VIMALA COLLEGE (AUTONOMOUS)
THRISSUR

KERALA- 680009, INDIA

(NAAC Re-accredited(3rd Cycle): A Grade, CGPA-3.50**)**

Affiliated to University of Calicut

B.Sc. DEGREE PROGRAMME

IN

FAMILY AND COMMUNITY SCIENCE

Choice Based Credit and Semester System
(CBCSS)

SYLLABUS AND SCHEME FOR CORE, COMPLIMENTERY and OPEN COURSES (2016 ADMISSION ONWARDS)

SYLLABUS FOR B.Sc FAMILY AND COMMUNITY SCIENCE PROGRAMME (CORE COURSES) 2016 ONWARDS

Pattern of the model question paper, scheme of evaluation for internal examination and credit distribution have been included.

B Sc FAMILY AND COMMUNITY SCIENCE PROGRAMME COURSE STRUCTURE

Credit Distribution

Semester	Common Course		Core Course	Complementary Course		Open Course	Total
	English	Additional language		Chemistry	Botany/ Zoology/ Physics		
I	4+3	4	2	2	2	-	17
II	4+3	4	2	2	2	-	17
III	4	4	2	2	2	-	14
IV	4	4	3+4*	2+4*	2+4*	-	27
V	-	-	3+3+2*+2+2*+2+2*+2**	-	-	2	20
VI	-	-	5+5*+5+5*+2+3	-	-	-	25
Total	**22**	**16**	**56**	**12**	**12**	**2**	**120**

***Practical** ****Project**

Mark Distribution and Indirect Grading System

Mark system is followed instead of direct grading for each question. After external and internal evaluations marks are entered in the answer scripts. Indirect Grading System in 7 point scale will be followed. Each course is evaluated by assigning marks with a letter grade (A^+, A, B, C, D, E or F) to that course by the method of indirect grading.

Mark Distribution

Sl.No.	Course	Marks
1	English	600
2	Additional Language	400
3	Core course: Family and Community Science	1750
4	Complementary course: Chemistry	400
5	Complementary course: Botany/Zoology/Physics	400
6	Open Course	50
	Total Marks	3600

Seven point Indirect Grading System

% of Marks	Grade	Interpretation	Grade Point Average	Range of Grade points	Class
90 and above	A^+	Outstanding	6	5.5- 6	First Class with distinction
80 to below 90	A	Excellent	5	4.5 - 5.49	
70 to below 80	B	Very good	4	3.5 - 4.49	First Class
60 to below 70	C	Good	3	2.5 - 3.49	
50 to below 60	D	Satisfactory	2	1.5 - 2.49	Second Class
40 to below 50	E	Pass/Adequate	1	0.5 - 1.49	Pass
Below 40	F	Fail	0	0 - 0.49	Fail

An aggregate of E grade with 40% marks (after external and internal put together) is required in

each course for a pass and also for awarding a degree. Appearance for Internal Assessment (IA) and End Semester Evaluation (ESEexternal)) are compulsory and no grade shall be awarded to a candidate if she/he is absent for IA/ESE or both.

After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below. For the successful completion of a semester, a student should pass all courses. However, a student is permitted to move to the next semester irrespective of SGPA obtained.

The Semester Grade Point Average can be calculated as

$$SGPA = \frac{\text{Sum of the credit points of all courses in a semester}}{\text{Total credits in that semester}}$$

$$\text{ie., } SGPA = \frac{C1*G1+C2*G2+C3*G3+\ldots\ldots\ldots}{n}$$

where G1, G2, … are grade points of different courses; C1, C2, are credits of different courses of the same semester and n is the total credits in that semester.

The Cumulative Grade Point Average (CGPA) of the student is calculated at the end of a programme. The CGPA of a student determines the overall academic level of the student in a programme and is the criterion for ranking the students. CGPA can be calculated by the following formula

The Cumulative Grade Point Average (CGPA) can be calculated as

$$CGPA = \frac{\text{Total credit points obtained in all semesters}}{\text{Total credits}}$$

CREDIT AND MARK DISTRIBUTION IN EACH SEMESTERS
2016 ADMISSION ONWARDS
Total credits: 120; Total Marks: 3600

Semester	Course	Cred3t	Marks
I	Common course: English	4	100
	Common course: English	3	100
	Common course: Additional Language	4	100
	Core Course: VFCIBOI - Fundamentals of Nutrition	2	100
	Complementary course: Chemistry	2	80
	Complementary course: Botany/Zoology/Physics	2	80
	Total	**17**	**560**
II	Common course: English	4	100
	Common course: English	3	100
	Common course: Additional Language	4	100
	Core Course : VFC2BO2- Human Development	2	100
	Complementary course: Chemistry	2	80
	Complementary course: Botany/Zoology/Physics	2	80
	Total	**17**	**560**
III	Common course: English	4	100
	Common course: Additional Language	4	100
	Core Course : VFC3BO3- Research Methodology and bio informatics	2	100
	Core Course : VFC3BPL1- Practical I- Research Methodology and bio informatics	-	-
	Complementary course: Chemistry	2	80
	Complementary course: Botany/Zoology/Physics	2	80
	Total	**14**	**460**
IV	Common course: English	4	100
	Common course: Additional Language	4	100

	Core Course : VFC4BO4- Food Science	3	100
	Core Course Practical: VFC4BPL2- Practical II- Food Science	4	100
	Complementary course: Chemistry	2	80
	Complementary course: Botany/Zoology/Physics	2	80
	Complementary course: Chemistry Practical	4	80
	Complementary course: Botany/Zoology/Physics Practical	4	80
	Total	**27**	**720**
V	Core Course : VFC5BO5-Physiology and Microbiology	3	100
	Core Course : VFC5BO6-Family Resource Management	2	100
	Core Course : VFC6BPL3- Practical III- Family Resource Management	2	100
	Core Course : VFC5BO7-Textile Science	2	100
	Core Course : VFC6BPL4- Practical IV- Textile Science	2	50
	Core Course : VFC5BO8-Diet in Health	3	100
	Core Course : VFC6BPL5- Practical V- Diet in Health	2	50
	Open Course : VFC5D01: Food Science and Basic Cookery VFC5D02: Interior Decoration VFC5D03: Textiles and apparel designing	2	50
	Project	2	50
	Total	**20**	**700**
VI	Core Course : VFC6B09-Fabric care and Apparel designing	5	100
	Core Course : VFC6BPL6 - Practical VI- Fabric care and Apparel designing	5	100
	Core Course : VFC6B10- Dietetics	5	100
	Core Course : VFC6BPL7- Practical VII- Dietetics	5	100
	Core Course: VFC6B11-Concepts in Family Relation	2	100
	Core Course: Elective Courses	3	100
	Total	**25**	**600**
	Grand Total	**120**	**3600**

B Sc HOME SCIENCE (FAMILY AND COMMUNITY SCIENCE)

CORE COURSE STRUCTURE UNDER CBCSS (2016 ADM.)

Semester	Code No.	Course Title	Hrs/ Week	Credit	Marks		
					EE (80%)	IE (20%)	Total
I	VFCIB01	Fundamentals of Nutrition	4	2	80	20	100
II	VFC2B02	Human Development	4	2	80	20	100
III	VFC3B03	Research Methodology and bio informatics	3	2	80	20	100
	VFC3BPL1	Practical I- Research Methodology and bio informatics	2	-	-	-	-
IV	VFC4B04	Food Science	3	3	80	20	100
	VFC4BPL2	Practical II -Food Science	2	4	80	20	100
V	VFC5B05	Physiology and Microbiology	4	3	80	20	100
	VFC5B06	Family Resource Management	2	2	80	20	100
	VFC6BPL3	Practical III- Family Resource Management	2	2**	80	20	100
	VFC5B07	Textile Science	2	2	80	20	100
	VFC6BPL4	Practical IV- Textile Science	4	2**	40	10	50
	VFC5B08	Diet in Health	3	3	80	20	100
	VFC6BPL5	Practical V – Diet in health	4	2**	40	10	50
	VFC6PR	Project	2	2	40	10	50
VI	VFC6B09	Fabric care and Apparel designing	5	5	80	20	100
	VFC6BPL6	Practical VII- Fabric care and Apparel designing	4	5	80	20	100
	VFC6B10	Dietetics	5	5	80	20	100
	VFC6BPL7	Practical VI- Dietetics	4	5	80	20	100
	VFC6B11	Concepts in Family Relation	4	2	80	20	100
	VFC6E01 VFC6E02 VFC6E03	**Elective Courses***** Entrepreneurship Management Quantity Food Preparation Techniques Extension Education and Communication	3	3	80	20	100
TOTAL				56			1750

* Exam will be held at the end of 4th semester

** Exam will be held at the end of 6th semester

*** An institution can choose any one among the three courses

EVALUATION

A) Theory: Every Semester

100 Marks for each paper.

QUESTION PAPER PATTERN FOR CORE

For a paper total marks is 80+20=100.

External : 80marks , Internal : 20 mark

Open course, 40+10=50

Project work 80+20=100

Distribution of marks and type questions.

Internal marks distribution

Sl.No	Criteria	Marks
1	Attendance	4
2	Assignments	4
3	Seminar	4
4	Test papers-2-	8
Total		**20**

External marks distribution

Category	**Total Questions**	**To be answered**	**Marks for each question**	**Total**
Section A – One sentence	10	10	1	10
Section B- Paragraph	12	10	2	20
Section C- Short essay	8	5	6	30
Section D-Essay	4	2	10	20
Total				**80**

Open course marks distribution

Internal marks distribution

Sl.No	**Criteria**	**Marks**
1	Attendance	2
2	Assignments	2
3	Seminar	2
4	Test papers-2-	4
Total		**10**

External marks distribution

Category	**total Questions**	**To be answered**	**Marks for each question**	**Total**
Section A –one word	5	5	1	5
Section B- One sentence	5	5	2	10
Section C- Paragraph	5	3	5	15
Section D-Essay	3	1	10	10
Total				40

B) PRACTICAL

Practical internal marks distribution

DIET IN HEALTH & TEXTILE SCIENCE

Sl.No	Criteria	Marks
1	Attendance	2
2	Performance	2
3	Record	2
4	Class test (2)	4
Total		10

FOOD SCIENCE

DIETETICS

FABRIC CARE AND APPAREL DESIGNING

Sl.No	Criteria	Marks
1	Attendance	4
2	Performance	4
3	Record	4
4	Class test (2)	8
Total		20

FAMILY RESOURCE MANAGEMANT

Sl.No	Criteria	Marks
1	Attendance	5
2	Performance	8
3	Record	5
4	Handicraft	2
Total		20

Practical -External marks distribution

VFC4BPL2 - PRACTICAL II - FOOD SCIENCE

Sl . No	Criteria	Mark
I	**QUALITATIVE TESTS**	
	TEST FOR CARBOHYDRATE	
I	Molish's test	4
Ii	Benedict's test	4
Iii	Fehling's test	4
Iv	Barfoed's test	4
V	Seliwanoff's test	4
Vi	Phenyl hydrazine test	8
Vii	Result	2
	TOTAL	**30**
OR		
	TEST FOR PROTEINS	
I	Coagulation	5
Ii	Molish's test	5
Iii	Biuret test	5
Iv	Millions test	5
V	Xanthoprotein test	5
viii	Result	5
	TOTAL	**30**
II	**QUANTITATIVE TESTS**	
I	Principle	5
Ii	Procedure	8
Iii	Titre value	5
Iv	Steps	7
V	Result	5
III	Record	20
TOTAL		**80**

VFC6BPL7 PRACTICAL IV DIETETICS

Sl . No	Criteria	Mark
1	Preparation and Taste	16
2	Serving and Presentation	4
3	Time and Cleanliness	4
4	Principle	4
5	Menu Plan	16
6	Calculation	8
7	RDA (8 Nutrients with units)	8
8	Record	20
TOTAL		**80**

VFC6BPL6 PRACTICAL V FABRIC CARE AND APPAREL DESIGNING

Sl . No	Criteria	Mark
1	Drafting	10
2	Construction	10
3	Grain	4
4	Identification	12
5	Neatness and Completion	2
6	Embroidery	2
7	Garments	20
8	Record	20
TOTAL		**80**

PROJECT

Project evaluation (Internal Marks)

Sl.No	Criteria	Marks
1	Initiative	1
2	Interest in research	1
3	Regularity	1
4	Efficiency	1
5	Writing Skill	1
7	Project Presentation	2
8	Viva	3
Total		**10**

Project evaluation (External Marks)

Sl.No	Criteria	Marks
1	Choice of the topic	2
2	Introduction and Objectives	3
3	Review of literature and Bibliography	5
4	Methodology	3
5	Results and Discussion	10
6	Summary and conclusion	2
7	Presentation	5
9	Over all	3
10	Viva	7
	TOTAL	**40**

SEMESTER I

VFC1 B01 FUNDAMENTALS OF NUTRITION

Credits: 2 **Theory: 4hrs / week**

Objectives:

To enable the students to gain information about the sources, functions and effects of deficiency of various nutrients.

Unit I Introduction to human nutrition Definition- Nutrition ,health, Malnutrition, Nutritional Status..Nutritional classification of foods,

Unit II Recommended Dietary Allowances ICMR Recommended Allowances for Indians (RDA) - Reference man & reference woman.

Unit III Study of Macronutrients Carbohydrates, proteins and fat - Classification, functions, digestion, absorption, metabolism,
sources, requirements and deficiency.

Unit IV Study of Vitamins Functions, sources, deficiency and requirements of :-Fat soluble vitamins (Vitamin A, D, E and K) and water
soluble vitamins (Vitamin B- Thiamine, Riboflavin, Niacin, folic acid and vitamin B12 and vitamin C)

Unit V Study of minerals Functions, sources, deficiency and requirements of: - Calcium, Iron, Iodine, Fluorine.

Unit VI Study of energy

Definition, Determination of Energy value of food by Bomb Calorimeter, Total energy requirements – BMR – factors effecting BMR, physical activity, physiological fuel value

Unit VII Water Functions, water balance and requirements.

References

1. Sri. Lakshmi B., Nutrition Science, New Age International (p) Ltd, New Delhi - 2002.
2. Swaminathan M., Handbook of Food and Nutrition, the Bangalore Printing and Publishing co., Ltd., Banglore.2003.
3. Bamji M.S. et.al. Textbook of Human Nutrition, Oxford, IBH Publishers, 1999.

SEMESTER II

VFC2 B02 HUMAN DEVELOPMENT

Credit: 2 **Hours: 4hrs / Week**

Objectives

1. To provide scientific knowledge about human development and behavior.
2. To know the needs of children at different stages of development.
3. To give an awareness of the needs and problems of exceptional children.

Unit I Principles of growth development

Stages of development, Importance of heredity and environment in the development of the child.

Unit II Prenatal period

Conception, stages of development, complications of pregnancy, factors influencing prenatal development, antenatal care.

Unit III Neonate

Characteristics, abilities and adjustments.

Unit V Babyhood, Early childhood, late childhood

Physical, motor, emotional, social, moral, cognitive and language development. Discipline methods and effects. Habit formation.

Unit VI Adolescence

Characteristics, physical, social, emotional, cognitive and moral development, problems of adolescence. Sex education- need and significance.

Unit VII Adulthood

characteristics and problems.

Unit VIII Pre- school education

Objectives and types of pre schools- nursery, balwadi, laboratory nursery school, kindergarten and Montessori.

Unit IX Play

Theories, values and types.

Unit X Juvenile delinquency

Causes and rehabilitation, child's laws and rights

Unit XI Exceptional children

Definition, causes, classification, identification, need for special education – gifted child, mentally handicapped, physical and sensory.

Related experience

1. Observation of the following developments of a child in preschool- physical, social, emotional and intellectual development.
2. Visit to any of the two places – day care centre/ special school/ balwadi / play school.

References

1. Hurlock E.B., Child Development, Mc Graw Hill, Kogakurtia Ltd.
2. Hurlock E.B., Child Growth and Development, Mc Graw Hill
3. Hurlock E.B., Developmental Psychology, Mc Graw Hill
4. Devadas R.P. and Jaya N. (1984) A Textbook on Child Development, Mac Millan, India ltd.

5. Suriakanthi A. (1989) Child Development, Kavitha Publication, Gandhigram.
6. Stewart A.C. and Friedmans (1987) Child development: Infancy through Adolescence, Willy International.
7. Gaij G.T. (1989) Human Development, Prentice Hall, New Jersey.

SEMESTER III

VFC3 B03 - RESEARCH METHODOLOGY AND BIOINFORMATICS

Credits: 2 **Hour: 3 hrs/week**

PART A- RESEARCH METHODOLOGY

Objectives

1. To understand the methodology of research its principles and techniques
2. Developing and understanding research from a report writing

Unit I Fundamentals of Research:

Definition of research, objectives, characteristics and types – action research, applied research, expost facto research, historical research, fundamental research.

UNIT II Defining research problem

Definition and selection, necessity of defining the problem, technique involved in defining a problem

Unit III Research design / proposal

Meaning and purpose of a research design or proposal, research problem definition, identification, statement of research problem, criteria for selection, definition of concepts (operational definition).Variables - types of variables, independent and dependent variables, control and intervening variables. Hypothesis AND related literature –Meaning

Unit III Methods of data collection

Collection of primary data – observation method, Interview method, collection of Data through questionnaires and schedules, other methods of data collection, collection of secondary data

Unit IV Research Tools

Questionnaire, observation, interview schedule and other tools used.

Unit V Sampling

Sampling methods, merits and demerits of sampling

Unit VI Research Report Writing

Principle of research report, contents in a report

References

1. Kothari.C.R., Research Methodology. Wiley Eastern Limited, New Delhi,2000

2. Best.W.J and Kahn V.J., Research in Education, 7th edition, Prentice Hall Private Ltd. New Delhi
3. Koul.L., Methodology of Educational Research,2ndedition, Vikas publishing house ltd., New Delhi

PART B BIOINFORMATICS

Objective

To provide the basic knowledge in the discipline and application of bioinformatics

Unit I – Introduction to bioinformatics

Definition, Branches- genomics and proteomics, Scope- Application of bioinformatics in various fileds

Unit II – Key biosequences in molecular biology

Nucleic acid and aminoacids

Unit III – Introduction to data bases

Important data base sources, Structure, Functions, classification

Unit IV – Tools of bioinformatics

Sequence analysis, Tools, Salient features of BLAST, FASTA, AND PSI- BLAST

References

1. Attwood, T K & D J Parry Smith. 1999> Introduction to Bioinformatics. Addison Wesley Longman
2. John Wiley & Sons. Inc., publications, NewYork
3. Khan I A & A Khayum. 2002, Fundamentals of Bioinformatics, Ukkkaz Publications, Hyderabad
4. Less A M. 2002. Introduction to Bioinformatics. Oxford University press. Oxford

SEMESTER III
VFC3BPL1 PRACTICAL 1 -RESEARCH METHODOLOGY AND BIOINFORMATICS

Credit: 0 **Hour: 2 hrs /week**

1. Prepare a research tool – questionnaire, interview schedule
2. Conduct a community survey on relevant topics of Home Science.
3. Prepare a research proposal
4. Observational study on developmental pattern of preschool children
5. Conduct a nutritional assessment survey among college students
6. Conduct a community awareness programme

SEMESTER IV
VFC4 B04 FOOD SCIENCE

Credits: 3 **Theory: 3hrs / week**

Objectives

To enable students

1. Understand the nutritive composition of different food groups.

2. Impart knowledge about the different methods of cooking and food preservation.

Unit I Introduction to food science

1. Definition of food and functions of food

2. Food pyramid, basic five food groups and uses

3. Cooking-objectives and different methods of cooking.

Unit II Study of foods

1. **Cereals** Structure (wheat) and nutrient composition cereal products, effect of heat on starch.

2. Pulses and Nuts and Oil seeds.

Nutritive composition and germination and anti-nutritional factors.

3. **Vegetables** Classification and nutritive composition and selection, pigments

4. **Fruits** Composition and nutritive composition, browning reaction

5. **Milk and milk products** Nutrient composition of milk and milk products – curd, butter, ghee, skimmed milk, effect of heat

6. **Eggs** Structure, nutritive composition, characteristics of fresh eggs and deterioration of eggs.

7. **Meat** Nutritional significance and post-mortem changes.

8. **Fish** Nutritional significance and selection.

9. **Fats and Oils** Nutritional importance, smoking temperature and rancidity.

10. **Beverages** Classification

11. **Sugar and its products** Caramalisation, hydrolysis, crystallization and stages of sugar cookery

Unit III Food preservation - Principles and methods

Unit IV Food adulteration- Common adulterants and simple Test for detection of Adulterants

References

1. Norman, N. Potter and Hotchkiss, J.H, Food Science, CBSE publishers and Distributers, New Delhi, 1996.

2. Mudambi, S.R. and Rao , S.M. Food Science, New Age International (P) ltd. Banglore, 1989.

3. Begum, M.P., A Text Book of Food, Nutrition and Dietetics, sterling Publishers Pvt. Ltd., New Delhi, 2001.

4. Srilakshmi, B., Food Science, New Age International Pvt. Ltd., New Delhi.

5. Mudambi, S.R. and Rajagopal M.V., Fundamentals of Food & Nutrition, New Age International (P) Ltd., New Delhi, 1990.

6. Swaminathan, M. Handbook of Food and Nutrition, The Banglore Printing and Publishing Co., Ltd., Banglore, 20

SEMESTER IV
VFC4 BPL2 PRACTICAL II FOOD SCIENCE

Credits: 4 **Practical: 2hrs / week**

Module I Food preparation

i. Record the weight of 1 cup/ 1tbsp/ 1tsp of different types of food stuffs.

ii. Record the ratio of raw to cooked volume of rice, rava and pulses.

iii. Simple preparations using cereals, pulses, vegetables, fruits, milk, egg, meat and fishusing different cooking methods.

iv. Weaning recipes

v. Food preservation – Jam, squash, pickles

***Module II FoodAnalysis* i.**

Qualitative tests for

a. Proteins

b. Carbohydrates – Monosaccharide (glucose, fructose) and disaccharides

ii . Quantitative tests

a. Vitamin C in lime juice (dye method)

b. Estimation of reducing sugar by Benedict's method

c. Calcium in food – demonstration

SEMESTER V
VFC5 B05 PHYSIOLOGY AND MICROBIOLOGY

Credits: 3 **Theory: 4 hrs / week**

Part-I HUMAN PHYSIOLOGY

Objective

To study about the various systems and functions of the human body.

Unit I Blood

Functions, composition, blood formation and destruction, hemoglobin, blood coagulation, blood groups, Rh factor, Erythroblastosis foetalis.

Unit II Circulatory System

Heart- structure, properties of heart muscle, Special conducting tissues, cardiac cycle, Heart sound, pulse, Heart rate, blood pressure, ECG.

Unit III Digestive System

Structure and functions of Digestive Tract, Functions of various secretions and juices, Functions of accessory organs such as salivary glands, tongue, liver, gall bladder and pancreas.

Unit IV Urinary System

Structure and functions of kidney, structure of Nephron, urine formation and micturition

Unit V Reproductive System

Male and Female reproductive organs in brief, ovarian and uterine cycle's, fertilization, implantation, parturition.

Unit VI Endocrine System

Structure and functions of pituitary gland, thyroid gland, parathyroid gland, Pancreas, adrenal glands and sex glands (ovaries, testis and placenta).

References

1. Chatterjee C.C., Human Physiology, (11thedition), vol 1 & 2, Medical Allied Physiology (1987).

2. Sarada Subramaniam and Madhavankutty K.A, A Concise Text Book of Physiology Orient Longman pub. New Delhi.

3. Vidya Ratan ,Hndbook of Human Ohysiology, Jaype Brothers ,Medical Publishers New Delhi, 110002

4. Sherman Veneles and Luriano, Human Physiology.

5. Best,Herbert Charles and Taylor ,Burke Norman –The Living Body
6. Text Book of Human Pysiology ,S.Chand and Co.Pvt.Ltd. Ram Nagar, New Delhi
7. Fred.E.D Armour, Basic Physiology, Oxford and IBH Publishing Co, New Delhi

PART –II MICROBIOLOGY

Objective: Elementary knowledge about microorganisms and their role in health and diseases.

Unit I Introduction, Importance of the study of microbiology and classification of microorganisms.

Unit II Bacteria and Bacterial Diseases Morphology, factors affecting growth, reproduction, spore formation. Pneumonia, tuberculosis, meningitis, gonorrhea, syphilis, typhoid, cholera and tetanus. Control and Destruction Of Bacteria Sterilization and disinfection

Unit III Yeasts Morphology and economic importance

Unit IV Virus and Viral Diseases, Morphology – Bacteriophages. Chicken pox, mumps, poliomyelitis, rabies, infective hepatitis, Chikunguinea, Dengue and AIDS.

Unit V Infection and Immunity: Sources of infection and methods of transmission. Immunity Classification –innate and acquired, active and passive immunity, immunization schedule for children

Unit VII Food fermentations: Cheese, bread, wine, fermented vegetables – methods and organisms used. Food and enzymes from microorganisms – single cell protein, production of enzymes.

Unit VII General principles underlying spoilage, Spoilage of different kinds of foods, cereals and cereal products – sugar and sugar products – vegetable and fruits – meat and meat products – fish and other sea foods – eggs and poultry – dairy and fermentative products (ice cream/milk/bread/wine).

Unit VIII Food Poisoning: food borne infections (a) Bacterial: Staphylococcal, Brucella, Bacillus, Clostridium, Escherichia, and Salmonella (b) Fungal: Mycotoxins including aflatoxins, (c) Viral: Hepatitis, (d) Protozoa – Amoebiasis.

References:

1. Anna .K.Joshua, Microbiology, Popular Book Depot, Madras 15.
2. Barnes and Noble, Bacteriology –Principles and practices.

SEMESTER V

VFC5 B06 FAMILY RESOURCE MANAGEMENT

Credit: 2 **Hours: 2hrs / Week**

Objectives

1. To help students learn principles of resource management
2. To provide students knowledge on household economics
3. To make students conscious of aesthetics
4. To encourage students to apply theoretical knowledge in practical life

Unit I Principles of Resource Management

1. Principles of Resource Management

meaning & definition of home management, steps involved in management, decision making, values, goals & standards, qualities of an efficient home maker

2. Resources

Definition & classification, characteristics resources, and guides to increase satisfaction from resources

3. Energy management

Fatigue-types, causes and methods to elevate fatigue

Work simplification-process chart, operation chart, flow process chart, Mundel's classes of change *Ergonomics*-meaning, importance, objectives, factors involved-man and his work, tools and equipment, indoor climate, furniture, ventilation, light, noise, storage

4. Time management

Principles & techniques, tools in making time plan, Gantt chart

5. Money management

a. *Family income*-sources of income, types of income, supplementing the family income

b. *Family expenditure*-family budget, steps in making family budget, Engels Law of consumption, savings, saving institutions-advantages

Unit II Housing and Interior Decoration

a. **Housing**

Functions of house, selection of site, principles of planning of house, kitchen layout

b. **Waste management**

Type of wastes, principles of waste management, disposal of waste. Recycling of waste and reuse of waste- biogas, vermiculture

c. **Interior decoration**

Design- definition and types, Elements of design, principles of design

Colour theory- dimensions, Prang's colour system and colour schemes

Flower arrangement-types and principles

Furniture selection, arrangement, and principle of arrangement

Window treatments- types and curtain styles

Accessories- classification- functional and decorative

Home lighting- types

References

1. Nickel, Pand Dorsey, J.M. Management in family living, Wiley Eastern Private Ltd, New Delhi, 1976
2. Gross, I.M & Grandall, D.W Management for Modern Families, 1973
3. Faulkner R & Faulkner S, Inside todays home, Holt Rinchart & Winston, Newyork
4. Rutt.A.H, Home furnishing, Wiley Eastern Private Ltd, New Delhi
5. Varghese.M.A, Ogale, N.N.Sreenivasan,K home Management, New Age International
6. Agan.T, The house-its plan & use, J.P.Lippincott company, Newyork, 1970
7. Ruth.F.Shewood, homes today and tomorrow, 1972, Chas.A.Benett company Illinois
8. Good house keeping guide to successful homemaking compiled by the editors of housekeeping 1956,Harper and Brother Publisher, Newyork.
9.Agarwal, K.C. Enviormental Biology, Nidi publication.Ltd, Bikaner,2001.
10 Miller T.G., Enviornment science, Wardsworth publicationco. TB.

SEMESTER V

VFC6 BPL3 PRACTICL I11 -FAMILY RESOURCE MANAGEMENT

Credit: 2 **Hours: 2hrs / Week**

_ Residence stay for one week as practical's with report incorporating
_ Types of design-decorative, traditional and modern
_ Elements of design-applications
_ Principles of design-illustrations
_ Colour wheel
_ Colour schemes
_ Curtain styles
_ Accessories
_ Flower arrangement
_ Prepare 2 handicraft items

Or

Event management- planning, organizing, implementing and evaluating a group activity (party, exhibition)

SEMESTER V

VFC5 B07 TEXTILE SCIENCE

Credit: 2 Theory: **2rs / Week**

Objectives

1. To give each student a desire to recognize and appreciate textile fibres.
2. To give the students sound scientific theory concerning fibers', including their production, properties and uses

Unit I Fibre Theory:

Definition, primary and secondary properties of a fibre, classification of fibres, fibre identification.

Unit II Textile Fibres-

Major fibres- cotton, linen, silk, wool, nylon, polyester, rayon, acetate (production, properties and uses)

Unit III Yarn Construction

Definition, spinning- cotton system, open end, wet spinning, dry spinning, melt spinning, bi component spinning, bi constituent spinning, friction spinning, twistless spinning, yarn- twist, number and types, blends.

Unit IV Fabric Construction

Looms- parts and operations- types of looms- handlooms, power loom and shuttle less looms, Preparation of yarns before weaving

Weaves- *Basic*- plain and derivatives, twill, bird's eye weave, herringbone twill, satin and sateen, *Novelty*- pile, leno, dobby, jacquard, double cloth, crepe, extra yarn weaves- spot (cut and continuous), lappet and swivel.

Fabric count and analysis, Blend and Mixtures

Unit V Nonwovens-

Knitting, felting, bonding, multicomponent, laces and nets, braiding.

Unit VI Finishes

Definition, classification, importance, types of finishes

mechanical- calendaring(friction, glazing, embossing, moireing and schreinerising), tentering, shearing, napping ,singeing,

Chemical-bleaching, mercerizing, sanforising, sizing, weighting, , crepe and crinkled effect, crease resistance,

special/functional- water repellency, flame proofing, mildew proofing and moth proofing .

Unit VII Dyeing and Printing

Dyes- definition and classification, mechanism of dyeing with direct, acid, basic, azoic, vat, sulphur, metal complex, mordant, reactive and disperse dyes. Methods of dyeing- fibre, stock, yarn, piece and garment.

Printing- styles- direct (block, roller, screen-hand screen, flat bed screen printing and rotary screen printing, stencil, duplex) discharge and resist (tie and dye, batik)

Unit VIII Environment and Textile Industry-

Environmental impacts related to cultivation, processing and uses.

Eco friendly fibres- jute, hemp, bamboo, organic cotton and recent trends.
Eco friendly practices and use of eco labels.

References

1. Marjory L. Joseph, Introductory Textile Science, Holt Rinehart and Winston, New York.
2. Susheela Dantyagi, Fundamentals of Textiles and their care, Orient Longmans, Madras
3. Hess, Textile fibres and their Uses, Oxford IBH Publishing Company, New Delhi.
4. Porter Corbman, Fibre to Fabric, Mc Graw Hill Book Company, New York.
5. www. fiber2fashion.com

SEMESTER V

VFC6 BPL4 PRATICALS IV TEXTILE SCIENCE

Credit: 2 **Hours: 4hrs / Week**

1. Collection of all fibres studied.
2. Identification of fibres by burning, microscopic and solubility tests.
3. Collection of all weaves studied.
4. Prepare a sample of block printing and tie and dye(1sample).

SEMESTER V

VFC 5 B08 DIET IN HEALTH

Credit: 3 **Theory: 3hours/week**

Objectives

To enable the students to

1. Understand the role of nutrition in different conditions.

2. Develop competency in planning diets to meet the nutritional requirements of different socio-economic levels.

Unit 1 Meal Planning

Link between health and Nutrition, different food groups, menu planning, balanced menus

Unit II Nutrition In Pregnancy

Nutritional status and general health, physiologic changes, nutritional requirements, dietary problems, complications

Unit III Nutrition In Lactation

Physiological adjustments during lactation, nutritional requirements, efficiency of milk production, diet of lactating women

Unit IV Nutrition In Infancy

Growth and development during infancy, nutritional requirements, breast feeding, artificial feeding, weaning foods suitable for infants

Unit V Nutrition In Preschool Age

Growth and development of preschool children, nutritional requirements, food habits and nutrient intake of preschool children, nutritional problems

Unit VI Nutrition In School Age

Physical development, food habits, nutritional requirements, nutritional status of school children

Unit VII Nutrition during Adolescence

Nutritional requirements, food habits, nutritional problems

Unit VIII Nutrition for Adults

Nutritional requirements, nutritional status and health status

Unit IX Nutrition for Aged

Nutritional requirements, food habits, nutritional problems

Unit X Nutrition in Special Events

Sports Nutrition

Unit XI Nutrition programmes and Agencies:

Important National Nutrition programmes- ICDS, Mid Day Meal Programme, Vitamin A prophylaxis Programme, Anaemia Prophylaxis Programme, goitre control programme, important national and international agencies working in the field of nutrition WHO, FAO, NIN, CFTRI.

References

1. Antia.F.P, Clinical Dietetics and Nutrition, Oxford University Press, New Delhi, 1997, 4th edition.
2. Srilakshmi.B, Dietetics, New Age International Pvt. Ltd. Publishers, New Delhi, 1997.
3. Swaminathan.M, Principles of Nutrition and Dietetics
4. Subhangini Joshi, Nutrition and Dietetics
5. Gopalan.C, Ramasastri.B.V, Nutritive value of Indian Foods, Vol.I, NIN, ICMR, 1994.
6. Mahan.J.K, Arlin.M.T, Krause's Food Nutrition and Diet Therapy 8th edition, W.B Saunders Company, 2001.

SEMESTER V

VFC 6 BPL5 PRACTICAL V -DIET IN HEALTH

Credit:2 **Practical:4hrs/week**

Planning diets to meet the requirement at different economic level- low, middle and high income for thefollowing conditions

Pregnancy

Lactation

Infancy

Preschool age

School Age

Adolescents

Adult

Old people

SEMESTER V

VFC6PR-PROJECT

Credit: 2 **Theory: 2hours / week**

Objectives

- To make the students research oriented
- To establish new research to contribute to program planning and evaluation

Content

- Development of research Programme
- Collection of Review
- Conduct Pilot Study in the field
- Conduct of work in the lab/ hospital/ community
- Analysis of Data
- Writing for the thesis and submission

SEMESTER VI

VFC6 B09 FABRIC CARE AND APPAREL DESIGNING

Credit: 5 **Theories: 5 Hrs / Week**

Objectives

1. To acquire the ability in selecting textiles and constructing garments.
2. To have the ability to know how to care for fabrics

Unit I Water

Types and methods of softening (caustic soda, Lime soda, zeolite, borax)

Unit II Study on Laundry

Soaps and detergents, stiffening agents, bleaches, laundry blues, stain removal, dry cleaning.

Unit III Principles of laundering and storing

Cotton, silk, wool, rayon and synthetics.

Unit IV Traditional Indian textiles and embroideries of India

Textiles-Dacca muslins, Jamdhani, Baluchari, Patola, Himrus, Bandhini, Kalamakari, Brocades Chanderi, Paithani, Pitamber, Banaras brocades, Amru

Embroideries- Kashida, Phulkari, Chamba rumal, Chikankari, Kantha)

Unit V Garment construction

Body measurements, methods of construction, parts and function of sewing machine, steps in preparing fabric before cutting, tools of sewing.

Unit VI Fashion Elements

Fashion terminologies- fad, style, classic, Haute couture, prêt-A- porter, trend

Fashion cycle

Merchandising- role of a merchandiser

Visual merchandising- Needs and important, elements- areas of display- store interior, store exterior, window display.

Unit VII Study of human figure

Elements and principles of design applied to apparel design, types of figures, selection of clothing for different figure types

UnitVIII Study Tour to research institute / Textile mill or shops.

References

1. Noemia D'souza, Fabric Care, New Age International (P) Ltd., New Delhi.
2. Jannette Jarnow, Kitty G. Dickerson, Inside Fashion Buisiness, Prentice Hall Inc., New Jersey.
3. Essay M., Fashion Marketing, Blackwell Sciences Ltd., London 2002
4. Shailaja D. Naik, Traditional Indian Textiles
5. Metha R.J., Master pieces of Indian Textiles.
6. Abling Bina, Fashion Rendering with Colour, Prentice Hall Inc., Corporation, New Jersey,2001
7.Martin M.Pergler, Visual merchandising and display, Conde Nast publication, Canada,2012

SEMESTER VI

VFC6 BPL6 PRACTICAL VI -FABRIC CARE AND APPAREL DESIGNING

Credits: 5 **Theory:4 hrs / week**

PRACTICALS

1. Stitches- basic hand and decorative (embroidery- any 10)
2. Samples of any 2 traditional embroideries of India.
3. Seams and seam finishes (4 types each)
4. Bias and its application- facing- bias and shaped, piping
5. Fullness- gathers, tucks, pleats and darts (2 samples each)
6. Pockets- side and front
7. Collars- Chinese, peter pan, full shirt
8. Plackets- continuous bound, faced and bound, broken kurta
9. Sleeves- set in, kimono, puff and raglan (paper patterns)
10. Fasteners
11. Construction of garments – girl's frock, salwar, kameez and sari blouse
12. Boutique window display- theme based (group activity , report and photo to be maintained in the record)
13. Knowledge of textiles available through visits to shops or mills

SEMESTER VI

VFC6 B10 DIETETICS

Credits: 5 **Theory: 5hrs / week**

Objectives:

To enable students:

1. Gain knowledge on normal and therapeutic diets.

2. Acquire practical experience in planning, preparing and serving of balanced diet in health and diseases.

Unit I Introduction to Dietetics

Role of dietitian, link between health and nutrition

Unit II Diet Therapy

Principles of Diet Therapy, therapeutic modifications of normal diets and routine hospital diets – enteral and parenteral feeding

Unit III Diets in disease conditions

1. Deficiency diseases

a. Iron deficiency anemia

b.Protein- Energy Malnutrition (PEM)

c. Vitamin A deficiency

2. Therapeutic Diets

a. Febrile conditions – TB and Typhoid

b. Obesity and uderweight.

c. Diabetes mellitus.

d. Gastro intestinal disturbances – peptic ulcer, constipation and diarrhoea.

e. Liver diseases – Hepatitis and cirrhosis.

f. Renal disorders - Glomerulonephritis and urinary calculi.

g. Cardiovascular diseases – Atherosclerosis, hypertension

h. Cancer.

Reference

1. F.P. Antia, Clinical Dietetics and Nutrition, III edition, Oxford University Press, Delhi, 1989.

2. Sri. Lakshmi B., Dietetics, New Age International (p) Ltd, New Delhi - 2002.

3. Swaminathan M., Principles of Nutrition and Dietetics.

4. Subhangini Joshi, Nutrition and Dietetics

5. Robinson, Corinno H, Basic Nutrition and Diet therapy.

Journals

1. Indian Journal of Nutrition and dietetics published by Avinashilingam Deemed University, CBSE.

2. The Indian Journal of Medical Research.

3. Nutrition, a Quarterly publication of the NIN, Hyderabad.

SEMESTER VI

VFC6 BPL7 PRACTICALS VII- - DIETETICS

Credit: 5 **Practical: 4hrs / Week**

Unit I Deficiency Diseases

Plan and prepare diets for Deficiency Conditions.

a.Iron deficiency anemia

b. Kwashiorkor

c. Night Blindness

Unit II Therapeutic Diets

Plan and prepare Diets for Disease Conditions

a.Routine hospital diets

b. Obesity

c.Underweight
d. Diabetes mellitus
e. Typhoid
f. Tuberculosis
g. Peptic ulcer
h. Constipation
i. Cirrhosis
j. Acute glomerulo nephritis
k. Renal calculi
l. Hypertension.
m. Atherosclerosis

Unit III Visits to research institute / Dietary Department.

SEMESTER VI

VFC6 B11 CONCEPTS IN FAMILY RELATION

Credit: 2 **Theory: 4hrs / Week**

Objectives

1. To help them understand family values.
2. To orient students for adjustment in marriage.
3. To prepare them to play the roles of a wife and mother effectively.
4. To make them aware on the laws and rights of women.

Unit I Marriage

Definition, purpose, functions, selection of spouse, physical, emotional, social, and intellectual maturity needed by the couple, areas of adjustment, factors influencing good marital adjustment, Courtship and Engagement – significance in Indian context.

Unit II Family

Definition, features, types of family and functions of family, co-habitation**,** Methods of family planning.

Unit III Family life cycle

Stages in the family life cycle- beginning, expanding, contracting- middle age- characteristic and adjustments(any4), old age- characteristics and problems

Unit IV Critical family situations

Infidelity, desertion, divorce, alcoholism, death/suicide, disabilities.

Unit V Deviant sexual behavior

Types- Exhibitionism, Fetishism, Frotteurisme, Pedophilia, sexual masochism, sexual sadism, Transvestic fetishism, Voyeurism, Zoophilia.

Unit VI Women and law

Laws pertaining to marriage, women rights

References

1. Devadas R.P. and Jaya N. (1984) A Textbook on Child Development, Mac Millan, India ltd.
2. Rao C.N.S. (1990) the Family, S. Chand and Company Ltd., New Delhi.
3. Hurlock E.B., Developmental Psychology, Mc Graw Hill
4. Devadas R.P. and Jaya N. (1984) A Textbook on Child Development, Mac Millan, India ltD

5. Antony P. D'souze, sex education and personality development, Ustian publishers,4/7Deshabhandhu, Gupta road, New Delhi.

ELECTIVE COURSES

SEMESTER VI

VFC 6 E01- ENTREPRENEURSHIP MANAGEMENT (Elective)

Credits: 3 **Theory: 3hrs / week**

Objectives:

1. Understand the nature of entrepreneurial activities
2. To make students aware of the urgent needs for self employment
3. To develop skills in project identification, preparation of project reports and its implementation.

Unit-1 Entrepreneurship

Definition, scope, characteristics, factors affecting entrepreneurial development, entrepreneur vs. entrepreneur, classification of entrepreneur, entrepreneur motivation, difference from a manager, role of entrepreneur in economic development.

Unit Ii Women entrepreneurs

Definition, present status in India, steps taken for the promotion of women entrepreneurs, problems faced by women entrepreneurs

Unit III EDP

Definition, need, Objectives, steps, agencies conducting EDP, Role of government in organizing EDP.

Unit IV Agencies for entrepreneurial support

KITCO, SIDCO, KVIC, DIC, STED, SIDO, NSIC, TCO, SISI, SIDBI

Unit V Small scale industries

Definition, types, role in modern economy, steps for starting SSI, problems faced by SSI, supporting mechanisms – incentives and facilities from government.

Unit VI Project

Definition, types, steps in identification, project life cycle, scope and importance, project objectives.

References

1. Desai, N. Entrepreneurial development- Principles, programmes, Policies(Vol.1) Formulation Appraisal and Financing (VOL.II) and Programmes and Performance (VOL III) Himalaya Publishing House, Bombay, 1996
2. Vinod A, Entrepreneurship Management
3. Winze.M.D Women Entrepreneurs in India, Mital publications, New Delhi 1987.
4. Jose Paul, Entrepreunership Development
5. Jayan, Entrepreneurship Development.

SEMESTER VI

VFS6 E02- QUANTITY FOOD PREPARATION TEXCHNIQUES

(Elective)

Credits: 3 **Theory: 3Hours / week**

Objectives

To enable students to

1. Understand the objectives of different types of Food Service Institutions.
2. Gain knowledge in menu planning, preparation of recipes in large scale and serving and in food costing.

Unit I Food Service Industry

Scope and objectives of hospitality industry, different categories of hotels.

Unit II Menu planning-The primary control of food service

Types of menu – A la carte, Table d'hote & cyclic, Static, single use, Factors affecting menu planning, menu presentation, cost concepts and menu pricing - Factor method, Prime cost method and Actual cost method.

Unit III Purchasing

Qualities of an institutional buyer, Purchasing activity, product selection, mode of purchasing, methods of purchasing and purchasing process, purchasing records.

Unit IV Receiving and storage

Receiving - delivery methods, delivery procedure and receiving procedure.

Storage –types (dry storage and cold storage)

Unit V Standardization of Recipes

Standardization and portion control

Unit VI Quantity Food production and quality control

Objectives of food production, methods of production, product standards and product control – HACCP

Unit VII Distribution and service of Food

Types of food service – waiter service, self service and vending.

Unit IX Budget

Steps in budget planning, break even analysis food budget, and food cost control.

Related Experience:

Standardization of 10 selected recipes used in food service Institutions and quantity food production of any two items.

REFERENCES:

1. Mohini Sethi and Surjeet, M. Malhan, "Catering Management an Integrated approach", Wiley Eastern Limited, Mumbai, II edition reprinted, 1996.

2. Marian C. Spears; Food Service Organization; III Edition, Prentice Hall Inc., usa.1995.

3.West and Woods, Introduction to Food Service, Macmillan Publishing Company, New York, 7th edition, 1994.

4. Odder Cesarani and David Fosket, Theory of Catering, Odder and Stoughton, London, xth edition,2003.

5. Odder Cesarani and David Fosket, Food and beverage service, Odder and Stoughton, London, x t h edition, 2003.

SEMESTER VI

VFC6E03- EXTENSION AND COMMUNICATION (Elective)

Credit: 3 **Theory: 3hours / week**

Objectives

To enable the students to:

1. Understand the principles and objectives of extension and community development in our country.
2. Acquire knowledge and skill in using communication techniques.
3. Prepare for higher studies in Extension Education

Unit I Community Development

1. Extension

Meaning, principles, concepts, scope and objectives of extension education in India

2. Community development in India

Objectives, principle, philosophy, Types of communities-Rural and Urban, community developmentprogrammes in India-origin and history, Basic rural Institutions-school, panchayat, co-operatives; other institutions- mahila mandals, youth clubs, rural youth programmes-4-H clubs, YFA

3. Leadership

Concepts, definition, characteristics, types, selection and training of leaders, methods of identifying professional and lay leaders.

4. Programme planning in Extension

Definition, principle, criteria for good programme planning, scope, steps involved in programme development, plan of work, calendar of work, types of evaluation in extension.

5. Rural Sociology

Characteristics, comparison between rural and urban society, kudumbasree.

6. Agencies and programmes for community development

SWB, urban and rural co-operative banks, District Rural Development Agency, Employment Training and

Poverty Alleviation-IRDP, JRY, TRYSEM, DWCRA, NAEP

Unit II Communication

1. Communication

Definition and importance, elements of communication- leagen's model, problems in communication, motivation- methods of motivating people

2. Methods of approaching people

Classification of extension teaching methods- types, scope, advantages and limitations of methods.

Individual methods- farm/home visit, office calls, personal letters and result demonstration

Group methods- method demonstration, lecture, meetings, conference

Mass methods - bulletin, circular letters, exhibits and television

3. Audio-Visual Aids

Importance of audio-visual aids in communication, cone of experience, factors to be considered in selection, preparation and use of audio visual aids, their merits and demerits

4. Home Science Extension Education

Needs and methods, vocationalization of Home Science in India, self-employment and Entrepreneurship through Home Science.

References

1. O.P.Dahama, O.P.Bhatnagar, Education and communication for Development, 2nd edition, Oxford and IBH
publishing Co., Pvt.Ltd.New Delhi.
2. S.V.Supe. An Introduction to Extension Education, Oxford and IBH publishing Co., Pvt.Ltd.New Delhi.
3. A.Advivi Reddy, Extension Education, Sreelakshmi press, Baptla.
4. Dale.E, Audio Visual methods in teaching, The Dryden Press, New York.
5. Kulendaivel.K, Audio Visual Education, Sri Ramakrishna Mission Vidyalaya, Coimbatore.
6. Dey.S.K, Panchayat Raj, Asia publishing house, Bombay, 1961.
7. Waghmore.S.K, Teaching Extension Education, Prasant publishers, Vallabha, Vidhyanagar, 1980.

OPEN COURSES

SEMESTER V

VFC 5 D01 FOOD SCIENCE AND BASIC COOKERY (OPEN COURSE)

Credit: 2 **Theory 2hrs / week**

Objectives

To enable students to understand the nutritive composition, methods of cooking and preservation of foods.

Unit I Introduction to food science

Functions of food, basic food groups and different methods and objectives of cooking.

Unit II - Study of foods

a. Cereals

Nutrient composition, effect of heat on starch and protein, role of ingredients in bread makingand cake making.

b. Pulses

Nutritive value and germination, role of pulses in cookery.

c. Vegetables

classification and nutritive value and pigments.

d. Fruits

Composition and nutritive value, browning reaction

e. Milk and milk products

Nutrient composition, effect of milk on heating, fermented and non fermented milk products,role of milk in cookery.

f. Eggs

Nutritive value, characteristics of fresh eggs, role of egg in cookery. Salad dressing, stages of foam formation.

g. Meat

Nutrient composition and effect of cooking.

h. Fish

Nutritional composition and fish cookery.

i. Fats and Oils

Functions of oils and fats in food, rancidity.

j. Beverages

Classification, nutritional importance.

Related experiences

i. Record the weight of 1 cup/ 1tbsp/ 1tsp of different types of food stuffs.
Record the ratio of raw to cooked volume of rice, rava and pulses.
Simple preparations using cereals, pulses, milk, vegetables, fruits, egg, meat and fish.
ii. Salad dressing - mayonnaise
iii. Baking – Cake, pizza, cookies (demonstration)
iv. Food preservation – Jam, squash, jelly, pickles.

References

1. Norman, N. Potter and Hotchkiss, J.H, Food Science, CBSE publishers and Distributers, New Delhi, 1996.
2. Mudambi, S.R. and Rao, S.M. Food Science, New Age International (P) ltd. Bangalore, 1989.
3. Begum, M.P., A Text Book of Food, Nutrition and Dietetics, sterling Publishers Pvt. Ltd., New Delhi, 2001.
4. Srilakshmi, B., Food Science, New Age International Pvt. Ltd., New Delhi.
5. Mudambi, S.R. and Rajagopal M.V., Fundamentals of Food & Nutrition, New Age International (P) Ltd., New Delhi, 1990.
6. Swaminathan, M. Handbook of Food and Nutrition, the Bangalore Printing and Publishing Co., Ltd., Bangalore, 2003.

SEMESTER V

VFC 5 D02 INTERIOR DECORATION (OPEN COURSE)

Credit: 2. **Theory: 2hrs / Week**

Objectives

1. To make students conscious of aesthetics.
2. To help them understand beauty in design.
3. To develop in them an appreciation of art and design.

1. Design

Definition and types- traditional, decorative, modern designs – naturalistic, stylized , geometric and abstract designs

2. Elements of design

Line,texture and light- types and effects, space, colour

3. Principles of design

Significance of : Proportion, balance, rhythm, emphasis and harmony.

4. Colour theory

Properties, prang's colour system, colour schemes, psychological implication of colours.

5. Furniture selection and arrangement

Principles of furniture selection and arrangement of furnitures in different rooms. Materials used in furniture construction.

6. Window treatments

Types- interior and exterior and curtain styles (Priscilla, cottage set, café, swags, cascade, valances, blinds, straight curtains)

7. Flower arrangement

Types (mass, line, mass cum line,miniatureandJapanesearrangement(Ikebana, Bonsai)and principles. Materials used for flower arrangement.

8. Accessories

Classification- functional and decorative. Functions

9. Home lighting

Types(local & general), Methods of lighting(direct, indirect and semi direct),Sources of lighting (Incandescent, fluorescent, structural and portable lamps), merits and demerits of incandescent bulbs and fluorescent tubes.

10. House

Functions, Principles of planning a house. Aspect &prospect.

11. Kitchen

Types (L shaped, U shaped, One way, Two way& Islandkitchens). Step saving kitchen and layouts. Kitchen work triangle.

Related experience _ Types of design-decorative, traditional and modern
_ Elements of design-applications
_ Principles of design-illustrations
_ Colour wheel
_ Colour schemes
_ Curtain styles
_ Accessories
_ Flower arrangement

References

1. Nickel, P and Dorsey, J.M. Management in family living,Wiley Eastern Private Ltd, New Delhi, 1976
2. Gross, I.M & Grandall, D.W Management for ModernFamilies, 1973
3. Faulkner R & Faulkner S, Inside todays home,HoltRinchartWinston, Newyork
4. Rutt.A.H, Home furnishing, Wiley Eastern PrivateLtd, New Delhi
5. Varghese.M.A, Ogale, N.N.Sreenivasan,K home Management, New Age International
6. Agan.T, The house-its plan & use, J.P.Lippincottcompany, Newyork, 1970

SEMESTER V

VFC 5 D03 TEXTILES AND APPAREL DESIGNING (OPEN COURSE)

Credit: 2 **Theory:2hrs / week**

Objectives

1. To recognize textile fibers.
2. To acquire ability in selecting textiles and constructing garments.
3. To develop self employment opportunities.

Unit I Fibre, yarn, theory and fabric construction

Definition, types, spinning, loom, weaving.

Unit II Weaves- Basic weaves and their variations

Novelty weaves- types, pile, leno, lappet, swivel, dobby, jacquard, double cloth, cut spot, continuous weave, crepe.

Unit III Fashion

Definition, fashion cycle, fashion trends in India.

Unit IV Traditional textiles and embroideries of India.

Unit VPrinting and dyeing

Types of dyes, printing methods**.**

Related Experience

1. Stitches- Basic hand and decorative (embroideries- any 10)
2. Seams and seam finishes.
4. Bias and its application.
5. Pockets- Set in, pocket in a seam, hip pocket.
6. Collars – Chinese, peter pan, full shirt
7. Plackets – Continuous bound, faced and bound broken kurta.
9. Demonstration of block prints

References

1. Hollen and Saddler; Textiles, Maxmillan.
2. Sushama Gupta, Neeru Garg, Renu Saini, Textbook of clothing and textiles, Kalyani publishers, Ludhiana.
3. Shailaja D Naik, Traditional Indian Textiles.
4. Essay M, Fashion Marketing, Blackwell Sciences Ltd., London.
5. Mary Mathews, Practical Cl