saving schemes , Shares & debentures (only introduction) Taxation-Types of Taxes & how to calculate income tax & file income tax return.

REFERENCE BOOKS

- 1) Consumer Economics by Surinderjit Kaur R.K. Lakhi and Joginder Singh
- 2) Consumer Pattern in India B.D Gupta Tata McGraw Hill
- 3) Consumer Buying for better living Fitzsimmons C John Wiley & sons Inc.
- 4) Consumer Behaviors Schiffman Leon Prentice Hall Pub.

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

BASIC PHYSICS (Semester –III) (Theory)

Course Code : BHSM-3396

Time: 3 Hours External Marks: 40

Internal Marks :10

Pass Marks: 14

Instructions for the Paper Setters:

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

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

CO1: to understand the role of physics in working various household devices

CO2: to understand the natural phenomenon in our life.

Unit-I

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

Unit-II

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

Unit-III

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

Unit- IV-

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

Books Recommended:

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

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

BASIC PHYSICS

(Practical)

(There Will be No Practical Exam in this Semester)

Pds- 2 pds/ week

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

in your laboratory

Bachelor of Science Home Science

Session: 2020-21

Course Title: Basic Chemistry

Course Code: BHSL-3084

Course outcomes:

Students will be able to:

CO1: understand various formulae and symbols used in chemistry.

CO1: understand the atomic structure.

CO2: acquire knowledge about various atomic models.

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

Bachelor of Science Home Science (Semester III)

Session: 2020-21

Course Title: Basic Chemistry

Course Code: BHSL-3084

Examination Time: 3 Hours

Max. Marks: 50

Theory: 40 CA: 10

Instructions for the Paper Setters: -

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

UNIT-I

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

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

UNIT-II

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

UNIT-III

Chemical bonding, definition of chemical bond, cause of chemical combination, types of chemical bonds, ionic bonds, covalent bond, coordinate bond, definition and simple examples based on electron dot picture (example include H_2 , Cl_2 , O_2 , NH_3 , CH_4 , C_2H_2 , MgF_2 , CaO , NH_4^+ , H_3O^+).

UNIT-IV

Elementary idea about normality, molarity, molality and strength of solution.

Structure of fibers (Natural and synthetic).

Elementary idea about pH of water, hard' water, its cause and type, heavy water with its uses.

Books recommended:

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

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

(Session 2020-2021)

HOUSING

(Theory)

COURSE CODE: BHSM- 3285

COURSE OUTCOME

CO (1): To Understand house related concept.

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

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

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

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

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

(Session 2020-2021)

HOUSING

(Theory)

COURSE CODE: BHSM- 3285

Time: 3 Hours

Max. Marks: 100

Theory: 60

Practical: 20

CA: 20

INSTRUCTION FOR THE PAPER SETTER:

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

CONTENT

UNIT-I

House & related concepts

Concept of House & home.

Functions of home.

Housing needs and factors affecting housing needs. Rented/ owned house/ house provided by public or private sector.

Type of houses, row, semidetached, detached, independent house, flats, apartment & multi-storeyed building.

UNIT-II

- Selection & principles of house planning
- Selection of Site , soil, locality and neighbourhood
- Principles of planning - Orientation, aspect, prospect, privacy, grouping, circulation, flexibility, roominess future requirement & practical considerations.
- Ventilation.
- Water supply, Drainage and drainage of rainwater, sewage system.
- Provision of light according to the need in different areas.
- Economy in house construction.

UNIT-III

- Building Materials used in construction of house
- Low cost, Eco friendly innovative building materials.
- Materials for foundation.
- Materials for walls & floors.
- Materials for electricity, sewerage & drainage.

UNIT-IV

- Housing financing agencies
- Various government and non-government agencies, general terms & conditions.
- Advantage and disadvantage of taking loan.
- Building by laws used for house construction & terminologies used.

REFERENCE BOOK

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

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

(Session 2020-2021)

HOUSING

(Practical)

COURSE CODE: BHSM- 3285

COURSE OUTCOME:

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

CO 2: To draw different types of floor plans.

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

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

(Session 2020-2021)

HOUSING

(Practical)

COURSE CODE: BHSM- 3285

Time: 3 Hrs.

Max. Marks: 20

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

Housing:

- 1) Symbols and common terms used for house planning
- 2) Types of floor-plans, elevation structural drawing and perspective view
- 3) Draw following house plan, considering in mind principle of planning
 - Row house- 100- 150 sq yard
 - Semi detached house 250-300 sq yard
 - Detached house- 500 sq yard and above
 - One room apartment
 - Flat
 - Double story house

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

(Session 2020-2021)

MEAL MANAGEMENT

(Theory)

COURSE CODE: BHSM- 3286

COURSE OUTCOMES:-

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

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

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

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

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

(Session 2020-2021)

MEAL MANAGEMENT

(Theory)

COURSE CODE: BHSM- 3286

Time: 3 Hours

Max. Marks: 100

Theory: 60

Practical: 20

CA: 20

INSTRUCTION FOR THE PAPER SETTER:

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

COURSE CONTENT:

Unit-I

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

Unit-II.

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

Unit-III

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

Unit- IV

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

References:

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

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

(Session 2020-2021)

MEAL MANAGEMENT

(Practical)

COURSE CODE: BHSM- 3286

COURSE OUTCOME:

CO (1): To understand the concept of Standardize Proportion Size.

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

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

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

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

(Session 2020-2021)

MEAL MANAGEMENT

(Practical)

COURSE CODE: BHSM- 3286

Time: 3 Hours

Max. Marks: 20

Note:

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

1. Cook following dishes for different meals. Standardize portion size and calculate their nutritive value.

- Breakfast dishes- Stuffed Paranthas, Pancakes, Poha, Dalia etc.
- Lunch & Dinner dishes- Main Dishes- Dal, Channa, Rajmah, Koftas etc., Rice- Pulaos, Paneer dishes, Side dishes, Dry. Vegetables, Stuffed Vegetables etc. Dessert - Puddings, Kheer etc. Salads, Soups etc.
- Evening Sweet & Salty snacks - at least 5 each.

2. Plan balanced diet for the following age groups calculating calories, protein, one important vitamin and mineral as per requirement for the given age group.

- (a) Infancy-Weaning foods
- (b) pre-schooler
- (c) school going child.
- (d) adolescent girl and boy
- (e) adult male and female(sedentary moderate and heavy worker)
- (f) Pregnant and lactating Women
- (g) Geriatric

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

(Session 2020-2021)

TEXTILE SCIENCE

(Theory)

COURSE CODE: BHSM- 3287

COURSE OUTCOME:-

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

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

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

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

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

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

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

(Session 2020-2021)

TEXTILE SCIENCE

(Theory)

COURSE CODE: BHSM- 3287

Time: 3 Hours

Max. Marks: 100

Theory: 60

Practical: 20

CA: 20

INSTRUCTION FOR THE PAPER SETTER:

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

CONTENTS

UNIT- I

- Introduction to textile fibres, classification of fibres based on length and source.
- Primary properties of textile fibres in relation to use for the consumer.
- Origin, Production and Properties of cotton, linen, rayon –viscose and cellulose acetate, Wool and silk, Nylon, polyester, acrylics and elastomeric fibres.

UNIT – II

Yarn manufacturing

- Classification of yarns carded and combed yarn, woollen and worsted yarns, filament and spun yarns.
- Types of yarns simple yarns, novelty yarns, textured yarns and their types & uses.
- Yarn twist

Fabric construction techniques

- Weaving Procedure (description of loom)
- Types: simple weave & its variations, twill, satin, novelty weaves and their types
- Characteristics of woven fabrics: on grain, off grain, thread count, balance cloth, selvedge.

Other Methods of fabric construction: Felting, Bonding

UNIT -III

Bleaches and finishes

- Types – oxidizing and reducing bleaches and their suitability
- Importance of finishes.
- Classification of finishing process on the basis of method of application, stability, types & purpose.
- Description of some important finishes: preparatory finishes- Brushing and shearing, scouring, degumming, desizing and bleaching
- Stabilizing finishes – Texturing, sanforizing, mercerization,
- Textural finishes – calendering, beetling, glazing, sizing, weighting, napping, moiré and embossing.
- Functional finishes- crease resistance, waterproof and water repellent, flame retardant and flame proof.

UNIT IV

Dyeing

- Types of dyes
- Method of dyeing - Home dyeing (simple) resist dyeing-tie & dye and batik.

Printing

- Techniques used in printing direct discharge and resist.
- Methods of printing block, stencil, screen
- Machine Printing, roller, screen.

Laundrying & care of textile fabrics

- Principles of washing
- Methods of washing of cotton wool, silk & synthetics, starches & blue
- Dry-cleaning principle & use.
- Storage of clothes.

Reference Books:

1. Randhawa Rajwinder K Clothing Textiles & Their care, pardeep publication.

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

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

(Session 2020-2021)

TEXTILE SCIENCE

(Practical)

COURSE CODE: BHSM- 3287

COURSE OUTCOMES

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

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

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

CO 4: To learn about informative labels on garments.

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

(Session 2020-2021)

TEXTILE SCIENCE

(Practical)

COURSE CODE: BHSM- 3287

Time: 3 Hrs.

Max. Marks: 20

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

1. Fiber Identification- Physical, burning, microscopic test.
2. Stain removal of basic stains- Tea coffee, Ball pen, ink, ghee & oil haldi, Nail paint, Lipstick, Boot polish.
3. Make sample & an article of each:
 - a) Tie & Dye
 - b) Block, screen and stencil.
- 4). Make sample of weaves: 1) Plain 2) Twill 3) Satin
- 5) Collection of labels of different garment & samples of different weave.

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

**SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE
PROGRAMME**

Bachelor of Science (Home Science)

(Session 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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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.

SESSION: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

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: 2020-21

TRADITIONAL EMBROIDERIES, TEXTILES AND COUSTUMES OF INDIA

(Practical)

COURSE CODE: BHSM-4285

Time: 3 Hrs.

Max. Marks:20

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

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

FACULTY OF SCIENCES
SYLLABUS
of
B.SC HOME SCIENCE (Semester: V)

(Under Continuous Evaluation Grading System)

Session: 2020-21



The Heritage Institution

KANYA MAHA VIDYALAYA

JALANDHAR

(Autonomous)

PROGRAMME SPECIFIC OUTCOMES FOR B. Sc. 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 counsellors, designers, food therapies, and in many more community services.

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

B.SC HOME SCIENCE

(Session: 2020-21)

Scheme of Studies and Examination

(Continuous Evaluation Grading System)

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

	Biochemistry						
BHSM-5284	Interior Space Designing	C	100	60	20	20	3+3
BHSM-5285	Therapeutic Nutrition	C	100	60	20	20	3+3
BHSM-5286	Basic Concepts Of Sewing And Fashion	C	100	60	20	20	3+3
BHSM-5077	Applied Botany And Home Gardening	C	100	50	30	20	3+3
	Total		550				

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Child Psychology
(Theory)
Course code: BHSL -5281

COURSE OUTCOMES

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

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Child Psychology
(Theory)
Course code: BHSL -5281

Time: 3 Hrs

Max. Marks: 50
Theory: 40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

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

CONTENTS

UNIT -I

Psychology related concept

Definition of Psychology
Nature of Psychology
Scope of Psychology
Definition of Child psychology

Attention

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

Unit-II

Memory

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

Unit-III

Learning and Motivation

Meaning, nature and types of learning.

Primary and secondary motives.

Role of Motivation in learning

Factors affecting learning.

Unit-IV

Theories related to different development of human life Span.

Cognitive theory- JeanPiaget.

Psycho-Sexual theory – SigmundFreud

Psycho-Social theory –Erick-Erickson.

Hierarchy of Needs –Maslow.

Reference Books :

Brooks, Flower, D & Shaffer, Laurence F childPsychology".

Developmental Psychology, by Elizabeth BHurlock.

Child Development and personality by Mussen Conger,Kogan.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Introduction to Extension Education and Community Development
(Theory)
Course code: BHSL -5282

COURSE OUTCOMES:

Outcomes:

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

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

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

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

CO 5 To learn the concept of community development.

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

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

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Introduction to Extension Education and Community Development
(Theory)
Course code: BHSL -5282

Time: 3 Hrs
Max. Marks: 50

Theory:40
CA: 10

INSTRUCTIONS FOR THE PAPER SETTER:

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

Contents

Unit-I

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

Unit-II

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

Unit-III

- Motivation in Extension
- Motivating Village people
- Motivating Extension worker
- Techniques of Motivation

- Community development – its definition, work, elements, objectives, philosophy, types, principles and process.

Unit-IV

- Role of voluntary organization in community development
- Panchayati Raj System organization & function
- Co-operative Societies – Organization & function

Brief knowledge of famous Rural Development programme

- The Integrated rural development programme (IRDP).
- Minimum Need programme
- National Rural employment programme. Family planning programme.

References:

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

Extension Education and Communication by V.K. Dubey.

Bachelor of Science (Home Science) Semester-V

Session: 2020-21

Course Code: BHSL-5063

Basic Nutritional Biochemistry-I

(Theory)

Time: 3 Hrs.

Max. Marks: 50

Theory: 40

CA: 10

Instructions for the Paper Setters:

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

Unit-I

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

Unit-II

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

Unit-III

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

Unit-IV

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

Books Recommended:

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

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Interior space Designing
(Theory)
Course code: BHSM-5284

COURSE OUTCOMES:

1. To study the objectives and importance of Home Interior Designing.
2. To study and orient the students towards present and future trends in furnishing material, flooring and curtains etc.
3. To plan furniture and color schemes for different rooms, age groups and gender.
4. To build the ability to apply various elements and principles of design in interiors.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Interior space Designing
(Theory)
Course code: BHSM-5284

Time: 3 Hrs
Max. Marks: 100

Theory:60
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER:

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

Unit–I

Introduction to Interiors

Importance of Homeenvironment
Objectives of Homefurnishing.
Factors to be considered while designinginteriors.

Unit–II

Furniture

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

Unit–III

Planning of colour schemes

Factors to be considered while planning colour schemes for differentrooms
Development of colourschemes
Planning of colour schemes for drawing room, drawing cum dining room bedroom, Master, children adolescent boy & girl andlobby.

Unit – IV

Wall finishes

Wall paper, wood panelling & theircare.
Paints – Types &suitability

Floor materials

Hard Material – stone, tile & wood

Resilient Material – Vinyl and Linoleum

Soft material – Carpets and rugs their selection, types, suitability and care.

Reference books

Home furnishing Anna Hong Rutt.

Home furnishing, Butter Winifred.

Home with character, Craig & Rush.

Family Resource Management & Health Science, Rajwinder K. Randhawa.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Interior space Designing
(Practical)

Course code: BHSM-5284

Course outcomes :

1. To acquaint the students with standard measurements of furniture.
2. To enable them to make templates of different furniture items.
3. To plan and execute various color schemes.
- 4 To develop color scheme samples of drawing room, bedroom, children room etc.
5. To study and collect various furnishing material and develop a scrap book.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Interior space Designing
(Practical)

Course code: BHSM-5284

Marks:20

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

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

Plan furniture arrangement and colour schemes. (Use samples) in the following rooms.

Drawingroom.

Drawing cum diningroom

Bedroom, Master, Children, adolescent boy and girl.

Do market survey of furnishing material and make a scrapbook.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Therapeutic Nutrition
(Theory)
Course code: BHSM-5285

Course outcomes:

- 1.To gain insight into objectives and concept of therapeutic diet.
- 2.To develop adaptations of normal diets into therapeutic diets.
3. To understand the concept of therapeutic nutrition in different diseases infections and fevers.
4. To gain knowledge of dietary modifications and management techniques.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Therapeutic Nutrition
(Theory)
Course code: BHSM-5285

Time: 3 Hrs

Max. Marks: 100
Theory: 60
CA: 20

INSTRUCTIONS FOR THE PAPER SETTER:

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

Contents :-

Unit-I

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

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

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

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

Unit-II

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

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

Nutrition in disturbances of small and large intestine etiology, symptoms and dietary management in Celiac disease, Lactose intolerance, ulcerative colitis.

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

Unit-III

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

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

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

Unit-IV

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

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

Gout - etiology, symptoms & dietary management.

Food Allergy - Causes, symptoms & dietary management.

Reference books

Food and Nutrition - by Dr. M. Swaminathan

Text book of Nutrition & Dietetics - by K. Meed Khanna & others.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Therapeutic Nutrition
(Practical)
Course code: BHSM-5285

Course outcomes

1. To develop therapeutic diets according to special requirements of nutrients.
- 2.To calculate the nutritive value of diets.
3. To study the nutritive value of diets given in different diseases.
- 4.To develop entrepreneurship skills in students.
- 5.To encourage the students to set up a diet clinic.

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Therapeutic Nutrition
(Practical)
Course code: BHSM-5285

Marks: 20

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

Prepare following therapeutic recipes and calculate their nutritive value.

Prepare 5 recipes of liquid and soft diet.

Prepare 5 high protein and high energy recipes.

Prepare 5 high carbohydrate, moderate protein & low fat recipes.

Prepare 5 high fiber and low glycemic index recipes.

Prepare 5 low sodium, low fat and high fiber diet.

Plan and calculate nutritive value of diet for the following diseases. Typhoid, Diarrhoea, Constipation, Jaundice, peptic ulcer, Diabetes, Hypertension, atherosclerosis, renal disease and obesity.

Students are required to run Diet Clinics in the college

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Basic concepts of sewing and fashion
(Theory)
Course code: BHSM-5286

Course outcomes:

1. To impart knowledge about sewing, it's equipment's and supplies.
- 2.To develop an understanding of basic sewing techniques.
- 3.To study various concepts of fashion, theories and terminology.
- 4.To study the cycle of fashion and importance to consumer.
5. To develop an understanding of fashion merchandising and its process.

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

Basic concepts of sewing and fashion
(Theory)

Course code: BHSM-5286

Time: 3 Hrs

Max. Marks: 100

Theory:60

CA: 20

INSTRUCTIONS FOR THE PAPER SETTER:

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

Contents :-

Unit-I

Sewing equipments

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

Unit-II

Sewing techniques

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

Unit -III

- Collars types and uses
- Yokes and skirt - types and uses

- Plackets - Types and uses
- Fasteners – Types and uses

Fashion Terminology

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

Unit-IV

Fashion Trend, Fashion Cycle

Sources of fashion, factors favouring fashion, selecting fashion, forecasting fashion, fashion show

Fashion merchandising

Advertising and Display

Reference books:

Basic process of clothing construction by Doongaji SDeshpande

Clothing, Textile & their care – by Dr. Rajwinder K.Randhawa

Ministry of Fashion – by ManmeetSodhia

Design Studies – by ManmeetSodhia

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

Bachelor of Science (Home Science) (Semester –V)
(Session 2020-21)
Basic concepts of sewing and fashion
(Practical)
Course code: BHSM-5286

Time: 3 hrs.

Marks:20

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

Demo of machine parts and operation.

Make sample of the followings.

Even, uneven, diagonal and machine basting.

Running stitch, back stitch, buttonhole stitch

Visible and invisible hemming

run and fell seam, counter hem, french and mantua maker.

Seam finishes – hand overcast, turned and stitch and binding.

Pleats – knife, box, inverted pleat

Gathers with band and shirring.

Tucks – Pin tucks, cross tucks, shell tucks, space tucks, release tucks.

Frill and piping attachment.

Patchwork.

Plackets – continuous, two piece and extended placket

Fastener – hook & eye, button and button hole Press button, skirt hook & velcro tape (Attach fasteners on placket only).

Pocket – Patch, in seam and cross pocket.

Make draft of child's bodice block and make sample of neck finishes on bodice block –

bias piping bias facing and shaped facing.

Make draft and sample of plain sleeve, cape Magyar using the neck finishes block.

Make draft and sample of peter pan, raised, peter pan (only draft) on child's bodice block.

Draft and stitch A-Line frock.

Draft and stitch baby frock with collar and puff sleeve.

Draft and construct child's bloomer.

APPLIED BOTANY AND HOME GARDENING

(Theory)

Course outcome: -

After passing this course the student will be able to:

CO:1 Identify different plants.

CO:2 Learn art of home gardening.

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

CO:4 Understand different means of plant propagation.

Course Code: BHSM-5077

APPLIED BOTANY AND HOME GARDENING

(Theory)

Time: 3 Hrs.

Theory: 50

Instructions for the Paper Setters:

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

Unit-I

Gardening

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

Unit-II

Propagation of plants

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

Unit-III

Kitchen Garden

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

Unit-IV

Lawn and Hedges

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

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

REFERENCE BOOK:

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

Bachelor of Science (Home Science) (Semester-V) Session 2020-21

Course Code: BHSM-5077(P)

APPLIED BOTANY AND HOME GARDENING

(Practical)

Course outcome: -

After passing this course the student will be able to:

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

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

CO:3 Maintain different plants in the garden.

CO:4 Identify ornamental plants.

Bachelor of Science (Home Science) (Semester-V) Session 2020-21

Course Code: BHSM-5077(P)

APPLIED BOTANY AND HOME GARDENING

(Practical)

Time: 3 Hrs.

Marks: 30

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

1. Study of garden tools and accessories.
2. Identification of different types of plants i.e. vegetable flowers, ferns and ornamental plants.
3. Preparation of soil digging tillage drainage watering and weeding.
4. To prepare and manuring a seed bed for raising seedlings.
5. To prepare a bed for sowing potatoes and cultivate them.
6. To prepare a plot for raising seedlings.
7. To prepare a pot for repotting.
8. To prepare a plot and cultivate seasonal vegetable (as in theory).
9. Plant propagation.
 - a) From seeds guiding rules for seed sowing.
 - b) Vegetative propagation by cutting and grafting.
 - c) Maintenance of plants
 - d) Use of pesticides and fungicides
 - e) Identification of slides of algae fungi and moulds.

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

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)

**SCHEME AND CURRICULUM OF AND EXAMINATION OF THREE YEAR DEGREE
PROGRAMME**

Bachelor of Science (Home Science)

(Session 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)

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)

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 :-

Intelligence

- a) Nature of Intelligence
- b) Measurement of Intelligence

Personality

Unit-I

Unit-II

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

Unit-III

Behaviour disorders

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

Unit-IV

Person with disabilities

- a) Concept of disability and classification system.
- b) Definition, classification, cause, prevention, education and rehabilitation.
 - Physical impairments.
 - Visual impairments.
 - Speech and hearing impairments
 - Learning disabilities
 - Behaviour disabilities
 - Nail biting, thumb sucking, bed wetting, Temper Tantrum, Stealing.
 - Dealing with Gifted children.

Reference Books

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

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

BEHAVIOURAL PSYCHOLOGY

Course Code: BHSM-6281

(Practical)

COURSE OUTCOMES

1. To conduct a case study on a child to study socio-psychological dimension.
2. To assess personality using two different techniques.
3. To assess intelligence using two different techniques.
4. A visit to guidance/counselling cell.

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

BEHAVIOURAL PSYCHOLOGY

Course Code: BHSM-6281

(Theory)

Time: 3 Hours

Practical: 15

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

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

Reference Books :-

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

Bachelor of Science (Home Science) (SEMESTER-VI)

INTERIOR DECORATION

(Theory)

Course Code: BHSM:6282

COURSE OUTCOMES

1. To understand the concept of Decorative and false ceiling.
2. To gain knowledge about good lighting and lighting needs for various activities and rooms.
3. To study different types of windows.
4. To study different types of curtains and draperies and their suitability.
5. To understand the importance of flower arrangement and its types.
6. To gain knowledge about equipments and accessories needed for flower arrangement.
7. To study the importance, types and selection of accessories used in rooms.

Bachelor of Science (Home Science) (SEMESTER-VI)

INTERIOR DECORATION

(Theory)

Course Code: BHSM: 6282

Time: 3 Hrs

Max. Marks: 100

Theory: 60

Practical: 20

CA: 20

INSTRUCTION FOR THE PAPER SETTER:

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

Content :**Unit-I**

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

Unit-II**Window Treatment**

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

Unit-III

Flower Arrangement

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

Unit-IV

Accessories

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

Reference books

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

Bachelor of Science (Home Science) (SEMESTER-VI)

INTERIOR DECORATION

(Practical)

Course Code: BHSM: 6282

COURSE OUTCOMES

1. To make elevation on walls, show lighting, windows and accessories in rooms.
2. To make fresh flower arrangement.
3. To make any furnishing article.

Bachelor of Science (Home Science) (SEMESTER-VI)

INTERIOR DECORATION

(Practical)

Course Code: BHSM: 6282

Practical : 20

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

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNITY NUTRITION

Course code: BHSM: 6283

(Theory)

COURSE OUTCOMES

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

6. To study different national nutrition programme and policies.
7. To gain knowledge about role of national and international agencies in community nutrition.

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNITY NUTRITION

Course code: BHSM: 6283

(Theory)

Time : 3 hrs.

Max. Marks: 100

Theory: 60

Practical: 20

CA:20

INSTRUCTION FOR THE PAPER SETTER:

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

Unit-I

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)

COMMUNITY NUTRITION

Course code: BHSM: 6283

(Practical)

COURSE OUTCOMES

1. To cook recipes and calculate their cost and nutritive values.
2. To assess the nutritional status of different vulnerable groups.
3. To develop different audio-visual aids for imparting knowledge.
4. To plan, implement and evaluate the nutrition education for target groups.
5. To visit school to see the functioning of mid day meal programme.

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNITY NUTRITION

Course code: BHSM: 6283

(Practical)

Marks: 20

Instruction for the paper setter.

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

1. Cook following 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)

GARMENT DESIGNING & CONSTRUCTION

Course Code: BHSM-6285

(Theory)

COURSE OUTCOMES

1. To identify different types of fabrics.
2. To understand the importance of labels.
3. To study the factors affecting selection of clothes for different age groups.
4. To study the use of lines in improving human figure.
5. To provide knowledge about anthropometry.
6. To gain knowledge about common fitting problems and methods of correcting them.
7. To get insight into pattern manipulation and its principles.

Bachelor of Science (Home Science) (SEMESTER-VI)

GARMENT DESIGNING & CONSTRUCTION

Course Code: BHSM-6285

(Theory)

Time: 3 Hrs

Max. Marks: 100

Theory: 60

Practical: 20

CA:20

INSTRUCTION FOR THE PAPER SETTER:

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

- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

Content :-

Unit-I

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

Unit-II

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

Unit-III

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

Unit-IV

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

Reference Books

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

Bachelor of Science (Home Science) (SEMESTER-VI)

GARMENT DESIGNING & CONSTRUCTION

Course Code: BHSM-6285

(Practical)

COURSE OUTCOMES

1. To introduce basic sketching techniques.
2. To draft and stitch different dresses like frock, ladies blouse, ladies shirt, ladies salwar, ladies kurta, ladies nighty etc.

Bachelor of Science (Home Science) (SEMESTER-VI)

GARMENT DESIGNING & CONSTRUCTION

Course Code: BHSM-6285

(Practical)

Time : 3 hours

Marks: 20

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

1. Pattern Making – dart manipulation by flat pattern
 - Shifting of darts
 - Combining darts
 - Converting darts into gathers
 - Converting darts into seam lines
2. Drafting and Construction
 - Draft and stitch petticoat (Drafting should be done directly on cloth).
 - Draft and stitch ladies blouse.
 - Draft and stitch ladies shirt.
 - Draft and stitch ladies Salwar/churidar (Drafting should be done directly on cloth).

- Draft and stitch ladies nighty.

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK

Course code : BHSM: 6286

(Theory)

COURSE OUTCOMES

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

6. To develop and plan of work, its importance and selection of subject matter.

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK

Course code : BHSM: 6286

(Theory)

INSTRUCTION FOR THE PAPER SETTER:

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

Course Content :-

Unit-I

- Communication-definition, importance process model, scope, function and 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)

COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK

Course Code : BHSM: 6286

(Practical)

COURSE OUTCOMES

1. To prepare different audio-visual aids like charts, posters, flash cards, pamphlet etc.
2. To prepare lesson plan.
3. A visit to impart extension education.

Bachelor of Science (Home Science) (SEMESTER-VI)

COMMUNICATION AND AUDIO VISUALS IN EXTENSION WORK

Course code : BHSM: 6286

(Practical)

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

1. Preparation of Visual Aid.

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

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

B.Sc. (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, Pardeep Publication.
- 2) Food Microbiology Frazier, William C and West off Dannis C. Tata McGraw will Publish Company Ltd.

