

BHAGWANT UNIVERSITY
Sikar Road, Ajmer
Rajasthan



Syllabus

Institute of Life Sciences & Applied Sciences
M. Phil
(Home Science)

ANNUAL SCHEME OF EXAMINATION:

1. Every candidate shall be required to offer three written papers and one dissertation (equivalent to one paper). Within this frame work the Board of Studies shall recommend the course of study for the M. Phil examination.
2. The course of study for the M. Phil degree shall extend over a period of one academic year. There shall be a continuous internal assessment and as external assessment. The proportion of internal and external assessment shall be 30:70. There will be no internal assessment in the dissertation. Total marks for M. Phil will be 400. Dissertation may be written by the candidates under the supervision of any teacher who is registered as M. Phil Supervisor. Supervisor can guide normally five dissertations. However, the maximum limit may be relaxed by the permission of Vice-Chancellor on the recommendation of Head. The internal Supervisor can guide five candidates and workload of six hours is admissible for each M. Phil course for dissertation. The Supervisor will sign and issue a certificate counter signed by the Head of department concerned.
3. The internal assessment may be evaluated on the basis of:

(a) Mid Terms	:	15 Marks
(b) Assignments /Seminar Presentation /Group Discussion:		15 Marks
4. Each theory paper shall consist of 100 marks. The dissertation shall also consist of 100 marks. For a pass, a candidate shall be required to obtain (a) at least 40% marks in each paper separately (b) a minimum of 50% marks in the aggregate of all the papers prescribed for the examination. In the mark sheet, successful candidates shall be classified as under

First Division	65% or more.
Second Division	50-65%
- 6- A candidate will have to pass individually both in the Internal as well as external examination and it should be shown separately in the marks sheet.
- 7- The placement of every candidate under a Supervisor/Guide shall be decided within two months from the last date for admission.
- 8- A candidate who fails at the examination even in one paper/dissertation shall be required to reappear at the examination in a subsequent year in all the papers/dissertation prescribed for the examination, provided that a candidate who obtains at least 50% marks in dissertation shall be exempted from the submitting a fresh dissertation and the marks obtained by him shall be carried forward for working out his result.
- 9- For each theory paper 10 questions will be set for the final examination and the candidate will have to attempt at least five questions. All the questions will carry equal marks.
- 10- Workload distribution: There will be a teaching of four periods of one hour duration per week for each theory paper and six hours for dissertation.
i.e. 4X3 = 12 hours for theory papers and six hours for dissertation per week.

Paper Code	Papers Name	TEACHING PERIOD			External Marks	Internal		G. Total
		L	T	P		Mid Terms 15 marks	Assignments /Seminar Presentation / Group Discussion	
01MPL25101	RESEARCH METHODOLOGY THEORY AND TECHNIQUES	4	-	-	70	15	15	100
01MPL25102	Advanced Paper In Food And Nutrition	4	-	-	70	15	15	100
01MPL25103	Advanced Paper In Home Science	4	-	-	70	15	15	100
01MPL25201	DISSERTATION	-		2	100	-	-	100
Total		12	-	2	310	45	45	400

Research Methodology Theory And Techniques

Course/Paper: 01MPL25101

Unit - I

Research – Definition – Importance and Meaning of research – Characteristics of research – Types of Research – Steps in research – Identification, Selection and formulation of research problem – Research questions – Research design – Formulation of Hypothesis – Review of Literature.

Unit – II

Sampling techniques : Sampling theory – types of sampling – Steps in sampling – Sampling and Non-sampling error – Sample size – Advantages and limitations of sampling.

Collection of Data : Primary Data – Meaning – Data Collection methods – Secondary data – Meaning – Relevances, limitations and cautions.

Unit – III

Statistics in Research – Measure of Central tendency – Dispersion – Skewness and Kurtosis in research. Hypothesis – Fundamentals of Hypothesis testing – Standard Error – Point and Interval estimates – Important Non-Parametric tests : Sign, Run, Kruskal – Wallis tests and Mann-Whitney test.

Unit – IV

Para metric tests : Testing of significance – mean, Proportion, Variance and Correlation – testing for Significance of difference between means, proportions, variances and correlation co-efficient. Chi-square tests – ANOVA – One-way and Two-way.

Unit – V

Research Report : Types of reports – contents – styles of reporting – Steps in drafting reports – Editing the final draft – Evaluating the final draft.

Reference Books

1. Statistical Methods - S.P. Gupta
2. Research Methodology Methods and Techniques - C.R. Kothari
3. Statistics (Theory and Practice) - B.N. Gupta
4. Research Methodology Methods and Statistical Techniques - Santosh Gupta

Advanced Paper In Food And Nutrition

Course/Paper: 01MPL25102

Year-I

UNIT-I

Basic Food groups – basic 4,5,7, and 11 Classification of foods based on nutrients cooking methods and functions of food sugar cookery – stages of cookery Cereal – Composition, nutritive value of rice wheat and locally available millets parboiling and milling of rice and methods of cooking. Pulses – Composition, nutritive value, toxic substances, germination- process, milling methods of cooking. Vegetable and Fruits- Composition, nutritive value classification, Factors affecting pigments selection and storage methods of cooking and changes during cooking meat – Nutritive value methods of cooking factors affecting tenderness of meat rigor mortis fish-classification nutritive value selection and cooking

Unit-II

Carbohydrates – Definition classification, functions sources and role of fiber or unavailable carbohydrates in human nutrition proteins- Definition classification functions sources and requirement Evaluation of protein quality –PER, BV, NPU and chemical score supplementary value of proteins. Lipids –Definitions classification, Sources and properties Essential fatty acids-sources functions and effects and of deficiency. Minerals – distribution functions absorption utilization requirements sources and effects of deficiency –calcium, Phosphorus sodium and potassium ,Trace elements-iron, iodine, copper, fluorine and zinc- functions sources and effects of deficiency vitamins Fat soluble vitamins – vitamin A,D,E,K –history, Functions sources, requirements and effects of deficiency, water soluble vitamins- acid, B1,B2 niacin, folic acid vit B12, Pyridoxine, biotin and Pantothenic acid- Functions, Sources, requirements and effects of deficiency.

Unit-III

Origin and Develop of catering- definition of catering.Types of catering establishing- Organization, Objectives and work pattern, commercial-hotels, motels, restaurants and star – rating of hospitals, School lunch and industrial catering -transport – rail, road , air and space.Menu planning – definition types of menus- standard portion size- definition, portioning equipment and portion control

Unit-IV

Diet therapy – definition, Purposes of a therapeutic diet, principles and types of hospital diet –clear fluid full fluid soft light bland and regular diet.Dietitian- types qualities qualifications and role of dietitian in managing hospital dietary.Types of feeding Concepts of oral and tube

feeding and parenteral nutrition routes of administration. Febrile Conditions – acute, chronic and recurrent-Typhoid TB and malaria Diseases of the kidney and urinary tract-nephritis nephrotic syndrome urinary calculi and renal failure and diabetes mellitus of the cardiovascular systems – atherosclerosis hypertension hyper- Cholesterolemia coronary heart disease

Unit-V

Concept and scope of community nutrition- meaning definition interrelationship with various departments – sociology medicine biology and agriculture

Assessment of nutritional status in a community- Direct and Indirect methods – merits and demerits common nutritional problems in India- causes signs and symptoms

Programmes for nutritional problems in India – prophylactic programme midday meal programme and ICDS

Reference:

1. Swaminathan M Essentials of food and nutrition vol I and II Bapcco Publication 1996
2. Srilakshmi B .Food science new Age International (p) Ltd Publishers third edition 2005
3. Norman W Potter and Joseph .H Hotchkins food science CBS Publishers and edition 2005
4. Sumathi R .Mudumbai ,Rajagopal M.V Fundamentals of foods and nutrition New Age International (P) Ltd Publisher third edition 1997
5. Paul s. Text books of Bio-nutrition curing diseases through diet CBS publications first edition 2005

Advanced Paper In Home Science

Course/Paper: 01MPL25103

Year-I

Unit-I

Fibres – Classification of textile fibers: General properties of fibers – manufacture uses and properties of cotton linen and silk nylon terrylene and acrylic. Fabric Construction: Parts of simple loom and weaves operation types of weaves basic and figure weaves other methods of fabric construction- knitting braiding felt lace and non woven fabrics .

Family clothing plan: Based on family budget occasion climate occupation and interests number of family members age figure fashion quality and accessories

Care of clothing: Principles of laundering and storing cotton wool silk rayon and synthetic fabrics study on the selection of suitable laundry soaps bleaches whitening agents and stiffening agents stain types methods of stain removal

Unit-II

Prenatal development-signs of pregnancy factors influencing prenatal development complications during pregnancy types of deliveries and types of birth still birth premature post mature twins triplets etc..

New born Baby- Characteristics of new born baby feeding-breast feeding and bottle feeding Development- Physical and motor development social emotional intellectual and language development-behavior problems – cause and treatment temper tantrums thumb sucking bed-wetting nail biting masturbation telling lies and stealing

School going children physical social .emotional and intellectual development interests and hobbies adolescence definition development physical social emotional and intellectual

Unit-III

Delinquency-causes prevention and rehabilitation drug addiction- rehabilitation measure for the victims sex education: Definition need for imparting sex educations to adolescents.

Adult: Development task physiological psychosocial Crisis of early and middle adulthood old age –characteristics needs and problems.

Art in everyday life: Importance of good taste, design elements, types and principles of design – emphasis, harmony, balance, proportion and rhythm.

Resources –management: Definition of management – management process –planning controlling and evaluating- values goals and standards. Resources-characteristics, factors, affecting the use of resources

Unit-IV

Family income and expenditure –types of income methods of handing family income family budgets institutions for family saving. House planning and finance: House planning- functions of a home selection of a site principles involved in planning a goods house plans for different income groups housing finance- financial consideration in housing source finance – government any other agencies –housing board co-op

Resource Management: Definition of management process – planning , controlling and evaluating – values , goals and standards. Resources – classification, characteristics, factors, affecting the use of resources.

Unit-V

Family- definition function type advantages and disadvantages of joint and nuclear families – crisis in the family definition types and effects of crisis on family members – mental illness unemployment dowry death and suicide Principle of inheritance interaction of heredity and environment habit formation- definition and principle.

Home science extension education: meaning definition objectives and principles need for extension in education- origin concept objectives characteristics steps in teaching role of home science extension in rural development meaning importance and principles of programmes development process.

References:

1. Dantagi S ., fundamental of Textiles and their care , Orient longment ltd New Delhi 1993.
2. Hollen N.Saddler, Textile Mac Millan New York 1977
3. Erwin M.D and Kinchen L.A ‘Clothing for Moderns ‘ Macmillan co New york 1970
4. Newman and Newman Development through life a psychosocial approach 6th edition Brooks/ Cole publishing company 1995.
5. Arya and Subash, C. Infant and child care fore mother vikas New Delhi 1972.

DISSERTATION

Course/Paper: 01MPL25201

Year-I

Each student will submit dissertation on any one topic related to Home science. Dissertation will be guided by supervisor of the university and will be examined by external.