



**MAHARSHI DAYANAND SARASWATI UNIVERSITY
AJMER**

NOTICE

Copies of the "Syllabus and Courses of Study"
prescribed for the Faculties of Arts, Fine Arts, Social
Science, Science, Commerce, Law, Education,
Management Studies etc.
Commencing from July,
Can be obtained from our authorised Agent.

On payment of the price printed
on each Syllabus, Postage will be
extra for copies desired by post.

Registrar

ALKA PUBLICATIONS

Purani Mandi, Ajmer

Ph. : 0145-2426301

E-mail : alkasciencebooks@gmail.com

"NEO" Ajmer



MAHARSHI DAYANAND SARASWATI UNIVERSITY, AJMER

पाठ्यक्रम

**SCHEME OF EXAMINATION AND
COURSES OF STUDY**

FACULTY OF SCIENCE

B.Sc. Home Science Part - I

**Examination
(w.e.f. 2018-19)**

**संस्करण
2018**

**मूल्य :
20/-**

**महर्षि दयानन्द सरस्वती विश्वविद्यालय,
अजमेर**

MAHARSHI DAYANAND SARASWATI UNIVERSITY,
AJMER

पाठ्यक्रम

SYLLABUS

SCHEME OF EXAMINATION AND
COURSES OF STUDY

FACULTY OF SCIENCE

B.Sc. Home Science Part - I

Examination
(w.e.f. 2018-19)



ALKA PUBLICATIONS

Purani Mandi, Ajmer

NOTICE

1. Change in Statutes/Ordinances/Rules/Regulations Syllabus and Books may, from time to time, be made by amendment or remaking, and a candidate shall, except in so far as the University determines otherwise comply with any change that applies to years he has not completed at the time of change. **The decision taken by the Academic Council shall be final.**

सूचना

1. समय-समय पर संशोधन या पुनः निर्माण कर परिनियमों/अध्यादेशों/नियमों / विनियमों / पाठ्यक्रमों व पुस्तकों में परिवर्तन किया जा सकता है, तथा किसी भी परिवर्तन को छात्र को मानना होगा बशर्ते कि विश्वविद्यालय ने अन्यथा प्रकार से उनको छूट न दी हो और छात्र ने उस परिवर्तन के पूर्व वर्ष पाठ्यक्रम को पूरा न किया हो। **विद्या परिषद द्वारा लिये गये निर्णय अन्तिम होंगे।**

© MAHARSHI DAYANAND SARASWATI UNIVERSITY, AJMER
Published and Printed by ALKA PUBLICATIONS, AJMER
☎ 0145-2426301
for Maharshi Dayanand Saraswati University, Ajmer

Syllabus / B.Sc. Home Science Pt. I / 3

Scheme of Examination and Courses of Study B.Sc. Home Science, Part -I, 2018

Duration of Theory Examinations: 3 hrs

Paper No.	NOMENCLATURE OF PAPERS	MAX MARKS		HOURS/ WEEK	
		Th.	Pr.	Th.	Pr.
1.	Gen. Hindi	100	—	4	—
2.	Gen. English	100	—	4	—
Main Papers					
1.	Applied Science	50	—	2	—
2.	Human Physiology	100	—	4	—
3.	Extention and Communication I	100	50	4	2
4.	Food and Nutrition (Fundamental of Food & Nutrition)	100	50	4	2
5.	Family Resource Management (Introduction to Resource management)	100	50	4	2
6.	Human Development I (Life Span Development)	100	50	4	2
7.	Textile and Clothing I (Introduction to Textiles and Clothing)	100	50	4	2
Total		650	250	26	10
Grand Total		900	36		

Note:- Practical work load is to be counted - 1:1

1. सामान्य हिन्दी

- समय : 3 घण्टे उत्तीर्णांक : 36 पूर्णांक : 100
निर्देश- इस प्रश्न पत्र के प्राप्तांक श्रेणी निर्धारण में सम्मिलित नहीं किये जायेंगे।
अंक योजना- (अ भाग)
- गद्य एवं पद्य संकलन की विविध विधाएं कमशः (25 + 25= 50 अंक)
1. एक प्रश्न व्याख्याओं से संबंधित कमशः (10 + 10= 20 अंक)
2. दो परिचायात्मक प्रश्न पाठ्य पुस्तकों से (15 + 15= 30 अंक)
- (ब भाग)
1. शब्द शुद्धि — 5 अंक
2. वाक्य शुद्धि — 5 अंक
3. पारिभाषिक शब्दावली (अंग्रेजी शब्दों के हिन्दी समानार्थक शब्द) — 5 अंक
4. संक्षेपण — 5 अंक

5. पल्लवन - 5 अंक
6. वाक्यांश के लिए सार्थक शब्द - 5 अंक
7. प्रारूप - 5 अंक
8. शब्द युग्म : अर्थ-भेद - 5 अंक
9. निबन्ध - 10 अंक

गद्य संकलन

1. ग्रामोत्थान - नानाजी देशमुख, दीनदयाल शोध संस्थान चित्रकूट
2. पर्यावरण और सनातन दृष्टि छगन मेहता, संक्रान्ति और सनातनता, संकलन से वागदेवी प्रकाशन बीकानेर
3. तितुरता हुआ गणतंत्र (व्यंग) - हरिशंकर परसाई, तिरछी रेखाएँ, वाणी प्रकाशन दिल्ली
4. लछमा (रेखाचित्र) महादेवी वर्मा अतीत के चलचित्र वाणी प्रकाशन नई दिल्ली
5. अग्नि की उड़ान (परिच्छेद 16) ए.पी.जे. अब्दुल कलाम प्रभात प्रकाशन नई दिल्ली
6. भेडाघाट : मार्बल रॉक्सोर धुआधार - अमृत लाल बेगड अमृत्यस नर्मदा ग्रंथ, मध्यप्रदेश अकादमी, भोपाल, मध्यप्रदेश
7. आवाज का निलाम (एकांकी) धर्मवीर भारती गद्य प्रभा- डॉ. नवल किशोर पंचशील प्रकाशन जयपुर
8. सवाचेती विजयदान देथा, आउटलुक पत्रिका 03.10.2005
9. हिन्दी भाषा और उसकी विशासत - डॉ. विद्यानिवास मिश्र, हिन्दी साहित्य का पुनरावलोकन विद्या निवास मिश्र, प्रभा प्रकाशन दिल्ली
10. सुसंग-कुसंग-सीताराम महर्षि, कृष्ट कुटीर, रतनगढ़, चुरु (राज.)
11. ये हैं प्रोफेसर शशांक - डॉ. विष्णुकान्त शास्त्री, 'समय के पाथेन बनने दो' संग्रह, लोक भारती इलाहाबाद (उ.प्र.)
12. तुलसी के काव्य में 'कुराज' और 'सुराज' - प्रो. सुर्य प्रसाद दीक्षित साहित्यिक डी 54, निराला, नगर लखनऊ (उ.प्र.)

पद्य - संकलन

1. गंगावतरण, भारतेन्दु हरिश्चन्द्र 'भारतेन्दु समग्र' संपादक, हेमन्त शर्मा हिन्दी प्रकाशन संस्थान, वाराणसी (उ.प्र.)
2. गोवर्धन धारण, हरिऔध 'प्रिय प्रवास' महाकाव्य हिन्दी साहित्य कुटीर वाराणसी, (उ.प्र.)
3. भारत वन्दना, मैथिलीशरण गुप्त 'मंगल-घट' काव्य ग्रंथ साहित्य (नीलाम्बर परिधान) सदन चिरगांव, झांसी (उ.प्र.)
4. समर शेष है रामधारी सिंह दिनकर 'परशुराम की प्रतिष्ठा' ग्रंथ से राजपाल एण्ड संस, दिल्ली

5. वीरों का कैसा हो बसन्त, सुभद्रा कुमारी चौहान 'सुभद्रा कुमारी चौहान' सम्पादक : सुधा चौहान साहित्य अकादमी नई दिल्ली
6. चल पड़े जिधर दो डगड सोहन लाल त्रिवेदी 'राष्ट्रीय गीत संग्रह' साहित्य अकादमी नई दिल्ली
7. श्रम दयाकृष्ण विजय, 'श्रम धरा' अर्चना प्रकाशन, अजमेर।
8. भारती की साधना, इन्दुशेखर तत्पुरुष 'हमारा दृष्टिकोण स्मारिका' 70/75 मानसरोवर जयपुर (राज.)

1. GENERAL ENGLISH

Duration: 3

Min Pass Marks: 36

MM 100

Objectives: This is essentially a language based Course. It aims at making students read English prose with a view to enlarging their comprehension of the language and encouraging them to develop reading habits. It also aims at giving those basic skills in grammar widening their vocabulary and teaching them to write simple and correct English.

1- Comprehension and Vocabulary

- a. Question based on content from the prescribed text. 10
 - b. Question based on a passage from the prescribed text to test the candidate's comprehension and vocabulary 20
 - c. Question based on an unseen passage to test the candidate's comprehension and vocabulary 10
- (There will be text of essays and short stories between 100 and 120 pages in length. The text book prescribed is "Language through Literature" (OUP, NEWDELHI)

2- Composition

- a. Letter/application writing 10 marks
- b. Paragraph writing/precise writing 10 marks
- c. Report writing 10 marks

3- Translation

- a. Elements of a sentence 2 marks
- b. Transformation of sentence 6 marks
- c. Modals 2 marks
- d. Tense Usage 2marks
- e. Determiners 2 marks
- f. Common errors in English 2 marks
- g. Phrasal verbs 4 marks

Phrasal Verbs:

- Break** : Break away, Break down, Break off, and Break up
Bring : Bring about, Bring in, Bring up, Bring down
Come : Come by, Come across, Come upon
Carry : Carry out, Carry on, Carry off, and Carry over.
Call : Call on, Call off, Call at.
Get : Gel Along, Get Away, Get By, Get Through, And Get Over.

6 / Syllabus / B.Sc. Home Science Pt. I

- Give** : Give up, Give away, and Give in
Hard : Hard up, Hard of hearing, Hard nut to crack, Hard to please
Look : look after, look in to, look forward to, look upto
Put : put out, put off, put up, put up with
Run : run after, run down, run over, run out of
Take : take after, take up, and take to

Books recommended:

1. A.J. Thomson and A.V. Martinet : A Practical English Grammar (Oxford Paper Back)
2. S.Pit Corder : Intermediate English Practice Book (Orient Longman)
3. Bhaskaran and Hordburgh : Strengthen Your English (OUP 1973)
4. T.I.h. Smith - Pearce : The English Errors of Indian Students (OUP)
5. I.K. Sharma and V.D. Singh : A practical Course of English (Ramesh Book Depot, Jaipur.

1. प्रारम्भिक हिन्दी

(ELEMENTARY HINDI)

(सामान्य हिन्दी के स्थान पर केवल अहिन्दी भाषी क्षेत्रों से आए हुए विद्यार्थियों के लिये)

उत्तीर्णांक : 36

अवधि : 3घण्टे

पूर्णांक : 100

अंकों का विभाजन -

1. पुस्तकों पर आधारित 50 अंक
 2. व्याकरण से संबंधित 20 अंक
 3. रचना से संबंधित 10 अंक
- क. लोकोक्तियों तथा मुहावरे आदि 10 अंक
 ख. पत्र लेखन अथवा निबन्ध 20 अंक

पाठ्यक्रम :

1. अध्ययनार्थ पाठ्य पुस्तकें : क. निबन्ध संग्रह, ख. कहानी- संग्रह
2. व्याकरण : शब्द-विचार, वाक्य विन्यास, वाक्य खण्ड, पद-क्रम का ज्ञान तथा इसमें होने वाली सामान्य त्रुटियों का ज्ञान।
3. रचना :
 क. मुहावरों तथा लोकोक्तियों का प्रयोग, काव्य में समान दिखने वाले शब्दों का अर्थ - भेद तथा उनका वाक्य में प्रयोग
 ख. पत्र लेखन, सरल निबन्ध।

पाठ्य पुस्तकें :

- क. निबन्ध संग्रह
 सुगम हिन्दी गद्य (सम्पादक) सूरज भान, राजपाल एण्ड सन्स, दिल्ली
 ख. गल्पदशिका 2, 7, 8, पाठों को छोड़कर

Syllabus / B.Sc. Home Science Pt. I / 7

- ग. व्याकरण एवं रचना-
 सुबोध व्याकरण एवं रचना - सं. श्री व्यथित हृदय संशोधन कर्ता - डॉ० अम्बाप्रसाद सुमन, श्री राम मेहरा एण्ड कम्पनी, आगरा।

MAIN PAPERS

**Paper I
 APPLIED SCIENCE**

Hours/Week- 2 hrs/ batch

Max. Marks : 50

Duration of Examination: 3hrs

Note: each theory paper is divided to three parts, Part -A, Part-B and Part-C
Part A : (10 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit.(each question is of 1 mark)

Part B : (10 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 2 mark)

Part C : (30 marks) contains at least 6 questions two from each unit(400 words) Candidate is required to attempt 3 question one from each unit. (each question is of 10 marks)

Contents:

Unit- I

Applied Chemistry

1. Tarnishing of Metals, its Prevention and Removal, Metal Polishes. Organic Coating Paints, Pigments, Wood Polish, Shoe Polish.
2. Elementary idea of the Chemistry of the following
 a) Polymers - Classification and their uses.
 b) Ceramic
3. Fuels - Classification, Calorific value, Solid fuels, Wood, Coal, Types and Selection, Liquid fuels- Petroleum, Gaseous fuels - Biogas, L.P.G. Oil Gas, Coalgas, Producer gas, Watergas, Non Conventional fuel, Solar energy.
4. Uses and Hazards of
 a) Cosmetics.
 b) Common Insecticides, Pesticides and rodenticides.
 c) Antiseptics and disinfectants.

Unit-II

Applied Physics

1. Mechanics -
 a) Introduction to Properties of matter solids liquids & gases.
 b) Simple machine -A brief introduction to mechanical advantage & efficiency.
2. Forces - Centripetal & centrifugal forces -spin dryer in washing machine dish washer.
3. Heat - Introduction to heat -sources & properties of heat, heat & temperature heat transfer, humidity, relative humidity & dew point.
4. Colour - Sources of colour, responses of eye to colour, methods of producing colour.

Unit-III
Applied Biology

1. Applied Biology
 - a) Structure of flower with details of its parts.
 - b) Important physiological processes (diffusion, osmosis, plasmolysis, absorption). Important of mineral nutrients in plants, role of micro organisms in soil fertility, nitrogen cycle, Carbon Cycle.
 - c) Propagation - Speed propagation - Viability, dormancy, seed treatment, planting, transplanting, plant protection from microbes and insects/pets for raising healthy seeding artificial methods - cutting, layering grafting.
 - d) Mendel's law of inheritance.
 - e) Morphology & life cycle of mosquitoes and housefly.
 - f) Economic importance of honey bee, silk moth, lac culture.
 - g) Characteristics of moulds, yeast and bacteria.

RECOMMENDED READING

BOTANY

1. Gopalaswamianger K.S. 1991, Complete gardening in India (Messers, Nagraj and Madras)
2. Handbook of Agriculture : ICAR , New Delhi 1987
3. Brickell C. 1993, Step by Step Gardening Technique (Royal Hort. Encyclopaedia of Practical Gardening, T.K. Bose and M.G. Som.; Vegetables Crops in India Naya Prakash, Calcutta 1986)
4. H.T. Harman and D. Kester : Plant Propagation, Principles and Practices (Printice Hall of India Pvt. Ltd. New Delhi 1986)
5. B. Choudhary : Vegetables (National Book of India, New Delhi 1986)
6. S. Kumar: Home gardening
7. J.L. Shreemali : Economics Botany (Kitab Mahal, Allahabad 1982)
8. Sudhir Pradhan : Economic Botany (Har Aanand Publications, New Delhi, 1995)
9. Robert, W. Sebery : Plants for Man (Printice Hall Incorporation 1972)
10. Sham Singh Fruit Cultivation in India.
11. Gangulee H.C., Dass K.S., Dass K.S and Dutta C.: College Botany Vol. I (New Central Book Agency Calcutta (1991))
12. Dutta A.C. : Botany For Degree Students (Oxford University Press, New Delhi, 1970)
13. Pelezar M.J., Chan and Krieg : Microbiology (Mcgraw Hill Book company. New York 1986)
14. Purohit S.S. : Microbiology, Fundamentals and Applications (Agro Botanica, Bikaner)

ZOOLOGY

1. Chatterjee K.D. : Parasitology (Published by the author) 1981
2. Chandler and Read : Introduction to parasitology (John Wiley and sons) 1960

3. Metcalf and Flint : Destructive and useful insects(Tata McGraw hill 1983)
4. Nayar Anathkrishnan and David : general and applied Entomology (Tata McGraw Hill 1986)
5. Roy & Brown: Entomology Medical and Veterinary including insecticides (Bangalore printing and publishing company) 1970
6. Kotpal : Morden Text book of zoology(Rastogi publications, 2000)
7. Jordan and Verma : Invertebrate Zoology(S. Chandanad Co. Ltd. 1998)
8. Jordan and Nigam : Animal Biology (Hindustani Book Depot , Lucknow 1986)
9. Dhoti A.K. : Silkworm biology and rearing (NECRT 1990)
10. Mehrotra V.S. Bee Keeping (Instruction cum Practical Manual), NECRT 1997
11. Winchester A.M. Genetics (A Survey of the principles of heredity) Oxford and IBH publishing company
12. Singh B.D. : Introduction to genetics (Kalyani Publishers 1997)
13. Atwal A.S. : Agricultural pests of India and South-East Asia, 1986
14. Outo and towel : Morden Biology (Holt, Rinchart and Winston Inc. New York. 1970)
15. Pelezar M.J. Chan and Krieg :Microbiology (Mcgraw hill Book Co. New York 1986) 5th Edition
16. Ravindra Nath Principles of Cytogenetics, Evolution, Plant Breeding, Genetics Engineering ,Biotechnology (Kalyani Publishers, 1997)
17. Verma V. (1986) A textbook of Practical Botany. Vol I-IV Rastogi Publications
18. Anderson D.B. and Mayer B.S. (1970) Plant Physiology , Van Nostrand Reinhold Co. East-west Press
19. Kochhar, P.L. (1994) A Textbook of Zoology Plant Physiology , Atma Ram & Sons, Delhi
20. Dhami, P.S. (1987) : A Textbook of Zoology, S.Nagin & Co. Jallundar
21. K.S. Gopalaswami lynger(1991) Complete Gardening in India , Bangalore, Gopalswami, Parthasarthy
22. Kocher, S.L. (1981) Economics Botany in tropics , MacMillan India
23. Hartmann, H. And kester, D.E. (1993) Plant Propagation Principle and Practice, N. Delhi, Prentice hall of India (Pvt.)Ltd.

Paper - 2

HUMAN PHYSIOLOGY

Hours/Week - 4 hrs/week

Max Marks : 100

Duration Examination - 3 hrs

Note: each theory paper is divided to three parts, Part -A, Part-B and Part-C
Part A : (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit.(each question is of 2 mark)

Part B : (20 marks) is compulsory and contain 5 question (50 words each) at

10 / Syllabus / B.Sc. Home Science Pt. I

least one question from each unit (each question is of 4 mark)

Part C : (60 marks) contains at least 6 questions two from each unit(400 words)

Candidate is required to attempt 3 question one from each unit. (each question is of 20 marks)

Objectives:

This course is enable the students to-

1. Understand the physiology of human body

Contents:

UNIT I

1. Elementary anatomy of various systems
2. Cell: Structure and function of cell, cell organelles.
3. Tissues: Classification, Structure and function
4. Gastrointestinal System
 - a) Structure and functions of various organs of the GI Tract
 - b) Digestion and absorption of food (protein, fats & carbohydrates) and role of enzymes and hormones

UNIT II

5. Respiratory System
 - a) Structure of lungs
 - b) Mechanism of respiration and its regulation
 - c) O₂ and CO₂ transport in blood
 - d) Vital Capacity and other volumes
 - e) Muscular exercises
6. Excretory System
 - a) Structure and function of kidney, bladder, formation of urine, role of Kidney in homeostasis
 - b) Structure and functions of skins
 - c) Regulation of Temperature of the body
7. Cardiovascular System
 - a) Blood and its compositions
 - b) Blood Groups
 - c) Coagulation of Blood
 - d) Structure and functions of heart
 - e) Heart rate, cardiac output, blood pressure and its regulation

Circulation of Blood

8. Skeletal System

- a) Types of bones, compositions and function of skeletal system
- b) Joints: types of joints

UNIT III

9. Endocrine Glands – Functions, impacts of hypo and hyper functioning
10. Reproductive System
 - a) Structure and function of sex glands and organs, including hormones

Syllabus / B.Sc. Home Science Pt. I / II

- b) Menstrual Cycle
- c) Physiology of Pregnancy, Parturition, Lactation and Menopause

11. Nervous System

- a) Elementary anatomy of nervous system
- b) Functions of different parts of the brain in brief
- c) Autonomous, sympathetic and parasympathetic nervous system
- d) Special Senses

12. Human Genetics

- a) Human Chromosomes, the inheritance and variation in man
- b) Abnormalities of autosomal chromosomes and chromosome structure
The generic basis of human disease, sickle cell anaemia, haemophilia
- c) Genetic Counselling.

References:

1. Guyton, A.C., Hall, J.E. (1996): Textbooks of Medical Physiology. 9th Ed. Prism Books(Pvt.) Ltd., Bangalore
2. Winwood (1998): Sear's Anatomy and Physiology for Nurses, London, Edward, Arnold
3. Wilson (1989) : Anatomy and Physiology in health and illness, Edinburgh, Churchill Living Stone.
4. Chatterjee, C.C.(1988) : A Textbook of Medical Physiology, London. W.B. Sounder's Co.

Paper 3

EXTENSION AND COMMUNICATION – I

Introduction to Extension Education

Hours/Week – 4 hrs /week

Max Marks : 100

Duration Examination – 3 hrs

Note: each theory paper is divided to three parts, Part –A, Part-B and Part-C
Part A : (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit.(each question is of 2 mark)

Part B : (20 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 4 mark)
Part C : (60 marks) contains at least 6 questions two from each unit(400 words)

Candidate is required to attempt 3 question one from each unit.

(each question is of 20 marks)

Contents :

UNIT I

1. Education

- a. Meaning : Definition and Need of Extension Educaiton
- b. Ways of importing Education :
 - i. Formal
 - ii. Non Formal
 - iii. Informal

- c. Meaning, Importance and Characteristics of
 i. Adult Education
 ii. Continuing Education
 iii. Distance Education
2. Extension Education
 a. Meaning and Definition of Extension Education and Home Science Extension. Scope of Home Science Extension Education and its relationship with other social science
 b. Principles of Extension Education

UNIT II

3. Qualities of an Extension Worker
 4. Extensions teaching approaches and methods
 a. Classification of Extensions teaching approaches
 i. Individual Approach
 ii. Group Approach
 iii. Mass Approach
 Characteristics, selection and use, advantages and limitations of each approach
 Classification of Extension Teaching aids, Characteristics, selection and use, advantages and limitations of each method/aid

UNIT III

5. Communication
 a. Meaning, Definition, Importance and scope nature of communication
 b. Functions of Communication
6. Communication Process
 a. Elements of Communication process and their characteristics
 b. Model of Communication Process
 c. Barriers of communication process
 d. Dale's cone of experience
7. Motivation: Meaning, Definition, Importance and role of motivation in extension education
 8. Learning: Meaning, Principles, Factors affecting learning process: Importance of Extension Education
 9. Teaching Steps of Extension Education.

PRACTICAL

Duration of Examination: 4 hrs
 Hours/Week: 2hrs

Max Marks: 50
 Min. Pass Marks: 18

1. Planning, Preparation & presentation of communication aids/media particularly for women and children
 a. Poster
 b. Chart/Flip Chart
 c. Flash cards/ Flip Book

- d. Flannel Graph
 e. Folder/Pamphlets/Leaflet
2. Planning & arranging any one
 a. Bulletin Board Display
 b. Window Display
 c. Exhibition
3. Planning Preparation & presentation of the following in Home Science
 a. Demonstration – Result/Method
 b. Role Play/Dramatization
 c. Puppet Show
4. Assess two of the following
 a. T.V. Programme – educational/ recreational
 b. Radio Programme – education/recreational
 c. New stories/items
 d. Social & commercial advertisement
 e. Magazine Articles
5. Developing skills in using (handling and care) of various instruments/equipments used for communication
 a. Overhead Projector
 b. Slide Projector
 c. Public Speaking Equipment
 d. Television
 e. VCR/VCD
 f. Computer & Other

Distribution of Marks:

1. File & Record	20 Marks
2. Any one graphics Communication aid	12 Marks
3. Bulletin Board/ window display presentation	6 Marks
4. Role Play/Puppet Show/Exhibition(Group Activity)	7 Marks
5. Viva Voce	5 Marks
Total	50 Marks

References

- Rogers, Alan, Teaching Adults in Extension Education for Development, Westwood Proc., Tilehurst, Reading Rg 316 LT England, Woodmans 1989
- Rogers, A. Teaching Methods in Extension Education for Development Westwood row, Tilehurst, Reading RG 316 LT, England, Woodmans 1989
- Reddy, A. Extension Education, Bapatia India, Sreelakshmi, Press, 1987
- WHO, Education for Health, World Health Organisation, Switzerland. Geneva, 1988
- Dhamma, O.P. & Bhatnagar, O.P, Extension and Communication for Development, Oxford and IBH Publishing Co. New Delhi, 1985

6. Extension Education in Community Development, Directorate of Extension Ministry of Food and Agriculture, Government of India, New Delhi, 1961
7. Supe, S.V. An Introduction to Extension Education, Oxford and IBH, Publishing Co. Pvt. Ltd. New, 1980
8. Waghmare, S.K. Teaching Extension Education, Prashant Publishers, Vallabh Vidyanagar, 1980
9. Parlikar, K.P., The Art of Teaching Home Science, Ekvira Education process.
 - a. Teaching – Steps of extension education
 - b. General Guide to learning and teaching and their implication in extension education. Publications, Baroda, 1990
10. Bhatia, R.L. Developing Presentation Skills, Wheelers Publishing, New Delhi, 1994
11. Prereira M.J., Development Communication Handbook – Ideas Skills, Illustrations, Satprabhoshon Sanchar Kendra, Indore. 1994
12. Yadav, Seema, Teaching of Home Sciences, Anmol Publicatins Pvt. Ltd. New Delhi 1978
13. Devdas, R.P. Methods of Teaching Home Sciences, National Council of Educational Research and Training, New Delhi 1978
14. Singh, R. Textbook of Extension Education, Sahitya Kala Prakashan Ludhiana, 1987

Journals:

1. Channing Villages, PPS Gussain for Consortium on Rural Technology, D-320, Laxmi Nagar, New Delhi-110092
2. Kurukshetra, Director, Publications Divisions, Ministry of I&B, Government of India, Patila House, New Delhi-110001
3. Yojana, Director, Publications Divisions, Patiala House, New Delhi – 110003
4. Indian Journal of Extension Education, The Indian Society of Extensions Education, Division of Agriculture Extension, IARI, New Delhi – 110012

Paper 4**FOODS AND NUTRITION – I****Fundamental of Foods and Nutrition**

Hours/Week – 4 hrs /week

Duration Examination – 3 hrs

Max Marks : 100

Note: each theory paper is divided to three parts, Part –A, Part-B and Part-C
Part A: (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit.(each question is of 2 mark)
Part B: (20 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 4 mark)
Part C: (60 marks) contains at least 6 questions two from each unit (400

words)

Candidate is required to attempt 3 question one from each unit.
 (Each question is of 20 marks)

Contents:**UNIT I**

1. a. Concept and definition of the terms – nutrition food, nutrients, malnutrition and health. Relationship between Food, Nutrition, health and disease. Brief History of nutritional science. Scope of Foods and Nutritions
 - b. Functions of Food – Physiological, psychological and socio-cultural functions
 - c. Factors affecting selction of food & food-related behaviour of families- availability agriculture production, food cost and economy, environment, sociocultural, psychological and religious factors, role of industrialization, urbanization, work pattern mass media, et. Acceptability of foods – sensory qualities, likes & dislikes, knowledge, attitude & practices regarding food-fads, fallacies and beliefs
2. Concept of minimum nutrient requirements and Recommended dietary Allowances, General methods of assessment of nutrient needs for-energy, protine, vitamis and minerals
3. Nutrients: Macro and Micronutrients. Classification, chemistry and properties, functions, sources, digestion, absorption and utilization, Recommended Dietary Allowances, Deficiency and Excess of –
 - a. (i) Water (ii) Carbohydrate (iii) fats(including FFA) (iv)Fiber (v) Protien (including – quality definition methods of improving protein quality of diets)
 - b. Minerals & Trace elements – calcium, phosphorous, magnesium, manganese, iron, copper, zinc, selenium, fluorine, iodine, sodium and potassium
 - c. Vitamins –
 - i. A.D. E. & K.
 - ii. Water soluble vitamins – Thiamine, riboflavin, nia cin, pyridoxine, pantothenic acid, folic acid, cynocobalamin, ascorbic acid

UNIT II

4. Energy Metabolism-
 - a. Units of measuring energy, fuel value of foods, methods of measuring energy value of foods, calculating of energy value of diets
 - b. Concepts of energy balance – components of energy expenditure and factors affecting the same. Measurement and determination of Basal Metabolic Rate and EnergyExpenditure, Energy requirement and recommended

- allowances
5. (a.) Foods (in brief): structure, food composition, nutritional contribution, selection, storage and care of the following.
 - a. Cereals and millets
 - b. Pulses and legumes
 - c. Nuts and oilseeds
 - d. Milk and milk products
 - e. Vegetables & Fruits
 - f. Eggs
 - g. Meat, fish and poultry
 - h. Sugar and sugar products
 - i. Fats and oils
 - (b) Classification and nutritional contribution, uses, storage and care of beverages:
 - (c) Condiments and spices: Use in Indian cookery

Tea, coffee, cocoa, chocolate and other beverages

(c) Condiments and spices: Use in Indian cookery

UNIT III

6. Concepts of Basic Food Groups and Food Exchanges list
7. Food Preparation
 - a. Basic terminology used in food preparation
 - b. Reasons of cooking food
 - c. Principles of food preparation
 - d. Methods of cooking – classification, procedure, merits & limitations
 - e. Effects of cooking and home processing on food constituents and colour, texture
 - f. Improving nutritional quality of foods – improving bio availability of nutrients and enhancement of quality of diets by –
 - i. Germination
 - ii. Fermentation
 - iii. Supplementation
 - iv. Substitution
 - v. Combination
 - vi. Fortification and enrichment
8. Food adulteration: definition, common adulterants and efforts to control : Food laws and standards

PRACTICAL

Hours/Week: 2 hr

Duration of Examination: 3 hrs

Objectives:

1. To acquire skills in food preparation techniques
2. To use appropriate methods of cooking for preparation of specific

Max. Marks : 50

Min. Marks : 18

3. Learn proper handling, preparation and service foods
4. Be familiar with evaluation of food products for their quality characteristics

Contents:

1. Principles and methods of working in food laboratory or Kitchen
2. Use and care of kitchen equipment
3. Market survey for availability and cost of foods.
4. Determination of percentage of edible portions of food.
5. Weights and measures of dry ingredients, solid fat liquids, etc. Standard weights and measures, weight and their equivalent measures.
6. Controlling techniques
 - a. Weights and Measure – standard and household measures for raw and cooked foods
 - b. Recipe standardization technique
 - c. Evaluation of food as rich, moderate and poor sources of specific nutrients
7. Cooking methods – various preparations using different cooking methods.
8. Preparation, serving and evaluating food items:
 - a. Beverages – tea, coffee, cocoa, fruits juice, punches, milk shakes etc.
 - b. Cereals – Breakfast cereals – upma, pohae, variation in paranthas, purees, chapatti, rice, pulao, biriyani, sandwiches, pastas, pancakes, porridges, biscuits, cookies, cakes etc.
 - c. Pulses – using whole, dehusked and sprouted pulses – chana, rajmah, sambharwada, dhokla, kadi etc.
 - d. Vegetables – dry vegetables, curries, koftas, baked vegetables dishes, cutlets etc.
 - e. Salads: Decorative and nutritious
 - f. Soups and Stews : Clear and nutritious soups
 - g. Milk, Paneer, Curd, Cheese and Khoa preparations – custards, kheers, ice-creams, Indian Sweets – barfis, gulab jamun, chenna, sandesh etc.
 - h. Eggs – hard and soft boiled, poached, scrambled Omlette and eggnog etc.
 - i. Meat fish and poultry (Optional)
 - j. Baked products: cakes and biscuits
 - k. Snacks – Savoury: mathri, kachories, pakoras etc. Sweets: Ladoos, Gunjias, Malpuas
 - k. Combination recipes
9. Food Adulteration: Qualitative testing of some common foods for adulteration- Demonstration.

Distribution of marks

- (a) Preparation of two dishes

18 / Syllabus / B.Sc. Home Science Pt. I

1. Quality characteristics (12+12)	24
2. Method of works & cleanliness	6
3. Serving	6
(b) Files and Record	10
(c) Test for adulterants (2) in given food.	4
Total	50

Paper 5

FAMILY RESOURCE AND MANAGEMENT – I

Introduction to Resources Management

Hours/Week – 4 hrs /week

Max Marks: 100

Duration Examination – 3 hrs

Note: each theory paper is divided to three parts, Part –A, Part-B and Part-C
Part A: (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit. (Each question is of 2 mark)

Part B: (20 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 4 mark)

Part C: (60 marks) contains at least 6 questions two from each unit (400 words)

Candidate is required to attempt 3 question one from each unit. (Each question is of 20 marks)

UNIT I

1. Introduction to Management
 - a. Management and Home – management definitions & objectives
 - b. Principles and function of Management(in brief)
 - c. Obstacles to the improvement of management
 - d. Ethics in management
2. Management as a system- Definition, elements, characteristics and its application in family management
3. Motivating factors of management
 - a. Values – definition, characteristics, classification, process of valuing
 - b. Goals – meaning, characteristics, types, general family goals.
 - c. Standards – definition, classification, criteria for choosing standards.

Unit-II

4. Management process –
 - a. Planning – definition, importance, types and techniques of planning.
 - b. Controlling- definition, phases of controlling, direction and guidance.
 - c. Evaluation- definition, importance, procedure of evaluation.
5. Resources in the family – definition, types, characteristics, factors affecting the use of resources
6. Decision making- definition, types, characteristics, process of decision making, levels of resolving conflict.

UNIT III

7. Management of time- tools in time management- time cost, time norms, peak load, work curve, rest period, process of managing time, time demand

Syllabus / B.Sc. Home Science Pt. 1 / 19

during different stages of the family life cycle.

8. Management of Energy- classification of house hold tasks, process of energy management

Fatigue- types, causes, measures to avoid fatigue.

9. Work simplification – definition, objective, factors determining the efficiency of worker. Techniques of work simplification. Mundel classes of change.

References:

1. Gross and Crandall E. (1963) – Management for Modern Families, Appleton Century Craft, New York
2. Nickel and Dorsey, J.M. (1970) Management in family living Wiley Eastern Ltd. New Delhi
3. Mullick, Premalak (2000) Textbook of Home Science Kalyani Publishers, New Delhi
4. Stidal R.E. & Bratton, E.C. Work in Home
5. Gross I.H. Crandall, E.W. Crandall and Knall, N.M (1980) Management for Modern Families
6. Donnelly J.H. Gibson, J.L. and Francirish J.M. (1995) Fundamentals of Managements Chicago
7. Fisher C.O. (1997) Human Resources Management Chennai, All India Publishers and Distributors
8. Kale M.G. (1998) Management and Human Resources
9. प्रबन्ध – नीलखा

PRACTICAL

Hours – 2 hrs/week

Max Marks- 50

Duration of Examination- 3 hrs

Min Pass Marks : 18

1. Identification of self as a resource – swot analysis (who am I)
2. Building decision making abilities through management games
3. Preparation of time plans for self and family
4. Making a chart/poster/pemplets on resources conservation
5. Application of managerial process for various events like party, occasion etc.

Marks Distribution

1. Records and file	10 (internal)
2. Report of Exercise 1,2,3	15 (internal)
3. Exercise -4	05
4. Exercise-5	10
5. Viva	10

Total Marks 50

Paper 6

HUMAN DEVELOPMENT I

Life Span Development

Hours/Week – 4 hrs /week

Max Marks: 100

Duration Examination – 3 hrs

Note: each theory paper is divided to three parts, Part -A, Part-B and Part-C
Part A: (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit. (Each question is of 2marks)

Part B: (20 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 4 mark)

Part C: (60 marks) contains at least 6 questions two from each unit (400 words) Candidate is required to attempt 3 question one from each unit.

(Each question is of 20 marks)

Contents:

UNIT I

1. Introduction to Human Development
 - a. Concept, Meaning & Definition,
 - b. Growth and Development
 - c. Human Development and Human Psychology
2. a. Methods of studying Human Development
 b. Principles of Human Development
 c. Factors affecting Human development
3. Stages of Human Development
4. Prenatal Development: The Period of the Zygote, Embryo and Fetus, The Apgar Scale
5. Infancy and Babyhood: New Born Reflexes, The sequence of motor development in infancy, developmental task in babyhood, Physical Growth :Changes in Body size, body proportions, muscles fat make up and gross motor skills, Handedness, social smile, separation and stranger anxiety

UNIT II

6. Childhood :Stages of Childhood, Characteristics and developmental tasks.
7. Speech and Language development
 - a. Pre speech & speech forms of communication
 - b. Hazards in speech development :speech disorders and speech defects.
 - c. Chomsky's Theory
8. Cognition Development
 - a. Cognition, Cognitive concepts of piaget's Theory
 - b. Cognitive activities for early childhood, factors affecting cognitive development
9. Moral Development
 - a. Definition and Pattern of moral development
 - b. Stages of of Moral development (moral development in Babyhood, Early childhood ,late childhood)
 - c. Discipline: Definition Techniques of discipline
10. Social Development
 - a. Definition, importance of early social experiences of a child

- b. Social development in Babyhood, special behaviour of Babyhood
- c. Social development in Early Childhood and late Childhood, Some common forms of social behaviour in Early Childhood

UNIT III

11. Emotional Development

- a. Childhood Emotions : Fear, Shyness, Worry, Anxiety, Anger, Jealousy, Curiosity, Affection
- b. Characteristics of Children's Emotions
- c. Factors affecting Childhood Emotionality
- d. Emotional Dominance, Heightened Emotionality
- e. Control on Emotions; Repression, Regression, Displacement, Indutriousness, Emotional catharsis

12. Play

- a. Meaning, Definition and difference between work and play
- b. Characteristics of Children's play
- c. Types of Play ,importance of play, Factors influencing Development of Children's play

13. Creativity

- a. Meaning, Development of Creativity
- b. Conditions fostering creativity and unfavourable conditions to creativity
- c. Expression of Creativity in Childhood

PRACTICAL

Hours - 2 hrs/week

Duration of Examination-3hrs

Max Marks- 50

Min Pass Marks : 18

1. Assessment of Growth and development through Anthrope metry
2. Psychometric Testing - use of related to language and emotional development
3. Use of different method of studying Human Development
4. Preparation and use of teaching aids for promoting various developments
5. Planning and implementing activities promoting various development

Distributions of Marks

1. Anthropometry	5
2. Psychimetric testing	5
3. Method of studying human development	10
4. Teaching Aids	10
5. Activity Planning & Implementation	5
6. File & record	10
7. Viva Voce	5
Total	50

References:

1. Hurlock E.B. : Child Development, 1978 McGraw Hill, London

2. Hurlock E.B. : development Psychology , A Life Span Approach 1980, 5th ed. Tata McGraw Hill, New Delhi
3. Mussen, P.H.: Conger, J.J.:Kagan J. Child development and Personality 1979, 5th ed. Harper and Row, New York
4. Gordan, I.J. (1975) : Human Development : Harper and Row , New York
5. Mussen, P. : Conger , J.J. Kagan J. And Huston, A.C. (1990): Child Development and Personality, New York
6. Santrock, J.W. (1988) Children Lowa: WMC Brown
7. Saraswathi, T.S. and Kaur B. (1993) : Human Development and Family studies in India New Delhi, Sage Publications
8. Sinha D. (1981) Socialization of the India Child, Concept New Delhi
9. Berk, L.E.(1996) Child development, Prentice hall , New Delhi
10. Craig G. (1999): Human Development ,Prentice Hall , NJ
11. Bigner, J.J. (1994) Individual and Family Development : A life span inter disciplinary approach, Prentice Hall
12. Harris, C.(1986) Child Development, West publishing company
13. Steward, Clarke. A. And Friedman S.(1987) Child Development : Infancy through Adolescence, John Wiley and sons
14. Papalia, D.E. and Olds , S.W. (1978) Human Development McGraw Hill Book Company
15. Sharma, N. (1999), Understanding Adolescence , New Delhi, NBT
16. Devedas R.P. Jaya, N.A.: text book of Child Development, 1984 Mac Millan, New Delhi
17. Gulati R et al (1994) Child Development: A Practical Manual , Phoenix Publishing House Pvt. Ltd. New Delhi

Paper 7**TEXTILES AND CLOTHING I****Introduction to Textile and Clothing**

Hours/Week – 4 hrs /week

Max Marks: 100

Duration Examination – 3 hrs

Note: each theory paper is divided to three parts, Part –A, Part-B and Part-C
Part A: (20 marks) is compulsory and contain 10 Questions (20 words each) at least 3 Questions from each Unit.(each question is of 2 mark)

Part B: (20 marks) is compulsory and contain 5 question (50 words each) at least one question from each unit (each question is of 4 mark)

Part C: (60 marks) contains at least 6 questions two from each unit (400 words)

Candidate is required to attempt 3 question one from each unit.

(Each question is of 20 marks)

Contents:

UNIT I

1. Textile Fibres & Their Properties
 - a. Classification of Fibres, terminology in textiles

- b. History, Molecular structure, production and properties primary and secondary and uses of cotton, linen, jute, wool, silk, rayon, polyester, acrylics, elastomeric fibres.

UNIT II

2. Yarn Constructions
 - a. Basic Principles of Yarn Constructions
 - b. Mechanical Spinning (cotton, wool and other)
 - c. Chemical Spinning (wet, dry, melt and other methods)
 - d. Types of yarns – Classification and Manufacturing (Simple, Complex and Sewing thread)
 - e. Properties of Yarn – yarn numbering systems, strength and twist
3. Introduction to clothing
 - a. Social and Psychological aspects of clothing
 - b. Functions of Clothing
 - c. Theories of clothing
 - d. Clothing in relation to status, culture and rituals
 - e. Individuality and conformity

UNIT-III

4. Fashion
 - a. Terminology, sources , fashion cycle and season
 - b. Factors favouring fashion cycle and season
 - c. Customer demand and fashion marketing
 - d. Fashion Change
5. Principles of Clothing Constructions
 - a. General Principles of clothing constructions drafting and making paper patterns
 - b. Body measurement – importance of taking body measurement and its relation to sizes and different types of garments
 - c. Preparation layout, pinning , marking and cutting
 - d. Equipment and supply used in clothing construction, their maintenance, problem and faced remedies with specific reference to sewing machine.

PRACTICAL

Hours – 2 hrs/week

Max Marks- 50

Duration of Examination-3hrs

Min Pass Marks : 18

1. Fibre Identification – visual, microscopic, burning and chemical
2. Thread count
3. Hand Stitches – (Sample)
 - a. Functional – Temporary and permanent
 - b. Decorative
4. Seams and seam –finishes (Sample)
5. Fullness plackets , fasteners (Simple)

24 / Syllabus / B.Sc. Home Science Pt. I

6. Collars, sleeves, pockets (simple and variations) (Sample)
7. Patch Work and darning (Sample)
8. Introduction to sewing machine and its functions
9. Practical related unit V of theory syllabus
10. Basic bodice block – child and adult

Distribution of Marks

1. Record & File	10 marks
2. Fibre Identification	7 marks
3. Thread count	7 marks
4. Hand stitches, seams & seam finishes	10 marks
5. Sample of item no. 6, 7, and 8	6 marks
6. Vice-voce	10 marks
Total	50 marks

References:

1. Joseph, Marjory L: "Introductory Textiles Science" Holt, Rinehart and Winston N. York
2. Wintage, Isabel B : "Textiles and Fabrics and Their Solutions" Prentice Hall. Inc. Englewood Cliffs, N. Jersey
3. Joseph, Marjory L: Essentials of Textiles " Holt, Rinehart and Winston, New York
4. Hess, Katherine Paddock " Textiles Fabrics and Their uses Oxford and IBH-Publishing Co. N. Delhi
5. Corbman Bernard : "Textiles fibre to Fabric" : McGraw Hill-Book Company, New York
6. Hollen Norma. Saddle Jane, Angford Anna – "Textiles": Macmillan Publishing Co. Inc. N. York
7. Deulkar Durga : "Household Textiles and Laundry Work" : Atma Ram & Sons. N. Delhi
8. Dhatyagi: Susheela : "Fundamentals of Textiles and Their care": Orient Longmans Bombay
9. Smith Betty F. And Black Ira Textiles in Perspective – Prentice Hall; INC Englewood life elifee Jersey
10. Kefgen, Mary and Speent Phylies – "Individuality in selection and Personal appearance" – Macmillan Publishing, New York
11. Erur, Mabil and Kinchen , "Clothing for Morden", Macmillan Publishing, New York
12. Mathew Mary: Practical Clothing Construction I & II Cosmic Press, Madras
13. Doongaji S and Deshpande R- Basic Processes of Clothing Construction