KANNUR UNIVERSITY
(Abstract)

B.Sc Home Science Programme -Scheme & Syllabus of Core Courses (I &II Semesters only) under Choice Based Credit Semester System for Under Graduate Programme-implemented with effect from 2009 admission-Orders Issued.

ACADEMIC BRANCH

No.Acad/C2/3616/2007 Dated, K.U.Campus. P.O,10-07-2009.

Read: 1.Minutes of the meeting of the Board of Studies in Home Science (Cd) held on 24-06-2009.
2. Minutes of the meeting of the Faculty of Science held on 16-06-2009.
3. U.O No.Acad/C2/3838/2008 (i) dated 07-07-2009
4. Letter dated -07-2009 from the Chairperson, BOS Home Science (Cd).

ORDER

1.The Board of Studies in Home Science (Cd) vide paper read(1) above has prepared and finalised the Scheme and Syllabus of B.Sc Home Science Core Courses under Choice Based Credit Semester System for implementation from 2009 admission.

2. The recommendations of the Board in restructuring the syllabus is considered by the Faculty of Science vide paper read (2) and recommended for the approval of the Academic Council.

3. The Regulations for Choice based Credit Semester System is implemented in this University vide paper read (3).

4. The Chairperson, BOS in Home Science(Cd),vide paper read (4) has forwarded the restructured scheme and syllabus of B.Sc Home Science Core Courses (I&II Semesters only) under Choice Based Credit Semester System, prepared by the Board of Studies in Home Science(Cd) for implementation with effect from 2009 admission.

5. The Vice Chancellor, after examining the matter in detail, and in exercise of the powers of the Academic Council as per section 11(1) of Kannur University Act 1996 and all other enabling provisions read together with, has accorded sanction ***to implement the scheme and syllabus of B.Sc Home Science Core Courses (I&II Semesters only) restructured in line with Choice Based Credit Semester System,with effect from 2009 admission,*** subject to ratification by the Academic Council.

6. The restructured scheme and syllabus of B.Sc Home Science Core Courses (I&II Semesters only)under Choice Based Credit Semester System, implemented with effect from 2009 admission is appended.

7. The Scheme and Syllabus of Complementary Courses offered for this Programme will be available along with the syllabus of Core Courses of the Complementary subject.

8. The affiliated Colleges are not permitted to offer Complementary Courses in violation to the provisional/permanent affiliation granted by the University. Changes in Complementary Courses are permitted with prior sanction /revision in the affiliation order already issued in this regard.

9. Orders are issued accordingly.

Sd/-
REGISTRAR

To:
1. The Principals of Colleges offering B.Sc Home Science Programme
2. The Examination Branch (through PA to CE)

Copy To:
1. The Chairperson, BOS Home Science (Cd)
2. PS to VC/PA to PVC/PA to Regr
3. DR/AR I Academic
4. Central Library
5. SF/DF/FC.

Forwarded/By Order

SECTION OFFICER

Appendix to U.O No Acad/C2/3616/2007 dated 10-07-2009.

K A N N U R U N I V E R S I T Y

Course Structure
and
Syllabus

FOR

UNDERGRADUATE PROGRAMME

IN

HOME SCIENCE

UNDER

CHOICE BASED CREDIT SEMESTER SYSTEM

w.e.f 2009 ADMISSION

COURSE STRUCTURE FOR UG PROGRAMME

HOME SCIENCE

Semester I

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Common Course English I	5	90	4
2	Common Course English II	4	72	3
3	Common Course Additional Language I	4	72	4
4	Core I	4	72	4
5	Complementary I (Course I)	4	72	3
6	Complementary II (Course I)	4	72	3

Semester II

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Common Course English III	5	90	4
2	Common Course English IV	4	72	3
3	Common Course Additional Language II	4	72	4
4	Core II	4	72	3
5	Complementary I (Course II)	4	72	3
6	Complementary II (Course II)	4	72	3

Semester III

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Common Course (General)	5	90	4
2	Common Course (General)	5	90	4
3	Core III	5	90	4
4	Complementary I (Course III)	5	90	3
5	Complementary II (Course III)	5	90	3

Semester IV

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Common Course (General)	5	90	4
2	Common Course (General)	5	90	4
3	Core IV	5	90	3
4	Complementary I (Course IV)	5	90	3
5	Complementary II (Course IV)	5	90	3

Semester V

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Core V	4	72	4
2	Core VI	5	90	4
3	Core VII	5	90	4
4	Core VIII	4	72	3
5	Core IX	5	90	4
6	Open Course 1	2	36	2

Semester VI

No.	Course Title	Hrs /wk	Hrs /Sem	Credit
1	Core X	5	90	4
2	Core XI	5	90	4
3	Core XII	5	90	4
4	Core XIII Elective	4	72	4
5	Core XIV Project	4	72	3
6	Open Course II	2	36	2

The Hours/Credits for Complementary Theory/Practical will be decided by the Board of Studies concerned.

Scheme Home Science(Core)

Semester	Course Code	Course Title	Hours/ week	Credit	Duration of Examn
I	1B01HSC	General perspectives of Home Science and Research Methodology.	4	4	3
II	2B02 HSC	Child Development and Welfare -Theory ,, - Practical	2 2	2 1	3 -
III	3B03 HSC	Food Science - Theory ,, - Practical	3 2	3 1	3 -
IV	4B04 HSC	Physiology and Microbiology	5	5	3
V	5B05 HSC	Family Relations and Counseling	4	4	3
V	5B06 HSC	Resource Management - Theory ,, - Practical	3 2	3 1	3
V	5B07 HSC	Textile Science - Theory ,, - Practical	3 2	3 1	3 -
V	5B08 HSC	Principles of Nutrition - Theory ,, - Practical	2 2	2 1	3 -
V	5B09 HSC	Normal and Therapeutic Nutrition - Theory ,, - Practical	3 2	3 1	3 3
VI	6B10 HSC	Housing and Interior Designing - Theory ,, - Practical	3 2	3 1	3 -
VI	6B11 HSC	Apparel Designing - Theory ,, - Practical	3 2	3 1	3 3
VI	6B12 HSC	Extension Education and Informatics in Home Science - Theory ,, - Practical	3 2	3 1	3 -
VI	6B13 HSC	Elective **1. General Psychology** 2. Institution Management 3. Catering Science and Technology 4. Computer Application	4	4	3
VI	6B14 HSC	Project	4	3	-

Scheme Open Courses

Semester	Course Code	Course Title	Hrs/ Week	Credit	Duration of Examn
V	5D01 HSC	Guidance and Counseling	2	2	3
VI	6D02 HSC	Food Processing and Preservation	2	2	3

*** 5B08 HSC and 5B09 HSC Practical examination (ESE) will be held at the end of 5th Semester.

*** 5B07 HSC and 6B11 HSC Practical examination (ESE) will be held at the end of the 6th Semester.

***5B06 HSC and 6B10 HSC Residence course (practical) will be conducted in the 6th Semester.

Evaluation

The evaluation scheme of each course shall contain two parts

- Continuous Evaluation (CE)
- End – Semester Evaluation (ESE)

Direct grading using a 5- point scale will be used for CE and ESE. 25 % weight shall be given for CE and 75 % weight shall be given for ESE.

End – Semester Evaluation in Practical Courses shall be conducted and evaluated by two examiners – one internal and the other external. Theory and practical examinations (ESE) for Core and Open courses shall be of 3 hours duration**.**

Components of Continuous Evaluation - CE (Theory)

The continuous evaluation (CE) shall be based on periodic written tests, assignments, seminar and attendance in respect of theory courses. Weight 5 will be given to each theory course and that may be distributed as follows:

Attendance	-	weight 1
Assignment	-	weight 1
Seminar	-	weight 1
Test Paper	-	weight 2

Written Tests : Each test paper may have a duration of minimum one hour. For each course there shall be a minimum of three written tests and the best two are to be taken.

Assignments : Each student is required to submit one assignment for a theory course.

Seminar: For each theory course, performance of a student shall also be assessed by conducting a seminar presentation based on topics in that course.

Attendence

Percentage		Grade
90% and above	-	A
85 to 89%	-	B
80 to 84%	-	C
75 to 79%	-	D
Below 75%	-	E

Assignment and Seminar

Performance		Grade
Excellent	-	A
Very Good	-	B
Good	-	C
Average	-	D
Poor	-	E

Project: The continuous evaluation (CE) of project is based on attendance, test, project presentation and project report. Weights will be distributed as follows;

Attendance	-	weight 1
Test	-	weight 1
Project presentation	-	weight 1
Project report	-	weight 2

Over all weight for Theory courses – Core and open (Internal) = 70 + 10

Components of Continuous Evaluation - CE (Practical)

I. Core courses 5B08 HSC and 5B09 HSC

Lab skill	-	weight 1
Practical test	-	weight 2
Practical record	-	weight 1

II. Core courses 5B07 HSC and 6B11 HSC

Lab skill	-	weight 1
Practical test	-	weight 2
Practical record	-	weight 1
Garments	-	weight 1

III. Core courses 5B06 HSC and 6B10 HSC

Residence Course	-	weight 2
Practical record	-	weight 1

IV. Core courses 2B02 HSC

Practical record	-	weight 1

V. Core course 6B12 HSC

Viva Voce	-	weight 1

Over all weights for practical – Core courses (Internal) = 14

End – Semester Evaluation (ESE) – Core Courses and Open Courses - (Theory)

PATTERN OF QUESTIONS and DISTRIBUTION OF WEIGHTS

Time: 3 hrs/ Course

Section A Objective Type 4 bunches of questions (weight 1 per bunch)		-	weight 4
Section B Short Answer 10 questions out of 12 (weight 1 each)		-	weight 10
Section C Short Essay	6 questions out of 8 (weight 2 each)	-	weight 12
Section C Long Essay	1 question out of 2 (weight 4)	-	weight 4
	Total		**-weight 30**

End – Semester Evaluation (ESE) – Core Courses - (Practicals)

Practical I. (Time - 3 hrs.)

I. Core courses 5B08 HSC and 5B09 HSC

A. Food Analysis / Estimation of Nutrients

Food Analysis

Principle	-	weight 1
Procedure	-	weight 1
Calculation	-	weight 1
True value	-	weight 1
Result	-	weight 1

or

Estimation of Nutrients

Minerals	-	weight 1
Carbohydrates	-	weight 2
Proteins	-	weight 1
Result	-	weight 1

B. Diet

Menu planning	-	weight 3
Preparation	-	weight 4
R. D. A	-	weight 1
Calculation of Nutritive value (2 nutrients of 2 food stuff)	-	weight 2
C. Practical Record	-	weight 1
Grand Total	-	**weight 16**

Practical II. (Time - 3 hrs.)

II.Core course 5B07 HSC and 6B11 HSC

A. Fibre Identification (3 Fibres)	-	weight 3
B. Weave Identification (3 Weaves)	-	weight 3
C. Construction of the Garment		
Draft	-	weight 3
Construction	-	weight 4
Embroidery	-	weight 1
Completion of work	-	weight 1
D. Practical Record	-	weight 1
Grand Total	-	**weight 16**

External Valuations

III. Core courses 5B06 HSC and 6B10 HSC

Practical record	-	**weight 2**

IV. Core courses 6B14 HSC)

Project	-	**weight 1**
Over all weights for practical (External)	-	**Weight 35**

- **The SGPA and CGPA for the programme will be calculated as per the regulations of UG programme 2009.**

Sd/-
Dr. Sr. Jessy Varghese
Chairperson,BOS Home Science (UG)

1B01 HSC GENERAL PERSPECTIVES OF HOME SCIENCE AND RESEARCH METHODOLOGY

Hours / Week: 4
Credit :4

Objectives

To enable the students to

1. Orient students towards Home Science
2. Encourage students to apply theoretical knowledge in practical situations.
3. Create awareness about the scope and significance of Home Science
4. Study the meaning of research, principles and procedure to conduct research.

Module I: Aims and Objectives of Home Science Education

Utilitarian, intellectual, social, national and practical aims; Aims at higher levels of Home Science Education.

Objectives: Knowledge, skill or ability, appreciation, attitude understanding, application, interest.

Module II: Nature and Scope of Home Science

Components of Home Science, Correlation of Home Science with other subjects. Professional Scope of Home Science.

Module III: Importance and Value of Home Science; vocational, cultural, economic, social, aesthetic and moral.

Module IV: Introduction to Research; Meaning, Criteria of Good Research, Importance of Research in Modern world.

Research Design; Survey and Experiment.

Module V: Methods and Tools of Collecting Data; Observation, case study, questionnaire, interview, rating scale.

References:

1. Yadav, S. **(**2006): Teaching of Home Science,. Anmol Publications pvt. Ltd., New Delhi.
2. Begum, F. (2004): Modern Teaching of Home Science, Anmol Publications Pvt Ltd. , New Delhi.
3. Bandarkar, P.L. and Wilkinson T.S. (2000): Methodology and Techniques of social research, Himalayan Publishing house, Mumbai.
4. Bhatnagar, G.L. (1990): Research Methods and Measurements in Behavioural and Social sciences, agri. Cole Publishing Academy New Delhi
5. Dwivedi, R.S. (1998): Research Methods in Behavioual Sciences, McMillan India Ltd. New Delhi.

2B02 HSC CHILD DEVELOPMENT AND WELFARE

Hours / Week: 4
Credit: 3

Objectives

1. To introduce the student to the excitement and challenges of studying children (from conception to adolescence)
2. To provide scientific knowledge about child-development, behaviour and welfare, and to enable to improve the quality of life of the child family and community.
3. To develop skills in the core and management of children.
4. To help the students to understand childhood problems, the challenged children, their problems, special needs, care and management.

Module I:

Child development, significance, scope, methods of child study, Concept of child and family welfare programmes state, national and international.

Module: II

Growth and development – definition, principles, stages of development, factors influencing, importance of heredity and environment.

Module III:

Prenatal development- Stages and factors influencing physical and mental health of pregnant women, teraotogens, Rh incompatibility, hazards, preparation for the arrival of the baby.

Module IV:

Stages of labours, normal and caesarean – new techniques of delivery, pre mature, LBW babies. The neonate – characteristics, abilities, and adjustments, reflexes – apgar test, neonatal care.

Module V: Infancy, Babyhood, early childhood and late childhood-physical, motor, social, emotional, intellectual, language, moral and religious development during the above stages. Mile stones in development, developmental delay – Factors influencing.

Module VI: Adolescence: Characteristics, development in different areas, Needs and problems, importance of guidance and counselling.

Module VII: Play- significance, theories, types, selection of toys.

Module VIII: Discipline -Techniques of discipline, essentials of discipline.

Habit formation- definition, principles underlying habit formation.

Needs and rights of children.

Module IX: Preschool education objectives, type.

Module X: Challenged children – definition, general classification, identification, and needs for special education.

Module XI: Behavioural problems in children classification and causes methods of handling.

Related Practical Experiences

1. Visit to a baby friendly hospital, observe the functioning and prepare a report. Observation of a new born and the various reflexes.
2. Observation of various developments in a child of any age boy / girl viz. physical, motor, emotional, intellectual and language development following any method of child study.
3. Visit to any one substitute child care centre / pre school / children's home / orphanage / specials schools.
4. One day participation in the activities of an anganwadi and report the experience.
5. Socio metric study of children / Adolescence.
6. Discuss common adolescence problems / or any common problems faced by a girl / child / woman – interactive session.
7. Experience in using a growth chart (record the height and weights)
8. Discuss the behaviour problems in early childhood in a school preschool set up (write a case study report)
9. Make a list exhibit or exhibit Toys, gifts, clothes, first aid box, books, stories songs etc suitable for each stage of development.
10. Make a list of toys and vocational activities suitable for children with problems on physically or mentally challenged children.
11. Preparation of indigenous low cost toy.
12. Teaching children a skill / a craft introduce a hobby or any creative work.
13. Only a list for practical are given from that you can choose for every batch limiting to only 5 practical every year.

References:

1. Hurlock. E.B. Developmental psychology Tata Mc Graw hill publishing company Ltd. New Delhi.
2. Devadas R.P A text book of Child Development and Jaya N. Mac Millan India Ltd. Delhi.
3. Suriyakanthi: Child Development, Kavitha Publications, Gandhi Gram, Tamilnadu.
4. Hurlock E. B. Child Development Tata HC Grawshill Publishing Company Ltd.

KANNUR UNIVERSITY

(Abstract)

B.Sc Home Science Programme– Model Question Paper for I Semester effective from 2009 Admission – Implemented – Orders issued.

ACADEMIC BRANCH

U.O.No.Acad/C2/3616/2007. Dated, K.U.Campus.P.O, 15 -10-2009.

Read:1.U.O.No.Acad/C2/3838/2008 (i) dated 07-07-2009.
2. U.O No.Acad/C2/3616/2007 dated 10-07-2009.
3. Letter dated 17-09-2009 from the Chairman, Board of Studies in Home Science (Cd).

O R D E R

1. Choice Based Credit Semester System was introduced in this University with effect from 2009 admission vide paper read (1) above.

2. The Scheme and Syllabus of B.Sc Home Science Programme under this scheme were implemented in this University vide U.O read (2).

3. The Chairman, Board of Studies in Home Science (Cd), vide paper read (3) has forwarded the Model Question Paper for I Semester of B.Sc Home Science Programme for implementation with effect from 2009 admission, under Choice Based Credit Semester System.

4. The Vice-Chancellor, after considering the matter in detail, and in exercise of the powers of the Academic Council, as per Section 11 (1) of Kannur University Act, 1996 and all other enabling provisions read together with, has accorded sanction ***to implement the Model Question Paper for I Semester examination of B.Sc Home Science Programme under CCSS, as forwarded by the Chairman, with effect from 2009 admission***, subject to report to Academic Council.

5. The Model Question Paper implemented is appended.

6. Orders are therefore issued accordingly.

Sd/-
REGISTRAR

To:
1. The Principal,
Nirmalagiri College,Kuthuparamba.
2. The Examination Branch (through PA to CE).

Copy to:
1. The Chairman, Board of Studies in Home Science (Cd)
2. PS to VC/PA to PVC/PA to Registrar.
3. DR/AR-I (Academic).
4. SF/DF/FC

Forwarded/By Order

SECTION OFFICER

K A N N U R U N I V E R S I T Y
(Abstract)

B.Sc Home Science Programme under CCSS– Model Question Paper for ***II Semester*** Examination– Implemented with effect from 2009 Admission – Orders issued.

ACADEMIC BRANCH

U.O.No.Acad/C2/3616/2007. Dated, K.U.Campus.P.O, 23-04-2010.

Read:1.U.O No.Acad/C2/3616/2007 dated 10-07-2009.
2. U.O No.Acad/C2/3616/2007 dated 15-10-2009.
3. Letter dated 24-03-2010 from the Chairperson, Board of Studies in Home Science (Cd).

O R D E R

1. The Scheme and Syllabus of B.Sc Home Science Programme (I & II Semesters only) and the Model Question Paper for I Semester Examination under CCSS were implemented in this University vide papers read (1) & (2) above, with effect from 2009 admission.

2. The Chairperson, Board of Studies in Home Science (Cd), vide paper read (3) has forwarded the Model Question Paper for II Semester Examination of B.Sc Home Science Programme for implementation with effect from 2009 admission, under Choice based Credit Semester System.

3. The Vice-Chancellor, after considering the matter in detail, and in exercise of the powers of the Academic Council, as per Section 11 (1) of Kannur University Act, 1996 and all other enabling provisions read together with, has accorded sanction ***to implement the Model Question Paper for II Semester examination of B.Sc Home Science Programme under Choice based Credit Semester System, with effect from 2009 admission***, subject to report to Academic Council.

4. Orders are therefore issued accordingly.

5.The U.O read (1) above stands modified to this extent.

6. The implemented Model Question Paper is appended.

Sd/-
REGISTRAR

To:
1. The Principal,
Nirmalagiri College,Kuthuparamba.
2. The Examination Branch (through PA to CE).

Copy to:

1. The Chairperson, Board of Studies in Home Science (Cd)
2. PS to VC/PA to PVC/PA to Registrar.
3. DR/AR-I (Academic).
4. SF/DF/FC

Forwarded/By Order

SECTION OFFICER

KANNUR UNIVERSITY

(Abstract)

B.Sc Home Science Programme-Revised Scheme & Syllabus (III to VI Semesters)- Choice based Credit Semester System -Implemented with effect from 2009 admission-Orders Issued.

ACADEMIC BRANCH

No.Acad/C2/3616/2007(1) Dated, K.U.Campus. P.O,27-06-2010.

Read: 1. U.O No.Acad/C2/3616/2007 dated 10-07-2009.
2. U.O No.Acad/C2/3616/2007 dated 15-10-2009 & 23-04-2010.
3. Minutes of the meeting of the Board of Studies in Home Science (Cd) held on 12-05-2010.
4. Letter dated 10-06-2010 from the Chairperson, BOS Home Science (Cd).

ORDER

1.The Scheme(full) and Syllabus(I & II Semesters) of B.Sc Home Science under Choice Based Credit Semester System were implemented as per paper read (1) above and the Model Question Papers for I & II Semesters were implemented as per paper read(2) above, with effect from 2009 admission.

2. The Board of Studies in Home Science (Cd),vide paper read (3) above recommended to revise the scheme and finalise the syllabus (III-VI Semesters) for implementation with effect from 2009 admission.

3. The Chairperson, BOS in Home Science(Cd),vide paper read (4) has forwarded the finalised scheme and syllabus for III-VI Semesters of B.Sc Home Science Programme as recommended by the Board of Studies in Home Science(Cd) for implementation with effect from 2009 admission.

4. The Vice Chancellor, after examining the matter in detail, and in exercise of the powers of the Academic Council as per section 11(1) of Kannur University Act 1996 and all other enabling provisions read together with, has accorded sanction ***to implement the revised scheme and syllabus (III-VI Semesters) of B.Sc Home Science Programme under Choice based Credit Semester System, with effect from 2009 admission,*** subject to ratification by the Academic Council.

5. The revised scheme and syllabus (III-VI Semesters) of the Programme are appended.

6. The U.Os read above stand modified to this extent.

7. Orders are issued accordingly. Sd/-
REGISTRAR

To:
The Principal,Nirmalagiri College,Kuthuparamba.

Copy To:
1. The Examination Branch (through PA to CE)
2.The Chairperson, BOS Home Science (Cd)
3. PS to VC/PA to PVC/PA to Regr
4. DR/AR I Academic
5. Central Library 6. SF/DF/FC.

Forwarded/By Order

SECTION OFFICER

Appendix to U.O No Acad/C2/3616/2007(1) dated 26-07-2010.

K A N N U R U N I V E R S I T Y

Revised Scheme
and
Syllabus
(III-VI Semesters)

FOR

UNDERGRADUATE PROGRAMME

IN

HOME SCIENCE

UNDER

CHOICE BASED CREDIT SEMESTER SYSTEM

w.e.f 2009 ADMISSION

Scheme-Core Courses

Semester	Course Code	Course Title	Theory/ Practical	Credit	Hours/ week	Duration of Exam (Hrs)
III	3B03 HSC	Family Relations and Counselling	Theory	3	3	3
			Practical	1	2	
IV	4B04 HSC	Physiology and Microbiology	Theory	3	3	3
			Practical	1	2	
V	5B05 HSC	Applied Food Science	Theory	3	3	3
			Practical	1	2	
V	5B06 HSC	Housing and Interior Decoration	Theory	3	3	3
			Practical	1	2	
V	5B07 HSC	Textile Science	Theory	3	3	3
			Practical	1	2	
V	5B08 HSC	Human Nutrition and Biochemistry	Theory	3	3	3
			Practical	1	2	
V	5B09 HSC	General Psychology	Theory	3	3	3
VI	6B10 HSC	Family Resource Management	Theory	3	3	3
			Practical	1	2	
VI	6B11 HSC	Apparel Designing	Theory	3	3	3
			Practical	1	2	
VI	6B12 HSC	Clinical Nutrition & dietetics	Theory	3	3	3
			Practical	1	2	
VI	6B13 HSC	Extension Education and Informatics in Home Science	Theory	3	3	3
			Practical	1	2	
VI	6B14 HSC	Project	-	3	3	-
Total				**54**	**64**	

Scheme Open Courses

Semester	Course Co	Course Title	Credit	Hours/ week	Duration of Exam (Hrs)
V	5D01 HSC	Guidance and Counselling	2	2	3
VI	6D02 HSC	Food Processing and Preservation	2	2	3
	Total		**4**	**4**	

3B03 HSC FAMILY RELATIONS AND COUNSELLING

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To equip the students with knowledge and skills in understanding people, families and community as a whole.
2. To understand human relation and to give necessary guidance and counselling at times of need.
3. To enable the students to apply their knowledge and awareness of human relationships in the field of child care and development.
4. To orient the students for adjustment in marriage and parenthood and to prepare them to take each role in their family efficiently and effectively.

Theory

Module I: Marriage (Hours - 12)

- Meaning, definition, significance, functions
- Mate selection, preparations for marriage, (health, physical, emotional, social and intellectual maturity & economic independence)
- Marital adjustment - areas needing adjustment, good marital relationship.
- Marital disharmony- divorce, separation, desertion, infidelity, infertility.

Module II: Family (Hours - 12)

- Definition, types, size, functions, merits and demerits.
- Family as a basic institution, changing roles of family members
- Causes for the disintegration of joint family system in India.
- Coping strategies, maternal employment, unemployment, single parent families.

Module III: Child rearing methods and practices (Hours - 6)

- Parental attitudes, factors in family influencing the personality and behaviour development of children.
- Responsible parenthood, Planned Parenthood, parental skills.

Module IV: Population education (Hours - 6)

- Definition, problems of over population, small family norm, family planning,
- Sex education-importance, needs, means of imparting sex education to children and adolescents.
- Sex deviations, sexually transmitted diseases.

Module V: Stress in children and adults (Hours - 5)

- Areas creating stress, causes
- Stress management at home, work and school.
- Role of counselling.

Module VI: Old age (Hours - 5)

- Characteristics, problems, existing provision in India

Module VII: (Hours - 4)

- Role of family in inculcating civic sense and values, aesthetic appreciation and creativity.

Module VII: (Hours - 4)

- Gender concepts, changing trends, gender analysis.

Practical (any five) **(Hours - 36)**

1. Observation of role of each member in a family and report.
2. Interviewing a youth facing unemployment and report.
3. Problems faced by old members in the family.
4. Interviewing married couples of different age groups on family adjustments and report.
5. Case study of parent of a disabled child/invalid.
6. Study of child rearing practices in 10 families, analyze and report.
7. Conduct a debate to find out college students opinion of values, value based education and the values they possess and want to possess.
8. Preparing booklet on any selected topic like tips to improve personality development/ social behaviour/ values/ coping skills in crisis/ improve self concept or esteem.

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. Hurlock. E.B. Developmental psychology Tata Mc Graw hill publishing company Ltd. New Delhi. Devadas R.P A text book of Child Development and Jaya N. Mac nillan India Ltd. Delhi.
2. Suriyahanth. A Child Development Kavitha Publications, Gandhi Gram Tamilnadu
3. Hurlock E. B. Child Development Tata HC Grawshill Publishing Company Ltd.
4. Counselling psychology. S.Narayana Rao, Tata MC Graw Hill, New Delhi
5. Guidance and counselling. Sister Mary Vishala,S. Chand & Company Pvt. Ltd., New Delhi
6. Guidance & Counselling. A.k. Nayak, A.P.H. Publishing Corporation.

4B04 HSC PHYSIOLOGY AND MICROBIOLOGY

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To understand the integrated functions of the various systems of the human body.
2. To understand the economic importance of micro-organisms
3. To understand the principles of various methods used in the prevention and control of micro-organisms.
4. To study food standards and role of various Agencies in maintaining quality control
5. To apply practical knowledge regarding the subject in daily life.

Theory

A. Physiology **(Hours - 27)**

Module I: Human Physiology (Hours - 3)

- Definition of physiology
- Structure and functions of a cell.
- Cell division, tissues, organs and system organization.

Module II: Digestive System (Hours - 4)

- Structure of digestive tract.
- Digestion and absorption of carbohydrates, fats and proteins.

Module III: Respiratory system (Hours - 4)

- Organs of respiratory system
- Mechanism of respiration, gaseous exchange in lungs and tissues, pulmonary volumes and capacities

Module IV: Blood (Hours - 4)

- Composition and Functions of Blood.
- Plasma proteins, Hemoglobin, haematopoesis, coagulation of blood.
- Blood groups, Erythroblastosis foetalis)

Module V: Cardiovascular System (Hours - 4)

- Structure of Heart.
- Special conducting tissues of heart, properties of cardiac muscles.
- Cardiac cycle, Systemic and Pulmonary circulation, heart rate, heart sounds, Blood Pressure.

Module VI: Excretory System (Hours - 4)

- Structure and function of kidney, Nephron.
- Mechanism of urine formation, Micturation.

Module VII: Nervous system (Hours - 4)

- Structure and functions of Neuron.
- Central and autonomic nervous system organization
- Transmission of Nerve Impulses, Reflex Action, Reflex Arc

B. Microbiology
(Hours - 27)

Module I: Microbiology (Hours - 2)

- Basic concepts, classification of microorganisms
- Economic importance of micro-organisms.

Module II Sterilization and Disinfection. (Hours - 3)

- Definition and methods.

Module III: Factors affecting growth of micro organisms (Hours - 3)

- Intrinsic and Extrinsic factors.

Module IV: Contamination of foods (Hours - 4)

- Contamination of food through soil, water and air during handling and processing.

Module VI: Foods Spoilage (Hours - 4)

- Factors responsible
- Microorganisms in food spoilage; bacteria, yeast and moulds.

Module VI: Food infection and intoxication (Hours - 4)

- Types, causes, symptoms, prevention and control of bacterial infection –{Salmonella, E.coli, Staphylococci, Clostridium} and Viral infection- (gastroenteritis, hepatitis)

Module VII: Resistance and immunity (Hours - 4)

- Resistance: Natural defenses of the body- primary and secondary
- Immunity - types; antibiotics and sulpha drugs, allergy.

Module VIII: Food Safety and regulations
(Hours - 3)

- Importance of food safety and factors affecting food safety.
- Food Standards, food adulteration (PFA, BIS, Agmark, Consumer Protection Act), HACCP – Food Quality Assurance System.

Practical **(Hours - 36)**

Physiology (Hours - 18)

1) Determination of blood pressure.
2) Determination of blood groups
3) Estimation of haemoglobin
4) Determination of blood glucose using a glucometer.

Microbiology (Hours - 18)

1) Preparation of wine and curd (economic importance of micro organisms)
2) Collection of food products having Quality Control Standards
3) Visit to a microbiology or clinical lab
4) Demonstration of equipments in microbiology laboratory

References

Physiology

1. Jain, A. K. , Textbook of Physiology, Volume 1 , Avichal Publishing Company, New Delhi, 2003.
2. Vidya Ratan.,(2004),Handbook of Human Physiology,7th Edition, Jaypee Brothers Medical Publishers(p) Ltd,New Delhi.

3. Ross and Wilson,(2006), Anatomy and Physiology in health and illness,10 th edition, Elsevier Limited, London.
4. Gyton: Medical Physiology
5. C.C. Chatterjee: Human Physiology Vol I & II

Microbiology

1. Joshua A. K., (1994), Microbiology, Popular book depot publishers.
2. Ananthanarayan,R and Panicker C.K.J ,Text book of microbiology.8th Edn. 2009 universities press (India) Pvt. Ltd., New Delhi.
3. James.M.Jay (1986) Modern Food Microbiology, 3rd Edition, Van Nostrand ,New York
4. Frazier W.C and Westhoff D.C (2008), Food Microbiology, 4th Ed, Tata McGraw.
5. Banwart J.G (1987) Basic Food Microbiology, Ist Ed, CBS Pub.

5B05 HSC APPLIED FOOD SCIENCE

Hours / Week : 3+2

Hours / Semester : 54+36

Credits : 4

Objectives

1. Familiarize with basic areas of Food Science
2. Understand the composition and chemistry of foods
3. Apply theoretical knowledge in various food processing techniques and quality assessment.

Theory **(Hours - 54)**

Module I; Food Science. (Hour - 2)

- Introduction to Food Science, definition, scope.

Module II: Properties of foods. (Hours - 4)

- Introduction to quality-attributes of foods;
- Gustation- the sense of taste, chemicals responsible for the basic tastes, factors affecting taste quality.
- Texture-in foods, objective measurement and evaluation of food texture.
- Colour-functions in foods, measurement of colour in foods.

Module III: Application of colloidal chemistry in food preparation. (Hours - 4)

- Classification of systems- sols, gels, suspensions, foams and emulsions.

Module IV: Food components (Hours - 12)

- Carbohydrates- Composition, Definition, Sources, Effect of cooking on starch,-Gelantinisation, Factors affecting gelation, Retrogradation, Dextrinisation, Types of food starch, Sugar cookery, Use in food preparation.
- Protein- Structure, sources, denaturation, factors affecting culinary role, textured vegetable protein.
- Fats and oils-Structure, Sources, rancidity, types of rancidity, reversion, factors leading to rancidity, prevention, effect of heat on fats and oils, hydrogenation, culinary role of fats.

Module V: Study of foods (Hours – 18)

- Food groups.
- Nutritive value, composition, chemical, physical and nutritional alterations occurring in foods during processing and storage and non nutrient components of foods.
- Cereals and cereal products
- Pulses and legumes
- Milk, meat, fish and egg.
- Fruits and vegetables.
- Nuts, oilseeds and spices

Module VI: Functional foods (Hour - 2)

- Antioxidants, Phytochemicals.

Module VII: Food processing (Hours - 6)

- Aims, principles, advantages, methods of food preservation, fortification and enrichment.

Module VIII: Product Development and Evaluation. (Hours - 6)

- Need for product development, standardization, sensory evaluation, shelf life evaluation.

Practical **(Hours - 36)**

1. Determination of the taste threshold for sweet, salty, sour, and bitter
2. Conduct a descriptive analysis of a given sample of food on the basis of its sensory attributes.
3. Study the various stages of egg white foam formation.
4. Determination of the best method of preparing a stable emulsion (Mayonnaise)
5. Stages of sugar cookery, Gelatinization of starch, Microscopic examination of various starches (rice, wheat, potato, tapioca)
6. Effect of acid and alkali on vegetable pigments.
7. Effect of different methods to prevent browning in fruits.
8. Preparation of general recipes and Food preservation techniques (Jams, squashes, pickles)
9. Standardization and product development
10. Visit to a Food Research Institute / Food processing Unit

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. Bennion M, Introductory Foods,10th Edn.,Prentice –Hall Inc.,West pont connectient,U.S.A,1995.
2. Srilakshmi.B, Foodscience, Newage International(P)Ltd,Publishers, New Delhi, 2007.
3. M.Swaminathan, Hand Book of Food Science and Experimental foods, BAPPCo.Ltd, Bangalore,1998.
4. Chandrasekhar U., Food Science & applications in Indian cookery, Phoenix Publishing House PVT.Ltd, New Delhi,2002.
5. Manay,N.S. & Shadaksharaswamy M, Foods facts and principles, New Age International Publishers, New Delhi,1998.
6. Potter N.M, Food Science 5th Edn, CBS Publishers & Distributors, New Delhi, 1996.
7. Peckham,G.C.,Foundation Of Food Preperation, Mac Millan Co ,London, 1994
8. GopalanC, Ramasastri,BV and Balasubramanian S.C,Nutritive Value of Indian Foods, NIN, Hyderabad,2004
9. Roday, S (2007), Food Science and Nutrition, Oxford University, New Delhi.
10. Related journals: Journal of Food Science and Technology

5B06HSC HOUSING AND INTERIOR DECORATION

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To initiate students into basic spatial planning.
2. To use and understand the elements and principles of Design
3. Develop basics skills for a career option in Interior Design.
4. To gain the basic knowledge of furniture arrangement and furnishing the residential space
5. To improve and enhance both the visual and communicative presentation skills

Theory

Module I: Housing: (Hours – 6)

- Functions of house
- Selection of sight
- Principles of planning a house
- Merits and demerits of renting and owning a house.

Module II: Kitchen Designs (Hours - 4)

- Characteristics of a good kitchen.
- Working areas in the kitchen.
- Work Triangle.
- Types of kitchen.

Module III: Introduction to Interior Design (Hours – 10)

- Design – Definition, Types of design.
- Elements of Design - Line and direction; Form and shape; Size; Colour; Texture; Space and Light
- Principles of Design - Proportion, Balance, Rhythm, Emphasis and Harmony. (Definition and application to interiors).

Module IV: Colour in Interiors (Hours - 10)

- Qualities of colour
- Prang colour system
- Colour schemes and its application
- Use and effects of colour in interiors.

Module V: Light (Hours - 4)

- Importance of good lighting
- Types of lighting – Natural and Artificial
- Methods of lighting

Module VI: Furniture (Hours - 4)

- Importance, Types, Selection and Arrangement
- Furniture accessories.

Module VII: Furnishings (Hours - 4)

- Types of furnishing – Rugs, carpets and other furnishings

- Care and maintenance

Module VIII: Window treatment (Hours - 4)

- Types of windows
- Treatment of windows, Curtain styles
- Treatment of problem windows.

Module IX: Accessories (Hours - 3)

- Classification
- Importance of accessories in interior designing
- Latest trends and use of accessories in Interior Decoration

Module X: Flower Arrangement (Hours - 5)

- Types of flower arrangement – Line, Mass, Combination of line and mass etc.
- Styles in flower arrangements – Traditional, Oriental and Japanese.
- Different shapes in flower arrangement – Vertical, Horizontal, Diagonal etc
- Methods of preserving flowers and foliage.

Practical **(Hours – 36)**

1. Draw the structural and decorative design.
2. Elements of design with three applications.
3. Prang colour wheel and colour schemes.
4. Furniture arrangement in a drawing room.
5. Window treatment by different curtain styles.
6. Different types and styles of flower arrangement.
7. Any two accessories to decorate the room.

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. Havanovich Inc. - Alexander N.J., Mercoust Brace (1972) The Art of Interior Design. Mc Millan & Co. New York
2. Ball, Victoria K 1655 (1980) Designing Interior Environment.
3. Deshpande R.S. (1974) Modern Ideal Homes for India, United Book Corporation,
4. Faulkner R and Faulkner S. (1987) Inside Today's Home, Rinehart Publishing Co. New York
5. Wills and Boons Ltd- Graham L (1982) Lighting your home
6. Moubray A.D and Black D.(1999) Window Treatments, Van Nosterand Reinhoid, New York
7. Nielson K.J. (1990) Colour in Interior Design, Mc Graw Hill, New York
8. Pile J.F (1975)Art of Interior Design, Indica publishers, Delhi
9. Khanna G. Carpets for the home, Rizzoli International Publications
10. Architectural Design,Earnest Pickering
11. Francis D.K.Ching, Architecture, Form, Space and Order
12. Shrish Vasant Bapat,Basic Design & Anthropometry
13. Shirish Vasat Bapat,Living Areas – Internal Spaces
14. Halse, Use of Colours in Interiors
15. Francis D.K.Ching, Interior Design Illustrated
16. Agan.T, The House- Its plan and Use

5B07HSC TEXTILE SCIENCE

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To gain knowledge about Textile fibers and their uses.
2. To develop skill in understanding textiles available in the market.
3. To impart knowledge about textile dyeing and printing.
4. To develop an understanding about the various kinds of fabrics, their structure, their utility.
5. To make consumers aware of the right way of purchasing textiles

Theory

Module: I Study of fibers (Hours – 8)

- Classification of textile fibers.
- Production, properties and uses of textile fibers - Cotton, linen, silk, wool, rayon, nylon and polyester
- Methods of identification of textile fibers.

Module: II Study of yarns (Hours – 8)

- Definition, Process of making fiber in to yarn - Hand, Mechanical (ring and open end spinning) and Chemical.
- Classification of yarns - Types and Characteristics.

Module: III Fabric Structure (Hours – 13)

- Weaving
  - Preparation of yarns for weaving.
  - Loom parts and its operations.
  - Basic weaves - plain, twill, satin.
  - Fancy weaves - pile, jacquard, dobby, leno, clip spot, swivel, lappet, double cloth and crepe.
  - Characteristics of woven fabrics – Yarns: warp and weft, grain, selvage, thread count and balance.
- Other methods of making fabrics
  - Knitting, felting, braiding, lace making, laminating and Bonding.

Module: IV. Dyeing and Printing (Hours – 12)

- Dyes and Dyeing
  - Classification of dyes
  - Natural, Artificial - acid, basic, disperse, vat, azoic, pigment, naphthol, sulphur and mordents.
  - Methods of dyeing - stock, yarn, piece, cross and union dyeing.
- Printing
  - Direct printing - block, roller and screen, discharge
  - Resist printing - tie and dyeing, batik.

Module: V. Fabric Finishes (Hours –8)

- Definition, purpose and classification.
- Types of finishes - singeing, scouring, bleaching, sanforizing, calendaring, tendering, sizing, weighting, brushing, napping, crepe and crinkled effect, crease resistance.
- Functional finishes – water proofing, flame proofing, mildew proofing, moth proofing, and soil resistance.

Module: VI. Selection of Fabrics (Hours –5)

- Factors affecting choice of clothing and house hold linen.

Practical **(Hours – 36)**

A. Learning by Doing (Hours – 24)

1. Collection of different fibers (cotton, silk, polyester, nylon, wool, rayon)
2. Testing of fibers - Visual inspection, burning, microscopic, solubility test.
3. Collection of different yarns - spun, filament, novelty yarns.
4. Identification of different weaves.
5. Collection of samples for all the basic weaves and their variations.
6. Collection of samples for pile, dobby, jacquard, leno, clip spot, lappet and double cloth.
7. Collection of samples to show the different printing methods.
8. Prepare samples for Block and Tie and Dye (any one).

B. Learning by observing (Hours – 12)

1. Visit to Mills – Weaving / Knitting / Spinning / Dyeing (Any one).

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. Corbman. B.P (1983)Fiber to Fabric, International student's edition, Singapore Mc Graw hills books co:
2. Gokarneshan. U. (2004) Fabric structure and design, New Age Internationa publishers.
3. Kate Well's Fabric Dyeing abd Printing, Conran Octopus
4. Smith J.L. (2003) Textile Processing, Abhishek Publications, Chandigarh.
5. Pellow.C.W (2000) Dyes and Dyeing, Abhishek Publications, Chandigarh
6. Nancy.Belfer Designing Batik and Tie & Dye.NIFT
7. Marsh.J.T An Introduction to Textile Finishing, B.I, Publications.

5B08 HSC HUMAN NUTRITION AND BIOCHEMISTRY

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To obtain an insight into the chemistry of major nutrients and physiologically important compounds.
2. To understand the role of nutrition in different stages of life cycle.
3. To enable the students to plan menus in accordance with basic concepts of nutrition.

Theory

Module I: Introduction to Nutrition (Hours – 2)

- Nutrition Science, the Indian nutrition scenario.
- RDA for Indians, global malnutrition, food security issues, future challenges for nutrition research.

Module II: Body composition (Hours – 2)

- Body composition – importance.
- Types of body composition, body measurements (direct and indirect).

Module III: Human energy requirements (Hours – 5)

- Definition of Energy requirements- factors influencing food intake, components of energy expenditure.
- Measurement of BMR, factors affecting BMR, thermic effect of food and energy expended in physical activity.
- Methods of estimating energy expenditure direct, indirect calorimetry, factorial estimation, DLW technique. Indian reference man, woman - energy requirements.

Module IV: Macronutrients and their metabolism (Hours – 8)

- Carbohydrates, classification, functions, metabolism, regulation of blood glucose concentration, types of fibre and physiological, and metabolic effects of dietary fibre and potential health benefits. Resistant starch, classification, health benefits, oligosaccharides, Glycemic index.
- Proteins –Classification of proteins and amino acids, functions, metabolism of protein, protein turnover, methods for evaluating protein quality, improvement of quality of protein in the diet. Requirements.
- Lipids - Composition, structure, functions, classification of fats and fatty acids. Essential fatty acids, trans fatty acids. Fat metabolism, requirements. Choice of cooking medium in the context of n-3, n-6, fatty acid ratio in Indian diets.

Module V: Water (Hours – 3)

- Functions, distribution and compartments of body water. Factors influencing water distribution.
- Water balance, water intake and out put, regulation of water balance. Requirements of water. Disturbances in balance, Dehydration, Oedema.

Module VI: Fat soluble vitamins A, D, E & K (Hours – 3)

- Fat soluble vitamins an over view. Food sources, functions, deficiency, toxicity and requirements.

Module VII: Water Soluble vitamins (Hours – 3)

- An overview, food sources, functions, deficiency, requirements

Module VIII: Macro minerals (Hours – 4)

- Calcium, phosphorus, Magnesium, sodium, potassium and chloride, general nutritional functions of minerals, food sources, deficiency, toxicity and requirements.

Module IX: Micro minerals (Hours – 4)

- Iron, Zinc, Iodine and fluorine, copper, selenium, chromium, manganese. An introduction food sources, factors affecting absorption of minerals, deficiency / toxicity requirements.

Module X: Principles of Human nutrition (Hours – 3)

- Menu Planning
- Rationale for menu planning, factors affecting menu planning**.**

Module XI: Nutrition for the Family (Hours – 17)

- Nutrition in Infancy - Growth and development, Nutritional requirements, Breast feeding, Weaning and supplementary foods
- Nutrition in preschool Age - Physiological Development and Food Intake, Development of Food Habits, Diet Plan, Infection and Malnutrition
- Nutrition in School going age - Growth rate, Nutritional requirement, Diet plan, packed Lunch.
- Nutrition in Adolescence - Growth and Development, Nutritional requirement, Factors influencing dietary pattern of the adolescent.
- Nutrition in Pregnancy - Physiological changes during pregnancy, Importance of nutrition in pregnancy, Diet for the pregnant mother, Complications of malnutrition in pregnancy
- Nutrition in Lactation - Nutritional requirements, Human milk composition, Importance of human milk for infant growth and development, Diet planning
- Nutrition in old age - Physiological changes, Nutritional requirements, Diet planning
- Nutrition for Athletes - Nutritional demands of sports, Ergogenic aids for competitions

Practical **(Hours – 36)**

I. Food Analysis
   1. Qualitative tests for carbohydrates, Protein, calcium, phosphorous and Iron
   2. Quantitative tests for
      a. Lactose content in milk
      b. Vitamin C in food stuffs
      c. Calcium in food

II Planning, preparing and serving normal diets for,
   Infants, Preschool Age, School going age, Adolescence / Athelete, Adulthood / labourer, Pregnancy, Lactation, Old age

References

1. Banarsidas B. (1995): Park & Park – Textbook of Preventive and Social MEDICINE< Jabalpur.
2. Bhatia Arti: Nutrition & Dietetics – Anmol Publication Pvt. Ltd – New Delhi
3. Blank F.C. (1999): Handbook of Food & Nutrition, Ago Botanical Publishers, Bikaner.
4. C. Gopalan, B.V. Ramasastri and S.C. Balasubramanian (1989) – Nutritive value of Indian Foods. NINICMR Hyderabad 500 007
5. Elenaor N., Witney S., Rady R. (1993) Understanding Nutrition, West Publishing Company, Minneapolis
6. Guthrie Helen (1986) Introductory Nutrition. Times Mirror/Mosby College Publishing
7. Kanna K. (1998): The Art and Science of Cokking, Phoenix Publishing HOUSE Pvt. Ltd. New Delhi.
8. Mudambi, S.R., Rajagopal, M.V., (1990) Fundamentals of Foods and Nutrition, New Age International Pvt. Ltd.
9. Nutrient Requirements and Recommended Dietary Allowances for Indians – I.C.M.R. Publication 1999.
10. Paul Insel, Elane Turner, Don Ross (2004) Nutrition Second Edition , American Dietetic Association, Jones and Barlett Publishers, Massachusetts
11. Robinsson, and Lawler. (1986) Normal and Therapeutic Nutrition, Mac Millan Pub. Co.
12. Wardlaw (1993): Perspectives in Nutrition, Paul Insel Mosby.

5B09HSC GENERAL PSYCHOLOGY

Hours / Week : 3

Hours / Semester : 54
Credit : 3

Objectives

1. To gain knowledge about basic facts and principles of psychology.
2. To impart knowledge about individual difference and personality development.
3. To understand the application of psychological principles in various aspects of human life.

Theory

Module I. Introduction to psychology (Hours - 8)

- Definition, nature and scope of psychology.
- History and schools of psychology

Module II. Individual differences (Hours - 3)

- Definition, nature and normal curve.
- Importance of individual differences.

Module III. Personality (Hours - 8)

- Meaning, definition
- Theories of personality (Type theory , Trait theory and Psycho analytical theory)
- Determinants of personality
- Personality tests.

Module IV. Motivation (Hours - 4)

- Importance, characteristics and types of motivation
- Maslow's hierarchical needs

Module V. Emotion (Hours - 8)

- Definition and nature of emotion.
- Bodily changes in emotion.
- Theories of emotion (James Lange theory and Cannon Bard's theory).
- Emotional Intelligence – Meaning and definition

Module VI. Intelligence (Hours - 4)

- Definition, types of intelligence tests
- Mental age and Intelligence Quotient
- Determinants of intelligence.

Module VII. Learning (Hours - 6)

- Meaning, types and methods of learning
- Learning curve and principles of learning
- Learning by conditioning – (classical and instrumental or operant)
- Determinants of learning.

Module VIII. Memory and Forgetting (Hours - 5)

- Memory - Definition, types of memory, process in memory.
- Forgetting – Definition, Causes and theories of forgetting

Module IX. Adjustment (Hours - 4)

- Meaning and definition.
- Situations the person adjusts with – stress, pressure, anxiety, conflict, frustration.
- Methods the person adopts for adjustments. - Mental mechanism.

Module X. Mental hygiene (Hours - 4)

- Meaning, scope and importance of mental hygiene
- Factors affecting mental health
- Psychotherapy

Refernces

1. Man (1951), Psychology, Houghton Mifflin Company, Boston.
2. Henry E Garret, General Psychology, Eurasia Publishing House Pvt. Ltd., New Delhi.
3. Srivastava D. N., General Psychology, Vinod Pustak Mandir, Agra.
4. Mangal S. K., General Psychology, Sterling Publishers private limited, New Delhi, 1998.
5. Kuppuswamy B. and Prabhu H., A text book of General Psychology, Media promoters and Publishers Pvt. Ltd., Bombay, 1986.

6B10HSC FAMILY RESOURCE MANAGEMENT

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To understand the principles of management and their application in the family context.
2. To acquire scientific skills in the management of family resources.
3. To recognize the significance of family resource management to enhance their quality of life.

Theory

Module I: Introduction to Resource Management. (Hours - 10)

- Basic Concepts and Definition.
- Management Process or Steps in Management.
- Decision Making - Significance, steps, conflict resolution in group decision making.
- Motivating factors - Values, goals, standards, attitudes.
- Qualities of Good Home Maker.

Module II: Family Resources (Hours – 5)

- Meaning and classification
- Factors influencing resource management
- Means to optimize satisfaction in resource management

Module III: Management of Time and Energy (Hours - 12)

(A). Time Management:

- Significance of time management
- Time Schedule

(B). Energy Management:

- Significance of energy management
- Efforts involved, energy cost
- Fatigue – Physiological, psychological - Causative factors and alleviating techniques.
- Body Mechanics and its application
- Work simplification - Meaning and techniques
- Mundel's classes of changes
- Basics of Time and Motion study-Pathway chart, Process chart, Operation chart, Multi man chart

Module IV: Management of Money (Hours - 12)

- Family income - Types and sources
- Family budget -Types of budget, steps in making family budget, Engel's law of consumption
- Financial records - Types, purpose, advantages
- Savings and investments - Meaning, saving institutions and the different schemes.
- Home maker as a consumer - Tips for wise buy-man-ship, consumer problems, rights and responsibilities, consumer protection, consumer redressl cell & procedures.

Module V: Equipment in the Home (Hours - 8)

- Classification of equipment

- Selection, use and care of popular household equipment - cooking stoves, ranges and ovens, micro-wave oven, pressure cookers, refrigerator, mixies, washing machine, water heater, vacuum cleaner.
- Renewable energy device - Solar cooker.
- Indigenous equipment - smokeless chulah, hay box cooker, Janatha refrigerator.

Module VI: Waste Management (Hours - 7)

- Principles of waste management, Types of domestic wastes
- Disposal of wastes – Kitchen waste, sewage, sullage.
- Recycling of wastes – biogas, compositing, vermiculture
- Re-use of wastes – making wealth out of waste

Practical **(Hours – 36)**

A. Learning by Doing (Hours – 24)

1. Experimental learning through group decision making
2. Preparation of time schedule
3. Study on work heights based on anthropometric measurements on vertical and horizontal planes.
4. Preparation of family budget
5. Study of a saving institution and its scheme
6. Preparation of a utilization object out of waste materials

B. Learning by Observing (any two) (Hours – 12)

1. Visit to consumer court/ consumer education forum
2. Observational visit to a renewable energy resource centre to understand its application
3. Exposure visit to study waste management techniques
4. Observational visit to houses to appraise the grouping of rooms

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. Anderson, E. (1976). Home appliances servicing . Taraporwala sons & Co. Ltd.Bombay
2. Cascio Wayne, F.(1985).Managing Human Resources, McGraw Hill Book Co, NewYorK
3. Decaon , R.E. Fireoough .R.M.(1981) Family Resource Management principles and applications, Ally & Bacon Boston
4. Goel, P.K.& Sarma.K.P.(1996) Environmental Guidelines and standards in India,Jaipur, Techno science.
5. Gross, Candall & Knoll (1972). Management for modern families, 4th ed. Appieton cenfuory crafless,Inc..
6. Nickle. P. Dorsey, J.M.(1970)Management in family living, sterling Publishers, New Delhi.
7. Saiyadin Mirza (1988) Human Resource Management : An Approach and Conceptual approach , Tata Mc Graw Hill, New York
8. Wilson . P. (1981) Household Equipment Selection and Management, Houghton Miflan Co.Inc.NewYork.
9. Varghese. M.A. et.al (1985) Household Equipment Manual , S.N.D.T. Women's University

6B11 HSC APPAREL DESIGNING

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To enable the students to develop skills in apparel designing and constructing Garments.
2. To gain knowledge in fundamentals of fashion.
3. To impart knowledge in style reading, pattern making and garment construction techniques.
4. To develop and understand the principles of pattern making through flat pattern and draping.
5. To recognize the terms and theories related to fashion.

Theory **(Hours - 54)**

Module: I Fashion (Hours - 4)

- Definition, concept, fashion lifestyle, fashion trends, fashion fore-casting and present day fashion.

Module: II. Design (Hours - 6)

- Elements and principles of design and its application in garments

Module III : Psycho aspects of clothing (Hours - 4)

- Clothing and wares, personality factors and clothing choices.

Module IV : Introduction to standard measurements (Hours - 6)

- Methods of taking measurements:

Module :V Pattern Making (Hours - 12)

- Principles and techniques involved in pattern making
- Drafting, draping, commercial patterns, flat patterns
- Lengthening and shortening, increase and decrease of waist line and bust line.
- Patterns for people with special needs- problems figurers-Broad and narrow shoulder.

Module: VI: (Hours - 8)

- Tools, equipments and terms used for garment construction.
- Sewing machine - types, parts and functions, maintenance, common problems and reason.

Module : VI. (Hours - 8)

- Steps in preparing fabrics for construction and
- Calculation of fabrics for different garments.

Module : VII. (Hours - 6)

- Apparel marketing and merchandizing.

Practical **(Hours - 36)**

1. Identification of machine parts, collection of pictures of different types of machines. (Hours - 2)
2. Standard construction process - basic stitches, decorative stitches, seams and seam finishes, fullness, plackets, hems, pockets, bias, fasteners, neckline finishes, collars, and sleeves. (Hours - 6)

4. Pattern Making- Preparation of blocks - body's front, back, skirt - front, back, sleeve using standard measurements. (Hours - 8)
5. Garment Construction: Frock (3-4 years), sari petticoat, sari blouse, churidar top and bottom (full size) or salwar kameeze (full size), night garment. (Hours - 20)

*** Student shall maintain record of each work. The record and the garments constructed by students shall be internally and externally evaluated.**

References

1. Armstrong, Helen Joseph , Pattern making for Fashion Design, Harper & Row, Publications
2. E. Rolfo Kopp & Zelin, How to Draft Basic Pattern, Fair child Publication Inc.
3. Gerry Cooklin, Garment Technology for Fashion Designers, Book Link.
4. Elizabetta Durdi, Figure drawing for fashion Design, The Pepin Tiziana Paci Press.
5. Claire B. Shaeffer, High Fashion Sewing Secrets from the World's Rodale Best Designer's
6. Mary Mathew's , Practical Clothing Construction, Part II, Bhattaram's Reprographics (P) Ltd,Chennai
7. Black Well (1988) The Technology of Clothing Manufacture, Scientific Publications
8. Hill house, M.S and Dress Design-Draping and Flat Pattern, London. Mansfield, E.A.
9. Riter.J. (1998) Hand Book For Fashion Designing, Best Drafting Techniques, Mital Publications.

6B12HSC CLINICAL NUTRITION AND DIETETICS

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To Impart knowledge in the field of clinical nutrition
2. Be able to make appropriate dietary modifications for various disease conditions based on the pathophysiology
3. To develop capacity and aptitude for taking up dietetics as a profession
4. Understand the consequence of nutritional problems in the society and have awareness on community nutrition based programs.

Theory **(Hours - 54)**

Module I: Introduction to Dietetics and Types of Diets (Hours - 5)

- Meaning and scope of dietetics
- Role of Dietitian
- Nutrition care process (NCP)
- Types of Dietary adaptations for therapeutic needs
- Types of Diets – Normal / General diets soft diets liquid diets
- Mode of feeding – Oral feeding, Enteral feeding, Parenteral feeding

Module II: Nutritional Management of infections and fevers (Hours - 5)

- Classification and etiology of fever / Infection
- Medical Nutrition therapy in Typhoid, Tuberculosis, HIV/AIDS

Module III: Nutrition, Diet and Cancer (Hours - 6)

- Etiological risk factors for cancer - Dietary and nondietary factors, Genetic factors, Environmental factors.
- Nutritional requirements for cancer patients, dietary management in cancer and feeding problems related to cancer therapy

Module IV: Nutritional Management of Diabetes Mellitus (Hours - 6)

- Prevalence, classification and etiology of diabetes mellitus
- Symptoms, diagnosis and complications Management of Diabetes
- Dietary management – glycemic Index, beneficial effects of some foods, supportive therapy, prevention.

Module V: Nutrition and Coronary Heart Diseases (CHD) (Hours - 6)

- Common disorders and complications of CHD, Prevalence, etiology and symptoms, Dietary management, Prevention of CHD.
- Atherosclerosis - Phases, Etiology, Symptoms, Complications, Nutritional Management
- Hypertension - Classification of BP, Stages of hypertension, Etiology, dietary Management, DASH Diet

Module VI: Dietary Management of G.I Disorders (Hours - 6)

- Peptic ulcer
- Constipation
- Diarrhoea

Module VII: Liver Diseases (Hours - 4)

- Etiology, symptoms and dietary Management of Hepatitis, Cirrhosis, Hepatic Coma

Module VIII: Nutritional Management of Renal Disorders
(Hours - 6)

- Common Renal Diseases
- General Principals of dietary Management in Renal diseases
- Etiology, Clinical symptoms and Dietary Management of Acute and chronic Nephritis, Nephrotic Syndrome

Module IX: Nutritional care in weight Management (Hours - 4)

- Weight imbalance prevalence and classification
- Guidelines for calculating ideal body weight
- Etiology, Clinical manifestations, consequences and Dietary Management of – Obesity, Underweight

Module X: Nutritional Problems of the Community (Hours - 6)

- Prevalence, causes, consequences prevention and control of Protein Energy Malnutrition (PEM), Vitamin A deficiency, Iodine Deficiency Disorders, Iron Deficiency Anemia
- National Programmes for control of malnutrition in India
  ICDS, NMACP, NIDDCP, VADCP, MDM, Targetted PDS.

Practical

(Hours -36)

1. Preparation of therapeutic Recipes
2. Types of therapeutic Diet : Normal, Soft, Fluid – Full Fluid and Clear Fluid Diets
3. Diet plan for
4. Fevers, Cancer- breast cancer, Diabetes Mellitus, CHD, Peptic Ulcer, Hepatitis, Cirrhosis, Nephritis, Nephritic syndrome, Obesity, Under weight, PEM, Iron Deficiency Anaemia
5. Visit to a feeding programme

References

1. Srilakshmi (2003) Dietetics IVth Edition , New age International (P) Ltd, Publishers, New Delhi
2. Clinical Nutrition (2005) Blackwell Science Service, Nutrition Society UK.
3. Public Health nutrition (2005), Edited by Nutrition society, Black well Science Service U.K.
4. Cecilia et. al (1988) Diet Manual Sixth Edition Mayo publishers, Philadelphia
5. L. Kathleen Mahan and Sylvia Escott- Stump, Krause's Food Nutrition and Diet therapy, 11th Edition, 2005, Saunders, USA.
6. Subhangini. A. Joshy (2002), Nutrition and dietetics, 2nd edition. Tata Mc. Graw. Hill publishing company (Ltd), New Delhi
7. Paul Insel, Elaine Turner, Don Ross (2004) Nutrition second edition American Dietetic Association, Jones and Barlett publishers, London

6B13 HSC EXTENSION EDUCATION AND INFORMATICS IN HOME SCIENCE

Hours / Week : 3+2
Hours / Semester : 54+36
Credits : 4

Objectives

1. To make the students understand the principle of extension
2. To understand the ways and means of home science extension
3. To enable students to use digital knowledge resource in learning and in home science extension
4. Develop skills in preparing and using audio-visual aids in extension work
5. Understand the process of communication in Home Science Education
6. Familiarize with the latest technologies in communication

Theory **(Hours - 54)**

Module I: Extension Education (Hours - 11)

- Meaning , definition, need, principles, philosophy.
- Difference between formal, informal and extension education.
- Home Science extension education and its contribution towards the development of community.

Module II: Communication and informatics in Home Science education. (Hours - 14)

- Definition, functions, elements, methods and problems of communication.
- Place and role of audio-visual aids in Home Science teaching.
- Introduction to use of IT in teaching and learning.
- Computer as an instructional tool (CAI) to transfer Home Science technology.
- Programme planning, development cycle, components, implementation and evaluation.

Module III: Leadership (Hours - 8)

- Definitions, types, functions
- Role of leaders in community development
- Qualities of a good leader

Module IV: Community Development. (Hours - 10)

- Definition, objectives and history of community development and extension programmes in India.
- Organizational set up and role of functionaries.
- Democratic decentralization - Panchayathi Raj (meaning, history, set up and functions).

Module V. Welfare programmes in extension (Hours - 11)

- National and International Programmes
- Government welfare programmes – Five year plans
- Non-Governmental organization - CSWB, SSWB, BSS, Nehru Yuvak Kendra, Kasturba Gandhi National Memorial Trust, CAPART and SHG

Practical

Learning by doing (any two)

1. Designing and composing print material – 1 page write up, invitation card, hand outs, leaflets, pamphlet, cover page of report, magazine and book (any two)
2. Prepare slides related to any topic in home science for power point presentation
3. Usage of raw data from secondary sources for preparing for different types of graphs and database.
4. Preparing transparencies on any Home Science related topics for class presentations.
5. Preparing and documenting computer assisted instructions (CAI) on any topic of Home science.

Learning by observing (any two)

1. Visit to any extension related institutions - a rural/ urban community
2. Visit to a block
3. Visit to a training centre
4. Visit to State Planning Board
5. Observe a self help group in action.

*** Student shall maintain records of each work, which shall be internally evaluated.**

References

1. ReddyA[1987] Extension Education,Bapatha ,Andra Pradesh,India,Sreelekshmi Press.
2. Dahama.O.P and Bhatnagar .O.P [1988] Education and Communication for
3. Waghmare,S.K[1980] Teaching Extension Education,Prasant Publication Vallabha,Vidhya Nagar.
4. Patnayak,Ram [1990] Rural Development in India,New Delhi,Vikas Publishing House .
5. Jain.Gopal lal[1997]Rural Develoment,Jaipur,Mangal Deep Publications.

Development,New Delhi,Oxford and IBH Publishing Co.Pvt .Ltd.

Journals

1. Journal of rural development
2. Journal of Social work
3. Kurukshetra

Web Resources

- www.fgcu.edu/support/office 2000
- www.microsoft.com/office MS office web site
- www.learnthenet.com Web primer
- http:/ computer.howstuffworks.com
- www.keralaitmission.org
- www.technopark .org.

6B14 HSC PROJECT

Hours / Week : 3
Hours / Semester : 54
Credits : 3

Objectives

1. To enable the students to understand Basic principles of Research Design
2. To enable the students to develop interest in Home science research and to develop project plan.
3. To enable the students to identify the problem of the community
4. To enable the students to adopt the procedure for the project
5. To enable the students to analyze the collected data

The projects are to be identified during the 5th semester with the help of the supervising teacher. The report of the project in duplicate shall be submitted to the department by the end of the sixth semester well before the commencement of the examination. The work may be chosen from any branch of Home science - collection of primary data and or secondary data involving application of home science theories they have learned in the curriculum.

The project report shall be produced for external evaluation during the university practical examination of core course 6B12HSC Clinical Nutrition and Dietetics. The viva – voce based on the project shall be conducted individually by the external examiner.

Evaluation of the project shall be done both internally and externally. Total weightage for project shall be -10 (5 internal and 5 external).

5D01 HSC GUIDANCE AND COUNSELLING

Hours / Week : 2
Hours /Semester : 36
Credit : 2

Objectives

1. To acquaint the students with the concepts and the need for guidance and counseling.
2. To make the students aware of the qualities and skills required for counselors.
3. To develop awareness among the students about the application of counseling.

Theory

Module I: Introduction to guidance and counseling. (Hours - 4)

- Meaning, objectives, types of guidance and counseling.
- Difference between guidance and counseling.
- Crisis - facilitative, preventive and developmental.

Module II: Counseling in the present scenario. (Hours - 8)

- Pressures on children and parents - familial, social, economic and vocational
- Factors and critical situations
- Need for counseling with special reference to Kerala.

Module III: Basic concepts in counseling. (Hours - 8)

- Counseling relationship, characteristics of a good counselors, counsel features,
- Counseling skills - listening skills, verbal and non verbal communication, qualities of counselors.

Module IV: Counseling process (Hours - 8)

- Methods of counseling - set up, stages.
- Common problems for beginning counselors, common errors in counseling.
- Child guidance centre.

Module V: Areas of guidance and counseling (Hours - 8)

- Personal counseling and group counseling
- Premarital counseling, marriage and family counseling, child counseling.
- Academic and school counseling, career counseling.
- Crisis intervention counseling, rehabilitation counseling, post traumatic counseling.

Related Activities

1. Visit a counselling centre
2. Discuss with teachers / parents / counselors on the common problems and remedial measures to prevalent among children / adolescence.
3. Role play on setting up a counseling situation.

References

1.Child psychology and child guidance. Kale S.V., Himalaya Publishing House
2. Child pshychology and child guidance. Dr. Vatsyan
3. Counselling psychology. S.Narayana Rao, Tata MC Graw Hill, New Delhi
4. Guidance and counselling. Sister Mary Vishala,S. Chand & Company Pvt. Ltd., New Delhi
5. Guidance & Counselling. A.k. Nayak, A.P.H. Publishing Corporation

6D02 HSC FOOD PROCESSING AND PRESERVATION

Hours / Week : 2
Credit: 2

Objectives

To enable the students to

1. Aware the need for food processing and food preservation
2. Understand different methods of food processing and food preservation
3. Encourage students to apply theoretical knowledge in practical situations

Module I: Food processing and preservation (Hours - 3)

- Scope, needs, principles, methods.

Module II: Food spoilage (Hours - 3)

- Types, causes and prevention.

Module III: Post harvest handling (Hours - 3)

- Cool storage of fresh fruits and vegetables, refrigerated storage and transportation.

Module IV: Food processing (Hours - 4)

- Processing of different foods – cereals, pulses, vegetables, fruits, animal foods.

Module V: Cooking of foods (Hours - 4)

- Different methods – baking, steaming, frying, pressure cooking, microwave cooking.

Module VI: Technology of preservation (Hours - 8)

- By using high temperature - heat process, canning, sterilization.
- By using low temperature - refrigeration, freezing, chilling
- By Drying, fermentation
- By using natural agents – sugar, salt, acid, honey etc.
- By using chemical preservatives.

Module VII: Preservation of foods (Hours - 8)

- Preservation of foods by using different methods (fruits, vegetables, cereals, pulses, milk, animal foods)

Module VIII: Effects of food processing and preservation. (Hours - 3)

- Physical and chemical changes in food during preservation.
- Common problems found in food processing and preservation.
- Byproduct utilization.

Related Experiences (any three items)

- Sugar cookery – preservation of jam, jelly, candy, fruit cheese.
- Beverages – squash, crush, syrup, RTS.
- Salt, oil, acid – pickles, chutneys, sauces.
- Fermentation – preparation of wine, vinegar
- Processing of animal foods – fish, meat and paultry.
- Milk and milk products – peda, cheese, paneer, ice creams.
- Drying and dehydration – vegetables, fruits, tubers, cereals, pulses.

References

1. Food facts and principles by Shakunthala Manay, New Agew International Publishers.
2. Preservation of fruits and vegetables by Girdhari Lal et. al., Indian Council of Agricultural Research.
3. Modern food preservation by M.C. Williams and Paini, Surjeet Publications.
4. Food processing and preservation by B. Sivasankar, Prentice-Hall of India Pvt. Ltd.
5. The technology of Food preservation by Norman W. Desrosier, James N. Desrosier, CBS Publishers and Distributors.

B.SC. HOME SCIENCE MQP

3 B03 HSC FAMILY RELATIONS AND COUNSELING

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. The science and study of ageing

   (a) Oncology (b) Gerontology (c) Pathology d) physiology

2. .Name any one venereal disease

   (a) Glossitis (b) Gonorrhoea (c) Giardia d) Diabetes

3. When is World AIDS day celebrated?

   (a) June 27th (b) Dec.1st (c) April 7th d) May 25th

4. India's population as on 1st March 2001 stood at

   (a) 1,028 million (b) 856.4 million (c) 989.5 million d) 0.222200 million

Match the following bunch of 4 questions. It carries weight 1.

5.	Marriage	-	Servant
6	Famulus	-	Universality
7.	Lesbian	-	HIV
8	S.T.D	-	Homosexuality

Answer the following bunch of 4 questions. It carries weight -1.

9. The ---------- is the major agent for transmitting culture.
10. Disloyalty to one's partner in marriage is known as ----------
11. Population education aims to make the younger generation aware of the problems and consequences of ---------- and of the concept of small family norms.
12. ----------is an important skill in counselling and it conveys the message that counselor is interested in the counsellee.

State the following bunch of 4 questions, True or False. It carries weight -1

13. Infidelity upset the dynamics of a family unit.
14. The concept of small family norm is not good for the development of a nation.
15. Divorce is not the final termination of marriage.
16. Unexpected change in the family causes family crisis.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Family crisis.
18. Marriage
19. Responsible parenthood
20. Old age
21. Family planning.
22. Merits of nuclear family
23. Maternal employment
24. Old age
25. Unemployment
26. AIDS
27. Infertility

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. Discuss the problems in old age
29. Explain the functions of family
30. Discuss the impact of alcoholism on the family
31. Define values and classify them.
32. Role changes in the family.
33. Stress among adolescents.
34. Effects of divorce.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Discuss marriage under the following headings
    a) Definition b) Functions and c) Areas of adjustments
36. Discuss the problem of population explosion in India
37. Elaborate on the characteristics of the family as a basic institution and its contribution to the society.

B.SC. HOME SCIENCE MQP

4 B04 HSC PHYSIOLOGY AND MICROBIOLOGY

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. The enzyme involved in lipid digestion

   (a) Amylases, (b) Proteases, (c) Lipases, (d) All the above

2. The end product of protein digestion

   (a) Amino acid (b) Glucose (c) Triglycerides, (d) Fatty acids

3. The optimum temperature for growth of psychrophilic micro organisms

   (a) Below 15^0C, (b) 20 - 25^0C, (c) 25 - 45^0C, (d) Above 45^0C

4. The strength and rigidity of bacterial cell wall is due to the presence of :

   (a) Capsid, (b) Pili (c) Murein, (d) Capsule

Match the following bunch of 4 questions. It carries weight 1.

5.	Vasopressin	-	Live Vaccine
6.	Insulin	-	Gastro-enteritis
7.	BCG	-	Diabetes Incipidus
8.	Salmonella	-	Diabetes Mellitus

Answer the following bunch of 4 questions. It carries weight -1.

9. ---------- is another name for voiding urine
10. ECG is the short form for ----------
11. The enzymes digesting carbohydrates are commonly termed as ----------
12. ———— is the minimum growth temperature for human pathogens.

State the following bunch of 4 questions, True or False. It carries weight -1

13. In blood coagulation the equivalent name of factor IV is calcium.
14. The phosphate test is used to find out the efficiency of pasteurization.
15. Endopeptidases helps in protein digestion.
16. Cholera is a viral infection.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Who are universal donors and universal recipients?
18. Draw the structure of a nerve cell.
19. What is blood grouping and explain its importance.
20. What are the properties of cardiac muscle?
21. List out functions of liver.
22. How can AIDS be prevented?
23. Name a disease caused by protozoa. Describe its symptoms.
24. Draw the structure of bacteria.
25. Enumerate any four food born infections.
26. Write short note on Cholera
27. Factors that influence the growth of micro organisms.

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. How respiration is regulated?
29. Enumerate the factors influencing blood pressure.
30. Explain blood coagulation.
31. Describe different type of sand filters.
32. What causes diphtheria? How it can be prevented
33. Differentiate between Acquired and natural immunity.
34. What are the factors responsible for food spoilage?

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Explain cardiac cycle.
36. Explain the structure and functions of Kidney.
37. Explain different methods of sterilization

B.SC. HOME SCIENCE MQP

5 B05 HSC APPLIED FOOD SCIENCE

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. The effect of dry heat on starch causes

   (a) Gelatinisation (b) Synerisis (c) Dextrinization (d) Gel formation

2. Food poisoning occurring in Canned foods

   (a) Salmonellosis (b) Botulism (c) Dysentery (d) Cholera

3. Pigment present in meat

   (a) Myoglobin (b) Haemoglobin (c) Tannin (d) Flavanoids

4. The temperature for pasteurization is

   (a) 100^0 C (b) Above 100^0 C (c) 50^0 C (d) Below 100^0 C

Match the following bunch of 4 questions. It carries weight 1.

5.	Vanaspathi	-	Non alcoholic beverages
6.	Coffee	-	Hydrogenated oil
7.	Tocopherols	-	Preservation
8.	Dehydration	-	Antioxidants

Answer the following bunch of 4 questions. It carries weight -1.

9. ---------- are good source of protein of high biological value.
10. Spoilage of fats and oils is called as ----------
11. Darkening of fruits is due to ---------- browning.
12. Anthoxanthins are present in ——— vegetables.

State the following bunch of 4 questions, True or False. It carries weight -1

13. Favism is a disease caused due to the deficiency of glucose 6 – phosphate dehydrogenase.
14. Rennin aids in the coagulation of milk
15. The temperature range in holding batch system is 72^o C for 15 seconds.
16. Ovamucoid is responsible for the jelly like character of egg white.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Define Food.

18. What is Lathyrism.

19. Give two uses of fat in food preparation.

20. Give any two principles of food preservation

21. Antioxidants

22. Write the Characteristics of fresh fish.

23. What is flaking?

24. Give an account on tenderness of meat and rigor mortis.

25. What is pasteurization?

26. Write the measures to prevent "Rancidity".

27. How is gluten formed?

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. Discuss the functions of food.

29. Draw and briefly explain the structure of an egg.

30. Enumerate the role of spices in cookery.

31. What are the different methods of improving nutritive value of pulses.

32. Write about phytochemicals.

33. Write on the pigments present in fruits and vegetables.

34. Explain the five food group systems.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Explain the enzymatic browning taking place in fruits and vegetables. How can you prevent it?

36. Give the various methods of food preservation.

37. Write notes on:

(a) Structure of wheat. (b) Nutritive value. (c) Parboiling and its advantages.

B.SC. HOME SCIENCE MQP

5 B06 HSC HOUSING AND INTERIOR DECORATION

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. The lightness or darkness of a colour is:

   (a) Value, (b) Hue, (c) Intensity, (d) Tint

2. The path connecting the sink, cooking area and refrigerator is called as:

   (a) Work area, (b) Plinth area (c) Work triangle, (d) Floor area

3. Balance is one of the principles of design:

   (a) Deign, (b) Land scaping (c) Flower arrangement, (d) None

4. Ikebana is :

   (a) Modern flower arrangement, (b) Japanese flower arrangement,

   (c) Mass flower arrangement, (d) Horizontal flower arrangement

Match the following bunch of 4 questions. It carries weight 1.

5.	Balance	-	Related colour harmony
6.	Analogous colour harmony	-	Principles of design
7.	Ikebana	-	Traditional flower arrangement
8.	Mass arrangement	-	Japanese flower arrangement

Answer the following bunch of 4 questions. It carries weight -1.

9. Monochromatic colour harmony is the ---------- colour harmony.
10. Naturalistic design is ---------- type of design.
11. Yellow, Red purple and blue purple colour are example for ---------- colour harmony.
12. The total area of the house including the thickness of the wall is called ----------

State the following bunch of 4 questions, True or False. It carries weight -1

9. Red and Green are examples for analogous colour harmony
10. The complementary colour of blue is yellow.
11. Shin, Soe, Hike are the principles of Japanese flower arrangement.
12. Carpets are small and Rugs cover the whole area of a room.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

13. Define work triangle.

18. Discuss briefly on the various types of design.

19. Define rhythm.

20. Qualities of colour.

21. U- shaped kitchen

22. Related colour harmonies.

23. Natural lighting.

24. Accessories

25. Differentiate Rugs and Carpets.

26. What are the aims of window treatment?

27. Golden oblong

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

29. Mention the principles to be followed while arranging flowers.

30. Discuss the elements of design

31. Significance of aesthetics in interior decoration,

32. What are the important factors that we have to consider while purchasing furniture for a room?

33. Illustrate any four traditional flower arrangements.

34. Discuss on any four types of curtain styles with suitable illustration.

35. What are the methods of lighting?

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

36. Define design. Explain the principles design?

37. Write briefly on:

a) Illustrate Prang colour wheel, b) Qualities of colour, c) Colour harmonies with examples, d) Warm and cool colours, e) Tints and shade.

38. Illustrate different Japanese flower arrangement with suitable Examples.

B.SC. HOME SCIENCE MQP

5B07 HSC TEXTILE SCIENCE

Time: 3 hours, **Max. Weight : 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight 1

1. T he amount of twist in a yarn is denoted by the term

   (a) T.P.I, (b) T.P.S, (c) T.P.T, (d) T.P.Y

2. _____ is a hand method of printing

   (a) Rotary screen printing, (b) Discharge printing, (c) Batik, (d) Roller printing.

3. Minimum number of harnesses required for twill weave is:-

   (a) 3, (b) 2, (c) 5, (d) 4.

4. _____ is an example of a natural dye

   (a) Mordant dye, (b) Vat dye, (c) Indigo, (d) Pigment colours.)

Match the following bunch of 4 questions. It carries weight 1

5.	Complex yarn	–	Ends
6.	Warp yarn	–	Slub yarn
7.	Plain weave	–	Floating weave
8.	Twill weave	–	Tabby weave

Answer the following bunch of 4 questions. It carries weight 1

9. ---------- is also known as artificial silk
10. ---------- dyes uses only cold water for dyeing
11. Rib weave is a variation of---------- weave
12. Yarn made from filament fibres are known as ----------

State the following bunch of 4 questions, whether True or False. It carries weight -1

13. Napping is a finishing process mainly used to straighten out the edges and weaving.
14. Wet spinning technique is used to produce rayon yarn.
15. Several layers of fabrics are compressed together into thin sheet with the help of an adhesive. This process of fabric construction is called bonding.
16. Nylon is a polyamide fiber.

Section B (1 x 8 = 8)

Write short answer on any **eight** of the following. Each question carries weight - 1

17. What is meant by mercerization
18. Briefly explain the term yarn count
19. Define weaving
20. What are blended fabrics?
21. Explain the term degumming
22. Weighting of silk
23. What is meant by retting of flax?
24. Define knitting
25. Vegetable dye
26. Rotary screen printing
27. Batik printing.

Section C (2 x 5 = 10)

Write short essay on any **five** of the following. Each question carries weight - 2

28. Give the classification of textile fibers
29. Compare the properties of cotton and wool fibers
30. What are complex yarns? Explain any two.
31. Briefly explain chemical spinning process.
32. Give an account of any one of the basic weaves
33. Discuss the manufacture of viscose rayon.
34. Differentiate woolen and worsted.

Section D (4 x 2 = 8)

Write essay on any **two** of the following. Each question carries weight - 4

35. Explain the manufacturing process of wool fiber from fiber to fabric.
36. Explain different methods of dyeing.
37. What are house hold linens? Explain the points to be considered while selecting household linens.

B.SC. HOME SCIENCE MQP

5B08 HSC HUMAN NUTRITION AND BIOCHEMISTRY

Time: 3 hours **Max. Weight : 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight 1

1. The enzyme involved in carbohydrate digestion

   (a) Amylases (b) Proleases (c) Lipases (d) All the above

2. The carbohydrate which is not available to the body

   (a) Glucose (b) Fructose (c) Cellulose (d) Maltose

3. Arachidonic acid is an example of

   (a) Essential Fatty acid (b) Non – Essential Fatty acid

   (c) Essential amino acid (d) Non – Essential amino acid.

4. Sprouted green grams has enhanced

   (a) Vitamin C (b) Vitamin A (c) Vitamin B (d) Vitamin E.

Match the following bunch of 4 questions. It carries weight 1

5.	Iron	-	Scurvy
6.	Iodine	-	Beriberi
7.	Vitamin C	-	Goitre
8.	Thiamine	-	Anemia

Answer the following bunch of 4 questions. It carries weight 1

9. The end products of Carbohydrate digestion is ----------
10. The amino acids which cannot be synthesized in the body are called ----------
11. Deficiency of fat in the diet may lead to ----------
12. ---------- Is essential for iron absorption.

State the following bunch of 4 questions, True or False. It carries weight -1

13. Beriberi is a disease condition caused by the deficiency of niacin.
14. The major source of vitamin B12 is plant foods.
15. Cereals are examples of complete proteins.
16. Conjugated protein gives a protein fraction and a non protein fraction on hydrolysis.

Section B (1 x 8 = 8)

Write short answer on any **eight** of the following. Each question carries weight - 1

17. Give the signs and symptoms of Vitamin A deficiency.
18. List the functions of cholesterol in the body.
19. Define reference Man and Women.
20. What is SDA.
21. Nutritional classification of proteins.
22. Differentiate between PCM and Marasmus
23. Give the physiological role of calcium in the body.
24. Differentiate between trans-amination and deamination.
25. What is Fructose
26. Scurvy
27. Weaning

Section C (2 x 5 = 10)

Write short essay on any **five** of the following. Each question carries weight - 2

28. Briefly explain principles of meal planning.
29. Functions of water, requirements and water-balance.
30. Explain the functions and sources of carbohydrate
31. Describe the physiological changes occur during pregnancy
32. Explain the factors influencing BMR.
33. Write a note on Vitamin A deficiency.
34. Explain the nutritional requirement during lactation.

Section D (4 x 2 = 8)

Write essay on any **two** of the following. Each question carries weight - 4

35. Explain fat with reference to its classification, function and metabolism.
36. Discuss the nutritional requirement during infancy.
37. Explain calcium under the following headings: Functions, Deficiency, Requirements, Sources.

B.SC. HOME SCIENCE MQP

5B09 HSC GENERAL PSYCHOLOGY

Time: 3 hours **Max. Weight : 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight 1

1. ---------- is the mechanism by which dangerous desires and intolerable memories are kept out of consciousness.

   (a) Sublimation (b) Repression (c) Suppression (d) Regression

2. ---------- is an internal factor which initiates to begin an act or behaviour.

   (a) Dreams (b) Motivation (c) Anxiety (d) Intelligence

3. The founder of Functionalism is ----------

   (a) Wilhelm Wundt (b) William James (c) J.B. Watson (d) Max Wertheimer

4. The condition which pressurizes man to the extent that he adjusts or he has to adjust.

   (a) Pressure, (b) Stress, (c) Anxiety, (d) Conflict

Match the following bunch of 4 questions. It carries weight 1

5.	Classical conditioning	-	B.F. Skinner
6.	Psycho analysis	-	J.B. Watson
7.	Behaviourism	-	Ivan Pavlov
8.	Operant conditioning	-	S. Freud

Answer the following bunch of 4 questions. It carries weight 1

9. ---------- is the systematic practice of measures for the prevention and or restoration of mental health.
10. Loss of memory is called ----------.
11. Branch of psychology which deals with the fundamental rules, principles and theories of psychology is called ----------.
12. The conflict arise in a person when two of positive stimuli are presented, is called ----

State the following bunch of 4 questions, True or False. It carries weight -1

17. Practice helps to increase the retention power of the learning material.
18. Negative accelerated curves are formed when the learning is difficult in the beginning
19. Emotion can not take place without feelings.
20. Persons with optimum number of traits are maximum in the population.

Section B (1 x 8 = 8)

Write short answer on any **eight** of the following. Each question carries weight - 1

17. Anxiety
18. TAT
19. Mental Age
20. Introspection
21. STM
22. EQ
23. Gestalt psychology
24. Retroactive interference.
25. Normal curve
26. Case study
27. Trait

Section C (2 x 5 = 10)

Write short essay on any **five** of the following. Each question carries weight - 2

28. Briefly explain the determinants of personality
29. Define motivation. Describe its characteristics.
30. Describe briefly the different mental mechanism.
31. Learning curve.
32. Explain the reasons for forgetting
33. Explain different types of memory.
34. Discuss the schools of psychology.

Section D (4 x 2 = 8)

Write essay on any **two** of the following. Each question carries weight - 4

35. Define emotion. Critically evaluate the theories of emotion.
36. Describe briefly the nature, history and scope of psychology.
37. Define personality. Explain the types and traits of personality.

B.SC. HOME SCIENCE MQP

6B10 HSC FAMILY RESOURCE MANAGEMENT

Time: 3 hours **Max. Weight : 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight 1

1. Feeling of extreme mental and physical tiredness

(a) Efficiency, (b) Fatigue, (c) Discomfort, (d) Frustrateion

2. Name any one saving institution

(a) LIC (b) FAO (c) ATM (d) CPM

3. When was the "Prevention of Food Adulteration Act" promulgated?

(a) 1954 (b) 1964 (c) 1974 (d) 1966

4. Expand CPM

(a) Control, Planning, Motivating (b) Controlling , Programming , Managing

(c) Critical Path Method (d) Central Programme Method

Match the following bunch of 4 questions. It carries weight 1

5.	Hay box cooker	-	Impellor
6.	Washing machine	-	Magnetron
7.	Microwave Oven	-	Indigenous Equipment
8.	Refrigerator	-	Ammonia

Answer the following bunch of 4 questions. It carries weight 1

9. Intelligence is an example of ---------- resource
10. Money income + psychic income + real income =----------income
11. The path connecting the sink working area and refrigerator is called as ----------
12. ---------- is the crux of management.

State the following bunch of 4 questions, True or False. It carries weight -1

13. Management is using what you have to get what you want.
14. Energizing is the heart of management.
15. Rest periods relieve psychological fatigue.
16. As the income increases, the income spent on food decreases.

Section B (1 x 8 = 8)

Write short answer on any **eight** of the following. Each question carries weight - 1

17. Pathway chart
18. Engel's Law of Consumption
19. Subsidiary Occupation
20. Time Norm
21. Types of goal
22. Home management
23. Psychological Fatigue
24. Vermiculture
25. Psychic income
26. Work siplification
27. Fatigue

Section C (2 x 5 = 10)

Write short essay on any **five** of the following. Each question carries weight - 2

28. Discuss about the different types of domestic waste
29. Body mechanism
30. Explain briefly about the principle and working of microwave oven
31. Explain the different types of family income
32. Explain Janatha Refrigerator.
33. Steps in decision making.
34. Describe the principles to be considered write planning a house?

Section D (4 x 2 = 8)

Write essay on any **two** of the following. Each question carries weight - 4

35. What is Family Budget? Explain the steps in making budget.
36. Write the qualities of a good home maker.
37. Explain the factors to be considered for the selection, care and use of any two major household equipment.

B.SC. HOME SCIENCE MQP

6B11 HSC APPAREL DESIGNING

Time: 3 hours **Max. Weight : 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight 1

1. The strength and weakness of any colour is

   (a). Hue (b). Value (c) Intensity (d) None of this

2. Which of the following does not suit?

   (a) line (b) shape (c) texture (d) harmony

3. The distinctive appearance of any garment which makes it different from others is

   (a) style (b) design (c) Fashion (d) blooms

4. A term used when turning dart is

   (a) copy (b) pivoting (c) close cup (d) trueing

Match the following bunch of 4 questions. It carries weight 1

5.	Fad	-	The garment that sells quickly
6.	Chic	-	Basic outline
7.	Hot number	-	Short lived fashion
8.	Style	-	Stylish

Answer the following bunch of 4 questions. It carries weight 1

9. ----------is a symbol for marking seam allowances, center lines, sleeve cap etc:
10. ---------- is a plain weave cotton fabric mostly unbleached, used to check the drape of fabric.
11. ----------is a tool made of plastics about 10" long with a spiral curve shape at the end
12. The practice of cutting and marking individual garments for customers are known as ----------

State the following bunch of 4 questions, True or False. It carries weight -1

13. The two very common pleats include knife pleats and box pleats.
14. Long lasting fashions are classics
15. Fashion merchandising does not include planning.
16. Proportion is also called law of relationship.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. What is meant by trueing?
18. Define grading.1
19. What is meant by fad in fashion designing?
20. Define pattern.
21. How much material is required to construct a sari petticoat with 40" length and hip?
22. Explain the term selvage.
23. How will you alter the basic pattern to increase the length?
24. What do you know about grain?
25. What is the importance of straightening the fabric?
26. What is Intensity?
27. Explain the term harmony.
28. What is pivoting

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

29. Write the guide lines for taking body measurements.
30. Briefly explain the different kinds of sewing machines.
31. Write down the principles of pattern making.
32. Briefly explain the factors affecting fashion.
33. What is meant by fashion merchandising? Briefly explain.
34. Write down the points to be considered while placing pattern pieces on material.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Explain the different methods used in pattern making.
36. Explain the tools/equipments used in garment making.
37. Describe principles of design with suitable examples.

B.SC. HOME SCIENCE MQP

6B12 HSC CLINICAL NUTRITION AND DIETETICS

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1 . Which among the following is an international organization engaged in Nutrition activities.

(a) FAO (b) ICMR (c) CFTRI (d) ICAR

2. The daily need of fibre in human diet is above

(a) 4-7 gm, (b)8-10gm, (c) 2-3 gm, (d) none of the above

3. ----------is a cancer protective nutrient.

(a) Vitamin E, (b) Vitamin K, (c) Vitamin B. (d) Iron)

4. Grade 1 obese person is with BMI of ----------

(a) 25 - 26.9, (b) 25 - 27.9 , (c) 25 - 28.9, (d) 25 - 29.

Match the following bunch of 4 questions. It carries weight 1.

5.	Acid producing food	-	Peptic ulcer
6.	Low fibre diet	-	Bread
7.	Low protein diet	-	Banana
8.	Alkaline food	-	Glomerulo nephritis

Answer the following bunch of 4 questions. It carries weight -1.

9. Expansion of TPM is ----------

10. A disease condition in which lesions develop on mucous lining of the stomach is known as----

11. The disease of the displaced child is ----------

12. In a normal fasting stage the blood of normal persons contain --------- of glucose per 100 ml.

State the following bunch of 4 questions, True or False. It carries weight -1

13. A high calorie low protein low fat diet is recommended for cirrhosis patient

14. Alcohol metabolism is under the control of insulin

15. In all therapeutic diet high vitamin content is not recommended.

16. Dyspepsia is a common abdominal disorder.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Give BMI classification of ICAR.
18. Write a note on clear fluid diet
19. Explain the agents responsible for liver damage
20. Enumerate any 4 causes of urinary calculi
21. Differentiate gastric and duodenal ulcer
22. Write a note on the metabolic changes in fever
23. What is PEM?
24. What are the principles of diet on tuberculosis?
25. Write about glycemic index.
26. Write the classification of BP.
27. Write about NMACP.

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. Give an account on Anemia Prophylaxis Programme.
29. What is the principle of diet for a hyper tension person? Explain.
30. Enumerate the role of dietician in disease management.
31. What is Parental nutrition? Explain the advantages and disadvantages.
32. What is ICDS? Discuss its objectives.
33. Discuss on importance of fibre in the diet.
34. Write on the diet modification in fever.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

36. What is therapeutic diet? Explain the need for modification of diet in different diseases.
37. Briefly explain etiology, symptoms and dietary management of diabetes mellitus.
38. Write a note on peptic ulcer. Suggest an appropriate diet for a patient with peptic ulcer.

B.SC. HOME SCIENCE MQP

6 B13 HSC EXTENSION EDUCATION AND INFORMATICS IN HOME SCIENCE

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. Community development programme was started in

   (a).1951 (b)1952 (c).1953 (d).1954

2. Integrated Child Development Service Scheme was launched in

   (a).1975 (b).1978 (c).1987 (d).1970

3. Name any one display aid

   (a).Chart (b).Puppet (c).Poster (d).Flash card

4. Expand NIRD

   (a). National Institute for Regional Development

   (b). National Institute for Rural Development

   (c). National Institute for Research Development

   (d). National Institute for Recruitment Development

Match the following bunch of 4 questions. It carries weight 1.

5.	Receiver	-	Subjective stress
6.	The personal stage	-	Sender
7.	Barrier	-	Interpersonal relationship
8.	Communicator	-	Audience

Answer the following bunch of 4 questions. It carries weight -1.

9. ----------is a plan of work arranged chronologically.

10. The fundamental objective of extension is ----------

11. Leaflet is a ----------aid.

12. The disturbances occur during the transfer of message is called as ----------

State the following bunch of 4 questions, True or False. It carries weight -1

13. In extension education there is no fixed curriculum.

14. Homogenous group is the audience for extension education

15. Extension education is not related to other sciences.

16. Communication is a primary tool for effective behaviour change.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Extension education
18. Plan of work
19. Programme planning
20. Integrated Child Development Service
21. Felt needs
22. Qualities of a good leader
23. Evaluation
24. Philosophy of extension
25. Panchayathi Raj
26. CSWB
27. Five Year Plans

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. Write on 'Programme development cycle'
29. Describe the principles and philosophy of extension education
30. How will you evaluate an extension programme
31. Place of audio-visual aids in home science extension.
32. Write on the importance of IT in teaching learning process.
33. Explain the functions of communication.
34. Differentiate formal, informal and extension education.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Trace the history of community development in India.
36. Explain the programme development process.
37. Explain the role of Home Science Extension towards the development of community

5D 01 HSC GUIDANCE AND COUNSELLING MQP

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. ---------- is to be avoided during counseling session

(a) Moralizing (b) Compliment (c) Humour (d) Encouragement

2. Counselling process should result in assisting the individual to become ---------

(a) Self supporting (b) Self directing (c) Self centered (d) Other centered

3. Counselling for adjustments in the job is called ----------.

(a). Personal guidance, (b) Vocational guidance

(c) Educational guidance (d) Civic guidance

4. In counseling the focus is given to ----------

(a) Counsellor's problems (b) Client's problems (c) Family problems (d) Social problems

Match the following bunch of 4 questions. It carries weight 1.

5. Educational guidance meets the requirements and problems relating to --------- in the school.

6. Individual guidance is also termed as ----------.

7. Guidance is a ---------- process.

8. The first step of directive counseling is ----------

Answer the following bunch of 4 questions. It carries weight -1.

9. Personal guidance	-	Multi channel interaction
10. Social guidance	-	One to one interaction
11. Individual guidance	-	Deal with social issues
12. Group guidance	-	Development of life skill

State the following bunch of 4 questions, True or False. It carries weight -1

13. For providing proper guidance, the co-operation among the different agencies like family, school or the sponsoring institutions, is not necessary.

14. Listening skill is important in counseling

15. Counselling process is same for all problems.

16. Guidance is required at every stage of a person's life.

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. Differentiate guidance and counselling
18. Qualities of a good counselor.
19. Child guidance centre
20. Educational counselling
21. Personal counselling
22. Counselling skills.
23. Objectives of counselling
24. Rehabilitation counselling
25. Health guidance
26. Techniques for group guidance
27. Client centered counselling

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. Write the objectives of guidance.
29. What are the functions of a Guidance Worker?
30. How will you give career guidance to the needy persons?
31. Write the role and functions of a counselor.
32. How to conduct interview in counseling?
33. Explain the psychological basis of guidance.
34. What are the advantages of group counseling?

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Explain different types of guidance.
36. What are the objectives of educational guidance? Write on the need for guidance and counseling among school children.
37. Explain the counseling process. Write on directive counseling and non-directive counseling.

6D02 HSC FOOD PROCESSING AND PRESERVATION MQP

Time: 3 hours **Max. Weight: 30**

Section A (1 x 4 = 4)

Answer the following bunch of 4 questions. It carries weight -1

1. In deep fat frying the temperature used is --------

   (a) 180^{o} C – 220^{o} C (b) 190^{o} C – 200^{o} C (c) 180^{o} C – 250^{o} C (d) 190^{o} C - 220^{o} C

2. ---------- is an example of cooing by moist heat.

   (a) Boiling (b) broiling (c) Roasting (d) sautéing

3. The increase in Vitamin C content on pulses during germination is ----------

   (a).7 – 20 mg/100g (b).9 – 30 mg/100g (c).7 – 25 mg/100g (d).9 – 35 mg/100g

4. ---------- is a method of food preservation by osmotic pressure.

   (a) Jam making (b) Canning (c) Freezing (d) Fermentation

Match the following bunch of 4 questions. It carries weight 1.

5.	Pectin	-	Dry heat
6.	Stewing	-	Cobalt - 60
7.	Broiling	-	Emulsion
8.	Irradiation	-	Moist heat

Answer the following bunch of 4 questions. It carries weight -1.

9. The instrument used to read soluble solid content in jam and jelly is ----------.
10. The concentration of sodium chloride in pickling in salt is ----------.
11. ---------- is a method of food preservation in which food is exposed to ionizing energy.
12. ---------- is a combined method of roasting and steaming.

State the following bunch of 4 questions, True or False. It carries weight -1

13. In pressure cooking food may be undesirably soft.
14. Germination improves the nutritive value of pulses.
15. In quick freezing process the temperature used is 35^{o} C to 40^{o} C.
16. The acceptable Daily Intake of SO_2 as per Joint Expert Committee on Food Additives is 0.5 mg/kg body weight /day

Section B (1 x 8 = 8)

Answer any **eight** out of the following. Each question carries weight -1.

17. What are the chief causes of food spoilage/

18. Write on fermentation.
19. What is food preservation?
20. Write on slow freezing process.
21. What are the principles of food preservation?
22. Write on poaching.
23. Write any four advantages of microwave cooking.
24. What is 'flat sour'?
25. Write on the scope of food processing.
26. Write briefly on any two preservation methods by natural agents.
27. What are the advantages of decortications of pulses?

Section C (2 x 5 = 10)

Answer any **five** out of the following. Each question carries weight -2.

28. What are the common problems found in food processing and preservation?
29. Briefly discuss on pressure cooking.
30. Comment on the processing of rice.
31. How will you prevent food spoilage?
32. Write on chemical preservation.
33. What are the types of spoilage in canned foods?
34. What is meant by food irradiation? Explain.

Section D (4 x 2 = 8)

Answer any **two** of the following. It carries weight- 4.

35. Briefly explain the different methods of food preservation.
36. Explain different methods of cooking.
37. Write an essay on post harvest handling of fruits and vegetables

Sd/-
Dr.Sr.Jessy Varghese,
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