

the circular of Dr. Ram Manohar Lohia Avadh University, Faizabad
No. लो. अ. वि./शै./3830/2002 dated 3.7.2002.

V-FEE STRUCTURE

All regular candidates of B.Sc. Home Science Part I, II & III shall pay fee in accordance with G.O. No. 1907/70-97-02 (85)/97 dated 11 Nov. 1997 of U.P. State Government.

VI-COURSE OF STUDY

The three-year B.Sc. Course in Home Science shall be spread over three academic sessions viz. Part I, II & III. The course of study shall be divided into three groups A, B & C in Part I, II & III each group shall carry a maximum of 200 marks. Each group contains two papers, which may or may not have practical. Students admitted to faculty of Home Science shall have to study all compulsory papers in Part I, II & III as given bellow :

MAIN COURSES

B.Sc. (HOME SCIENCE)

FIRST YEAR

GROUP-A

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-I	English Grammar & composition	50	—	50
Paper-II	Basic Sciences	90	60	150
	Total			200

GROUP-B

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-III	Ecology and Environment	60	40	100
Paper-IV	Sociology and Psychology	60	40	100
	Total			200

GROUP-C

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-V	Computer Application	60	40	100
Paper-VI	Research Methods and Statistics	60	40	100
	Total			200

MAIN COURSES
B.Sc. (HOME SCIENCE)
SECOND YEAR
GROUP-A

Paper	Name of the paper	Theory	Practical	Total
Paper-I	Extension management and communication Technology	60	40	100
Paper-II	Introduction to textile	60	40	100
	Total			200

GROUP-B

Paper	Name of the paper	Theory	Practical	Total
Paper-III	Human Development-I	60	40	100
Paper-IV	Resource management	60	40	100
	Total		200	

GROUP-C

Paper	Name of the paper	Theory	Practical	Total
Paper-V	Principles of Nutrition	60	40	100
Paper-VI	Empowerment through entrepreneurship development	60	40	100
	Total			200

MAIN COURSES
B.Sc. (HOME SCIENCE)
THIRD YEAR
GROUP-A

Paper	Name of the Paper	Marks		Total
		Theory	Practical	
Paper-I	Cooking and baking	—	100	100
Paper-II	Functional interiors and space management	60	40	100
	Total			200

GROUP-B

Paper	Name of the Paper	Marks		Total
		Theory	Practical	
Paper-III	Human Development II	60	40	100
Paper-IV	Programme Planning and Evaluation	60	40	100
	Total			200

GROUP-C

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-V	Clothing construction and costume management	60	40	100
Paper-VI	Home Science applied to community	60	40	100
Total				200

VII-ATTENDANCE

A student shall be deemed to have pursued a regular course of study in a subject during each year provided he/she attended at least 75% of the classes actually held in each subject of his/her examination.

VIII-EXAMINATION

1. The B.Sc. Home Science Part I, II & III examinations shall be conducted in the month of March/April every year by means of written papers or partly written papers and partly practicals. Examination in practical shall not preclude putting oral questions to the candidates by examiners.
 2. All applications to appear at examination shall be addressed to the Registrar of Dr. R.M.L. Avadh University, Faizabad through the Principal concerned and shall be presented in such time and such manner as may be notified by the Registrar of Examinations.
 3. His/Her application form and fees shall be dispatched through the proper channel* so as to reach the Registrar of Examinations on the date to be notified for each examination. Even in the case of candidates who appear as ex-student** for any examination, the application form through the proper channel should be submitted to the Registrar of Examination.
 4. No candidate shall be allowed to pursue in B.Sc. Home Science course as a private candidate.
- * The application forms of regular students shall be forwarded by the Principal of the college.
- ** A student having the eligibility to appear in the examination but could not appear or declared fail shall be deemed to be an ex-student.

IX-SCHEME OF EXAMINATION

Pattern of question in each paper shall be as follows :

1. Objective Questions : 10% of Max. Marks Approximately
2. Short Questions : 30% of Max. Marks Approximately.
3. Long Questions : 60% of Max. Marks Approximately.

X-ADMIT CARD

A candidate may not be admitted into examination room unless he/she produces his/her admit card to the officer conducting examination or satisfy such officer that it will be subsequently produced.

XI-DECLARATION OF RESULT

Candidates must secure the following minimum percentage of marks for passing part I, II & III of B.Sc. Home Science Examinations :

1. 33% in theory and practical separately in each group.
2. A candidate securing 25% marks in any of the three groups excluding practicals not less than 33% marks in the remaining two groups shall be declared passed provided he/she secured minimum aggregate of 33% in theory only.

The Division in B.Sc. Home Science shall be declared on the basis of aggregate marks of Part I, II & III examinations as given below:

1. Ist Division 60%
2. IInd Division 45%
3. IIIrd Division 33%

NOTE :-

A candidate may appear in the back paper examination in accordance with regulations issued by Dr. RML Avadh University, Faizabad.

MAIN COURSES
B.Sc. (HOME SCIENCE)
FIRST YEAR
GROUP-A

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-I	English Grammar & composition	50	—	50
Paper-II	Basic Sciences	90	60	150
	Total			200

GROUP-B

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-III	Ecology and Environment	60	40	100
Paper-IV	Sociology and Psychology	60	40	100
	Total			200

GROUP-C

Paper	Name of the Paper	Marks		
		Theory	Practical	Total
Paper-V	Computer Application	60	40	100
Paper-VI	Research Methods and Statistics	60	40	100
	Total			200

FIRST YEAR**PAPER-I****COURSE TITLE : ENGLISH GRAMMER AND COMPOSITION****Catalogue Description :**

A course in English aiming at improving ability to comprehend, write and speak the language through the study of parts of speech, tense, articles, voice, narration, idioms and phrases, Antonym etc. Improving writing skills of students through letter writing and essay writing.

Objectives :

To enable students to obtain knowledge about fundamentals of English grammar. Develop skills and techniques that are essential for precis writing, Expansion of idea, Letter and essay writing.

Syllabus**Theory****Marks : 50****SECTION-A (Applied Grammar)****S.No.****Theory Topics**

1.

Parts of Speech

noun-kinds, Number, Gender, Person, Case

II. Pronouns

III. Adjectives

IV. Verbs

V. Prepositions

VI. Conjunctions

VII. Interjections

2.

Tense

3.

Article

4.

Voice

5.

Narration

6.

Word Power-idioms and phrases, Antonym

SECTION-B (Composition)

1.

Precise writing

2.

Punctuation

3.

Expansion of ideas

SECTION-C (Letter Writing and Essay Writing)

1.

Private Letters

2.

Business Letters

Reference Books :

1. Allen, W. Stannard. Living English structure, Orient Langmans, London, 1962.
2. Jones, Daniel, Everyman's English Pronouncing Dictionary, University book stall, New Delhi, 1993.
3. Jones, Daniel, An out line of English Phonetics, Arnold, London, 1970.

4. George, H.V. common error in english learning, M/S Newbury House, London, 1970.
5. Sharma, S.D.A. Text book to spoken and written English, Vikas, Delhi, 1984.

FIRST YEAR**PAPER-II****COURSE TITLE : BASIC SCIENCES**

Catalogue Description : An elementary study of physics, chemistry and basic nutrition science.

Objective : To enable students to :

1. Gain knowledge about the essentials of chemistry and physics.
2. Develop Fundamental knowledge about nutrition. Understand adulteration, additive, preservation fortification and biochemical aspects of nutrition science.

Syllabus**Theory****Marks : 15****SECTION-A : CHEMISTRY**

S.No.	Theory Topics	Lecture No.
1.	Elementary students of atomic structure chemical bonding	1
2.	Water-Desalination of water, hard and soft water. Hardness and their removal, method of purification of water 'for drinking purpose' in city, ionisation of water, ionic product of water, idea of PH, Main concept regarding Acids and bases.	2
3.	Organic Chemistry : Introduction, Origin, classification, nomenclature and purification of organic compounds, Empirical, molecular and structural formula of organic compounds.	2
4.	Hydrocarbons (Elementary idea about alkanes and alkenes & Alkeynes), IUPAC names of simple Hydrocarbons.	1
5.	Acids-Preparation, properties and use of acetic acid and oxalic acid.	1
6.	Elementary study of essential oils.	1
7.	Soaps, shampoos, hair dye (Elementary Knowledge)	1

Syllabus**Theory****Marks : 15****SECTION-B : PHYSICS**

S.No.	Theory Topics	Lecture No
1.	Basic Units of measurement, Domestic electricity, distribution Methods, Basic switches, plug, adopter, Socket, fuse, conductors and insulators.	2
2.	Concept and measurement of temperature and pressure, Nature of Heat and its modes of transmission. Nature of light and its basic properties only, concept of propagation, reflection, refraction, polarization, Mirror and lenses.	3
3.	Basic electronics circuit elements (Resistors, capacitors,	

- Inductors, Diode and transistor) Building blocks of computer Radio, T.V. (Basic knowledge). 3
4. Sound-Recording and reproduction of sound, Echoes, Resonance. 1

Syllabus**Theory****Marks : 60****SECTION-C****COURSE TITLE : BASIC NUTRITION SCIENCE**

Catalogue Description : Composition of Foods, functions of foods, nutritional value of foods and meals, nutrients. Function and deficiency diseases.

S.No.**Theory Topics**

1. Definitions- Food, Nutrition, Nutrients, Nutritional status, Optimum Nutrition, Under nutrition, dietetics.
2. Function of food, food groups.
3. In short description of cereals, Millets, Pulses, Nuts and seed, Fruits. Vegetables, Milk and Milk products, Egg, Meat, Fish and poultry, Fats and oils. Sugar and jaggery. Spices and condiments.
4. Food Adulteration : common adulterants, food additives, Measures to overcome food adulteration, food laws.
5. Improving Nutritional quality: germination, fermentation, Supplementation, substitutions. Fortification and enrichment.
6. Food Preservation-Principles and Methods- importance of food preservation, causes of spoilage, principles of food preservation, Methods of food preservation.
7. Home scale methods of food preservation in short Drying, pickling, Jam, Jellies, bottling fruit juices or squashes, freezing.
8. Elementary knowledge of microbiology, microorganism and food. Food poisoning-(in short) Types of foods poisoning, salmonella food poisoning, staphylococcal food poisoning. Botulism., C.I, perfringens food poisoning, B. cereus food poisoning. Prevention and control.
9. Biochemical Aspects: carbohydrates: Definition, classification and functions of
 - (a) Monosaccharides —glucose, fructose, galactose
 - (b) Disaccharides —maltose, lactose, sucrose
 - (c) Polysaccharides —Starch, glycogen.
10. Lipids: Definition and classification of lipids, types and properties of Fatty acids composition and characteristics of fats, types and functions.
11. Proteins: Definition, classification, functions of proteins, Amino acids, sources.

12. Enzymes: Definition, types and classification of enzymes, definition and types of coenzymes.
13. Vitamins: Fat soluble and water soluble vitamins, function, RDA, sources, Deficiency diseases.

PRACTICAL SYLLABUS**SECTION-A :****CHEMISTRY PRACTICAL****MARKS: 20****S.No.****Practical Title**

1. Qualitative analysis of organic compounds (test for following compound and their identification) Methanol, ethanol, acetic acid, oxalic acid, fructose and glucose.
2. Estimation of available chlorine in bleaching powder.
3. Acid base titration (oxalic acid-sodium hydroxide)

SECTION-B :**PHYSICS PRACTICAL****MARKS: 20****S.No. Practical Title**

1. Repairing of fuse, Iron
2. Formation of electrical-circuit to glow a bulb.
3. Measurement of temperature, length, density, Mass, weight and volume.
4. Study of series and parallel combination of switches.
5. Ohm's law (verification and resistance determination).

SECTION-C :**BASIC NUTRITION PRACTICAL****MARKS: 20****S.No. Practical Title**

1. Test of carbohydrates and proteins
2. Microscopic view of bacteria.

Reference Books :

1. Physical and inorganic chemistry by J.K. Khanna, R.K. Baundra, R.K. Khanna
2. Physical and inorganic chemistry by B.P. Bochlar, R.P. Gupta.
3. Organic Chemistry by R.K. Baundra and J.R.K. Khanna, R.K. Khanna.
4. Avery household equipments
5. Fundamental physics- Kumar & Mittal
6. Practical Physics- Kumar & Mittal.
7. Practical Chemistry- High school level.
8. Biotechnology- R.C. Dubey.
9. Conn and Stmpf. Outlines of biochemistry (iv or v edn.) 1976
10. Lehninger (1983) principles of Biochemistry.
11. Plummer Introduction to practical biochemistry
12. Homes, Hooper & Houghton; Instantant notes in Biochemistry.
13. Biochemistry- Harper
14. Biochemistry- A.V.S.S. Rama Rao.

FIRST YEAR

PAPER-III

Course Title- ECOLOGY AND ENVIRONMENT

Catalogue Description :- Scope of environmental sciences, environmental influences environmental principles, energy, natural resources and uses, environmental disruptives environmental ethics, management and organizations.

Objectives :- To enable students to :

Obtain knowledge about fundamentals of ecology and environmental.

Syllabus**Theory****MARKS : 60****S.No. Theory Topics**

1. Scope of environmental Sciences: Definitions, Meaning, Scope, Interrelationship and importance of the study of environment.
2. Environmental segments; Lithosphere, Hydrosphere, Atmosphere, Biosphere their physical structure and composition, origin and inter relationship.
3. Environmental and Ecological Principles; Ecological terminology and definition, ecosystem and its components (both terrestrial and aquatic) energy flow, food chain, food web, ecological pyramids and population dynamics.
4. Environmental Factors: Laws of minimum and Law of tolerance, environmental factors such as light, water, temperature, gases, soil and micro climate.
5. Biogeochemical cycles: cycling of minerals in the environment with particular reference to nitrogen, carbon, phosphorus, oxygen and sulphur.
6. Environmental Descriptions:
 - A. Pollution: Types sources, effects and control of air, water and soil pollution.
 - B. Biotic activities; Deforestation, grazing, burning, mining etc., and their influences in environmental and agriculture, effects of industrialization on environment.
 - C. Introduction to global environmental problem viz. acid rain, ozone depletion, green house gases and climatic changes.
7. Natural Resources Water, Land, Forest, Mineral, wild life biodiversity etc. with particular references to natural resources on India and their current status. Biodiversity loss and its conservation.
8. Energy and its Utilization Renewable and non-renewable energy sources and their utilization with special references to Indian scenario: Environmental waste management and utilization process, types, characteristics and treatments and as resources.

9. Environmental management and Ethics: Basic environmental Law and policies. National and International environmental conservation bodies and organization effect of population industrialization on environment.

SYLLABUS**PRACTICAL****MARKS : 40****S.No. Practical Title**

1. Analysis of D.O. & B.O.D. in natural water system.
2. Soil texture pH and E.C. in soil system.
3. Biodiversity analysis of flora & fauna in pond water.
4. Quantitative enumeration of bacteria and fungi in outdoor and indoor conditions.
5. Biodiversity analysis in natural land system.

References:-

1. De. A.K. Environmental chemistry. Wiley Eastern Ltd. New Delhi.
2. Odum E.P. Fundamental of biology.
3. Agrawal, K.C. Environmental Biology.
4. Sharma, B.K. and Kaur H. Environmental Chemistry.
5. Dhaliwal G.S. Sangha G.S. and Rablan P.K. 1996 Fundamentals Environmental Sciences. Klyari publishers, New Delhi, p-375.

FIRST YEAR**PAPER-IV****COURSE TITLE-SOCIOLOGY AND PSYCHOLOGY**

Catalogue Description : Meaning and scope of Rural sociology, socio cultural setting of rural India, rural traditions, customs and folkways; Rural Institutions- Social, Economic, Political, and Religious; Rural social stratification; Rural social change with specific reference to Agricultural Innovations; social changes and impacts, Evaluation.

Objectives : To enable students to :

1. Understand the fundamentals of sociology and psychology.
2. Introduce students to the experience of using the required tools (Psychology tests) to measure various aspects of behaviour.

Syllabus**Theory****MARKS : 30****SECTION-A SOCIOLOGY****S.No. Theory Topics**

1. Rural sociology: Meaning, scope, objectives and emerging trends.
2. Society: Concepts of society, meaning and definition, element of society.
3. Planned social change
 - a. Approaches to rural planning: Improvement and transformation
 - b. Indian Rural Development programmes- Critical analysis of development programmes, particularly Integrated Rural

Development- programme and their consequences.

4. Social stratification- Meaning and definition, Bases and forms of social stratification.
5. Social group- Meaning and definition; primary and secondary groups. Importance of social groups.
6. Social Control- Meaning and definition, Means and agencies of social control (Family, education, customs, religious, state, law)
7. Social change- Meaning and definition, factors of social change.
8. Social evils (a) casteism, untouchability, dowry.

Syllabus

Theory

MARKS : 30

SECTION-B PSYCHOLOGY

S.No. Theory Title

1. Introduction- Definition of psychology, psychology science, its scope, branches and importance, applied psychology in home science.
2. Main method of studying psychology.
3. Motivation- Definition, Concept and need, Incentive and instinct types of motives-Innate and acquired.
4. Personality- Concept of personality, Definition of personality, types of personality, Measurement of personality importance of Heredity and environment in the development of child personality.
5. Learning- Meaning, Learning and maturation, Laws of learning, factors affecting learning.
6. Individual differences- Meaning, types and causes of individual differences.
7. Intelligence- Meaning, theories and measurement of intelligence.

Syllabus

Practical

MARKS : 40

S.No. Practical Title

1. Verbal and non verbal test.
2. Performance test.
3. Ability test
4. Personality test.
5. Seminar on any topic.

FIRST YEAR

PAPER-V

Course Title - Computer Application

Catalogue Description: Introduction to personal computer, peripheral, Operating system (DOS & Windows) and high level languages. Interaction with software package (Excel, Fox Pro) and their execution for the following applications. Solution of arithmetical/logical, operation, plotting of graphs and diagrams. Simple statistic computations and data base file creation and query.

Objectives : To enable student to :

1. Understand the fundamental of personal computer and peripheral, operating system.
2. Introduce students to the Execution of software package and data base management system.

Syllabus**Theory****MARKS : 60**

Total Number of Lecture: 108

S.No.	Theory Topic	No. of Lecture
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1	Introduction to personal computer And Peripheral	10
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- * Computer History
- * Classification
- * Generation
- * Number System
- * Computer Languages
- * Hardware
- * Definition
- * Classification
- * CPU
- * Input/Output Devices
- * Storages Devices
- * Software
- * Definition
- * Classification
- * Examples

2. Operating System (DOS & Windows)

18

- * MS Dos
- * Introduction
- * Booting
- * Classification of Commands
- * Commands Definition
- * MS Windows
- * An Introduction
- * Desktop Property
- * Windows Events
- * Startup Menu
- * Windows Explorer

3. Execution of software package :

40

- * MS Word
- * Document
- * Templates
- * Table

- *Formatting
- *Mail Merge
- *Printing
- *MS Excel
- *Basic Concept of spread Sheet**
- *Cell referencing
- *Formula/Function Handling
- *Data Table Management
- *Goal Seek/Scenario
- *Pivot Table/Subtotal/Sort/Filters
- *Chart (Pi/Bar/Line Etc.)
- *Printing
- *MS Power Point
- *Presentation Concept
- *Slide Master
- *Slide View
- *Formatting
- *Transition/Animation
- *Compilation/Pack and Go

4. Data Base Management System 40
- * An Introduction with Fox Pro
 - * Concept of DBMS
 - *Table
 - *Field
 - *Records
 - * Data Base Handling
 - *Creation of Table
 - *Type of Field
 - *Table Properties
 - * Programming with Data Base
 - * An introduction with Programming
 - * Programming Logic and Technique
 - * Simple Arithmetical/logical Operation
 - * Data base Handling with Programming in Fox Pro.

Syllabus**Practical****MARKS : 40**

1. MS DOS
 - * Working with Internal Commands.
 - * Working with External Commands.
2. MS Windows
 - * Desktop Setting (Background/Screensaver/Appearance)
 - * Data Time Properties
 - * Working with files, Folders, Sub-Folder

- * Creation of Folder/Sub-Folder
- * Creation of Files
- * Renaming of Files/Folders
- * Move and Copy a File/Folder
- * Setting Properties of Folder

3. MS Word

- * Creating Document (Blank/Templates)
- * Editing on Document
- * Formatting on document
 - * Font Style-Font Size/Colour/Background
 - * Bullets and Numbers
 - * Borders and Shading
 - * Headers and Footers
 - * Proofing of Document (Spelling/Grammar check)
 - * Inserting Page Number, comment, Date time, Bokmark, Pictures, File and Document
- * Applying Different type of views on document
- * Working with Table
- * Mail Merge
- * Printing a Document

4. MS Excel

- * Working with Formula
- * Working with Function
 - * Date/Time Functions
 - * Arithmetical Functions
 - * Statistical functions
 - * Relational Functions
 - * Logical Functions
- * Formatting on Worksheet
- * Working with Chart
- * Working with data Table
 - * Sort
 - * Filter
 - * Sub Total
 - * Goal Seek
 - * Scenario
- * Pivot Table
- * Printing the Worksheet

5. MS Power Point

- * Creating a presentation using
 - * Blank Presentation
 - * Template

- * Auto Content Wizard
- * Slide View
- * Compilation/Pack and Go
- * Applying different view on slides
- * Formatting
- * Transition/Animation
- * Compilation/Pack and Go
- 6. Data Base Management System
 - * Working with Data Base Table
 - * Fields
 - * Records
 - * Data Base Handling
 - * Creation of Table
 - * Type of Fields
 - * Table Properties
 - * Programming with Data Base

FIRST YEAR**PAPER-VI****COURSE TITLE: Research methods and Statistics**

Catalogue Description : Types and methods of research bibliography & literature survey, statistical analysis. Introduction to statistics, Diagrammatic and graphical representation of data. Measures of central tendency, dispersion, skewness and kurtosis. Correlation and Regression. Introduction to sampling methods.

Objectives:

1. To develop on understanding of research methods and techniques.
2. To understand Basic statistics.

Syllabus**Theory****MARKS : 60**

- | S.No. | Theory Title |
|-------|--|
| 1. | Types of research |
| 2. | Methods of research-observation field and laboratory studies |
| 3. | Bibliography and literature survey |
| 4. | Statistical analysis: Parametric and non-parametric techniques |
| 5. | Selection of variable: dependent and independent |
| 6. | Research reporting |
| 7. | Introduction to statistics: definitions, functions, uses of limitations |
| 8. | Classification and tabulation of data, Qualitative and quantitative Classification, Discrete and continuous variables, Frequency tables, Grouped and ungrouped data. |
| 9. | Diagrammatic representation of data, Histogram, Frequency polygon, Frequency curve, Ogives. |

10. Measures of central tendency, introduction to basic concepts of logarithms, AM, GM, H.M., Median, Mode and Merits, Demerits and uses, Relationship between AM, GM, HM, Quartiles, Deciles and percentiles.
11. Measure and Dispersion: Range, Range coefficients, Inter Quartile Range, Quartile Deviation, variance, standard Deviation, coefficient of variation.
12. Measures of skewness and kurtosis, Definitions of symmetrical distribution, skewness and kurtosis, Relationship between mean, median and mode and between quartiles of symmetrical and skewed Distributions.
13. Correlation and Linear Regression Analysis, Definition of Correlation, its types, Definition of Regression, Regression equations of Y on X and X on Y. relationship between correlation coefficient- and regression coefficients.
14. Introduction of sampling Methods: Definition of population, Random sample, Sampling versus complete enumeration, use of random number table for selecting a simple random sample.

Syllabus**Practical****MARKS : 40****Practical Title**

1. Preparation of survey report- that include different sampling methods, statistical analysis, graphical presentation etc.

References :

1. D.N. Elhance- Fundamentals of statistics
2. Basic statistics by B.L. Agarwal
3. Mathematical statistics of Kapoor & Saxena.
4. Agriculture statistics by Verma & Singh.
5. Higher Algebra Hall and Knight
6. Statistical Analysis- S.P. Gupta