

**DIRECTORATE OF DISTANCE EDUCATION
UNIVERSITY OF JAMMU
JAMMU**



**STUDY MATERIAL
FOR
B.A. Semester- I**

HOME SCIENCE

COURSE NO.

Lesson No 1-22

HS-101

STANZIN SHAKYA

Course Co-ordinator

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HOME SCIENCE

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HOME SCIENCE

Course No.: HS-101

Title : Introduction to
Home Science

Duration of Exam. : 3 Hrs

Total Marks: 100
Theory Examination: 80
Internal Assessment: 20

Objectives:

The course is designed to enable the students to:-

1. Understand the concept, scope and philosophy of Home Science.
2. Appreciate the role of Home Science in Nation building.
3. Develop desirable attitudes towards integrated rural and urban development.
4. Cultivate human values through learning Home Science

Unit-I: Basics of Home Science

- Definition, meaning, branches and scope of Home Science.
- Philosophy of Home Science.
- Development of Home-Science as a discipline.
- Linkages of Home Science with other related subjects- Psychology, Sociology, Economics and Agriculture.

Unit-II: Job Opportunities in Home Science

- Home Science Education at various levels-School/College/ University/ Research.
- Job oriented courses: Nutrition, Dietetics, Food Preservation, Housing.
- Textiles and Clothing, Interior Design, Pre-School education and extension

- Vocations within and outside Home Science Institutions.
- Qualities of a good Home Science student.

Unit-III: Home Science in Action Programme

- Applied Nutrition programme, Integrated Child Development services
- Integrated Rural Development programme
- National Rural employment Programme
- Training of Gram sewikas, Mukhya Sawikas, National Adult Education Programme
- Role of Home Science in Women's empowerment.
- Role of Home Science in the Service of community and in rural Development.

UNIT-IV: Home Science and Family Studies

- Average size, marriage patterns, distinct social roles and nature of relationship between members of the family.
- Internal distinction is authority based on Age and sex roles.
- Gender differences with reference to atrocities and access to resources (female headed households)
- Role of Home Science education in the empowerment of Individual, Family and Society.

Unit-V: Introduction to Computers

- Relevance of computers to Home Science-Basics of Computer: A. Model of computer, Characteristics of computer, problem solving using computers.
- Input/output units Description of computer input/output units, other input method, Computer output units.

- Security and safety of Data; Secondary storage devices. Computer Memory--computer languages.
- Introduction to operating system-MS Windows, exploring desktop, Windows, exploring desktop, accessories, control panel, managing documents and folders.

Note For Paper Setting

The question paper will consist of ten long answer questions (two from each unit, choice from within the unit). Each question carries a weightage of 16 marks. The candidate will have to attempt five questions (at least one from each unit). (16x5=80 marks)

Internal Assessment (Total Marks: 20)

20 marks for theory paper in a subject reserved for internal assessment shall be distributed as under:-

- | | | |
|------|--|-----------------|
| (i) | Class Test | 10 marks |
| (ii) | Two Written Assignments/ : project reports | 10 marks |
| | | (05 marks each) |

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1. Devdas, Rajmal, P. (1968) Textbook of Home-Science, Farm Information Unit, Directorate of Extension, Ministry of Agriculture, New Delhi.
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3. The Family and Integrated Rural Development, FAO, 1976.
4. Devdas, Rajmal, P. Methods of Teaching Home Science. National Council of Education Research and Training, Delhi, 1977.
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Semester - I

Course No.: HS-102

Title : Practical

Duration of Exam. : 3 Hrs

Total Marks: 50

External Examination: 25

Internal Assessment: 25

- 1) Survey to know different marriage patterns in the Indian society.
- 2) A Report on visit to Preschools/Food Preservation Centers / Interior designers/NGO's /Dietitians /Fashion Houses & Women entrepreneurs
- 3) Visit to ICDS to know the services provided for the community.
- 4) Basics of computer operation and care.

Internal Assessment (Total Marks: 20)

50% of the total marks for the practical paper in a subject reserved for internal assessment shall be distributed as under:-

- (i) 40% for Class assessments and tests and
- (ii) 10% for regularity of attendance

Basics of Home Science
Definition, Meaning, Branches and Scope of Home Science

Structure

- 1.0 Objective
- 1.1 Definition of Home-Science
- 1.2 Meaning of Home-Science
- 1.3 Scope of Home Science
- 1.4 Self Check Exercise

1.0 Objectives

After studying this chapter you will be able to understand.

- Meaning and Definition of Home-Science.
- Various Components of Home-Science.
- Scope of Home Science.

1.1 Definition of Home Science:-

Home-Science is the application of many sciences and arts towards achieving better, healthier and happier homes. It is concerned with daily living of people. The foods they eat, the clothes they wear, the homes in which they live, family relationships, health and bringing up of children, the values people cherish and how they use their resources to achieve happiness. Home-Science education involves skills, attitudes (both social and emotional) appreciations and judgement essential for building and maintaining a satisfying home. The quality of home-living affects the efficiency of pupils and workers.

1.2 Meaning of Home-Science

Home-Science education is that part of school programme which prepares youth, adults for the greatest of all vocations home making. It helps in the development of rights, values and appreciation. It makes a contribution towards increasing health, happiness and fulfillment in the home. Home-Science education enables pupil to understand the functions of parenthood, responsibilities of family membership and management of one's resources. It helps them to develop a sound Philosophy of personal and home living. Home Science is concerned with daily living of people. The food they eat, the clothes they wear, the homes in which they live, family relationships, health and bringing up of children. The values people cherish and how they use their resources to achieve happiness. Home-Science education involves skills, attitudes, appreciations and judgement essential for building and maintaining a satisfying home.

Home-Science education involves:-

(1) Appreciation of Values such as:-

The importance of maintaining family life for one's happiness, well being, order in arrangement of personal belongings and method of work, the importance of the home maker to the family and community, art in food, clothing, housing, furnishing, gardening the responsibilities of citizenship, etc.

(2) Creations of proper attitude such as:-

Interest in daily life of the home and family, desire to assume responsibilities in the home, interest in community affairs which influence home and family, interest in working for a happy family life, desire to become emotionally mature, desire to develop objective points of view, respect consideration for the rights of other.

(3) Knowledge of facts such as:-

What constitutes good health for oneself, sound habit of hygienic living, privileges and responsibility of home membership, how community helps home, developmental stages of normal growth in children, food as it relates to family welfare and health, common household textiles and clothing, housing and its influence in the family.

(4) Judgement in consideration such as:-

When to work alone and when with others, using personal and family resources, discrimination between the real and unreal.

(5) Ability to do Household Tasks such as:-

Care for personal routines, help in daily work, in the household, work independently, plan, purchase, prepare serve meals, preserve food, entertain graciously, select garments, care for clothing, construct a garment or alter, care of household equipment, get along with small children and adults.

(6) Developing Skills in:-

Using household tools, performing household jobs, preparing meal, construction and care of clothes etc.

(7) Formation of habits such as:-

Good personal hygiene, health practices, working and living harmoniously with members of group, family school or society to achieve common goals, being well groomed, proper food selection and eating, carrying through a job.

The goal of Home-Science education is to help each pupil lead a more satisfying personal, family and community life. A good Home-Science programme should be built around their needs and interests. The major phases of Home-Science are :-

- a) Foods, Nutrition and cookery.
- b) Household Management
- c) Clothing and Textile.
- d) Child Development.
- e) Health, first aid and Home-Nursing.
- f) Human Relationships.

i) Foods, Nutrition and Cookery :-

Nutrition is important for healthy living and that health is essential for success and happiness. The section on foods and nutrition includes suggestions for experiences that will help pupils to select, prepare combine foods in nourishing meals.

ii) Household Management :-

Its objective is to develop an appreciation of management in the economical use of time energy, money and other material goods as well as the human resources to derive maximum joy in home life. Good management is getting what one wants, with what one has. It is concerned with all aspects of family life, managing food and time, spending money wisely, planning activities to save energy and labour, catering to the needs of every member of the family, cleaning, clothing, decorating etc.

iii) Clothing and Textiles :-

The aim of this area is to help one to recognise the aesthetic, hygienic and economic-values of clothing as an asset to personality. The clothing needs of the family, the money to be spent in meeting those needs, knowledge of fabrics from the stand point of cost, durability, nature of textile fibers and sewing equipment and taught. Making garments, methods of washing clothes, caring for clothing, alteration, repair and storage etc. Such experiences are included to give an understanding to pupils about textiles, clothing and laundry.

iv) Health, first aid and Home nursing :-

The process of teaching this area is to develop the appreciation that maintenance of good health is the key to happiness and the duty of every educated person. In home-science, students have opportunities and experiences, to practise the principles of mental health and improve their health habits. They study how diseases are spread and how a healthy environment prevents diseases, and how to take care of the sick at home, feeding the sick, prevention of illness, safeguard to health, hygiene, physiology, community health, home sanitation, personal grooming and first aid measures etc.

v) **Child Development and mother craft :-**

Through observations on children, the inherent interest of adolescent pupils in children receives fulfilment. This area develops an eagerness in pupils to take care of and to love children. Pupils learn to do things with and for children. They learn to select and tell stories in the nursery or pre-basic schools. They make toys for their younger ones. Information on feeding, clothing and entertaining children are included in these areas. Through these experiences pupils begin to understand stages of child growth and development.

vi) **Human Relationships :-**

The area of human relationships in Home-Science is important because it deals with getting along with people. Good relationship between the members of the family, classmates and friends is essential for healthy growth and happiness. Through active participation in family celebrations festivals and other important days, good human relationships are fostered. Individual and group recreation, leisure time activities civic and social responsibilities are included in this area. Democratic procedures adopted in Home-Science classes result in greater respect of human personality and appreciation for the worth of each individual.

Throughout the Home-Science programme, spiritual and moral values should be emphasised. A deep respect for moral standards (individual and collective) should be developed. The place of religion in the home, ethical standards, sportsmanship, understanding oneself and others, developing loyalties and tolerance, importance of devotion, honesty, trust worthiness, dependability and integrity are essential to successful home and family living and is stressed.

All aspects of Home-Science are closely inter-related with each other and with pupils home to family problems. For example, for providing adequate nutrition for the child is not just a problem of food, but also involves money management, human relationships, health, child development and ethics. In same way, all family problems involve several or more than one area of Home-Science. In teaching of Home-Science in high schools, all the above mentioned should be divided into separate units spread over than year of high school.

The home provides opportunities for development of desirable attitudes and ideals in its members through sharing of responsibilities, joys, sorrows, success, failures, income and possession. Under parental guidance, children develop security, a feeling of belonging, assurance that they are needed, courage, integrity and ethical standards. Parents and children together create the "home environment" in which character-building and cultural, spiritual and moral values in life take deep roots.

Family is a very important influence in the development of personality of children and in the growth and maturity of adults. "Family" means "home". It is the unit of life in a community, it is the economy as well as the moral and spiritual unit. Good homes and good communities are basic to democracy. Homes also determine the production, distribution and consumption of wealth in a society. It is the throne of man's highest aspirations, seat of great human achievements and the source of spiritual energy. It is the institution which has preserved and transmitted our cultural heritage from generation to generation. It sets standards for individual and morality. It gives meaning to human dignity and nurtures the intellectual and creative genius of people. Wherever homes have been neglected, communities have disintegrated and decayed. Home-making and motherhood are the divine functions of the woman. Motherhood is her crowning glory. Tagore defined man as the artisan, and the woman as the artist. On women depends the stability and integrity of all that goes to make "home".

The home-maker of today, living in a complex society with many different patterns of living, has to assume a wide variety of responsibilities. In the olden days the home-maker's functions were easier, confined to certain skills only-spinning yarn, weaving cloth, preparing food, making butter, tending cattle etc. Practice in performing these tasks was acquired through assistance from grandmother, mothers or other older members of the family. In modern times, the basic needs of the family for cloth, food and house still remains but in a very different form. Today, there is a bewildering variety of clothing fabrics in the market, made of synthetic fibres, unheard of before. Many processed foods are available. Various types of soaps and washing powders are being sold. Patterns of living are undergoing changes through factors such as the decreasing number of working hours, change of occupations from farming to industries, men and women working for a career etc.

The modern home is an interdependent rather than an independent agency. The home and community have many responsibilities which formerly the home alone assumed. Homes and communities are so dependent upon each other that anyone, trying to make a good home, has to be concerned with making the community better, safer and healthier than before. This necessitates effective co-operation of the home-maker with others in the community. Problems of human relationship are, therefore, different today from those of the past. The home-maker cannot confine her activities to the four walls of a house.

Home Science training should give her the techniques and ability essential for group living and getting on well with others. It should help her to develop a high degree of independence and initiative. She must be able to think through a problem to get proper information and work out solutions for it. She must make decision which are vital to the welfare of the family.

The home is the foundation for happy living. The greatness of a race is determined by the millions of its homes. Women as homemakers, citizens and workers, are nation-builders and the repositories of our culture. By strengthening home and family life in the midst of rapid changes in modern society, they can make immortal the foundations of our rich heritage of culture and spirituality. Therefore the future of the nation depends on the type of education given to women. Their education means awakening of the civic responsibilities and a broad training in the social, economic and scientific phase of home life, then certainly they will be a strong force in the making of a nation. Let our curriculum and teaching of Home Science in high schools and colleges be such as to inspire and train our girls to discharge properly their great duty to the country.

The purpose of education is the full development of all aspects of the individual-physical, emotional, intellectual, aesthetic and spiritual growth. True education lifts us from the world of spritual values. It gives us a philosophy, which will utilise the knowledge of physical, physiological and biological sciences and social sciences in the development of character.

Education is the process by which an individual grows, develops and becomes increasingly well adjusted in a changing society. Education provides experiences that enable a person form desirable habits, broaden mental vision, deepen under-standing of her status in society and acquire skills to meet and solve problems encountered every day. Mastery of material environment in itself cannot bring happiness. Knowledge is only an instrument to achieve ideals. One may have knowledge, but not Judgement; one may have material power, but not spiritual vision; one may have physical strength, but not capacity. Science must help us to acquire moral qualities, discipline, dedication and devotion to truth. The mind of an educated person should be cultured and fearless.

Home Science education is that part of school programme which prepares youth and adults for the greatest of all vocations “homemaking”. It helps in the development of right values and appreciations. It makes a contribution towards increasing health, happiness and fulfilment in the homes. Home Science education enables pupils to understand the functions of parenthood, responsibilities of family membership and management of one's resources. It helps in careful weighing of competing demands and making intelligent selections and decisions.

Home Science is concerned with daily living of people, the foods they eat, the clothes they wear, the homes in which they live, family relationships, health and bringing up of children, the values people cherish, and how they use their resources to achieve happiness. Home Science education involves skills and attitudes (both social and emotional), appreciations, and judgement essential for building and maintaining a satisfying home. The quality of home living affects the efficiency of pupils and workers.

1.3 Scope of Home Science

The goal of the Home Science education is to help each pupil lead a more satisfying personal, family and community life. It means that, through the study of Home Science, pupils should get knowledge, skills, understandings and appreciation of cultural and spiritual values, which will enable them to live more joyfully effectively in their families and in their "would-be" homes after marriage.

In Home Science pupil learn to use their intelligence and ability to enrich their own lives and the lives of others in the family, community, nation and the world. They develop qualities needed for responsible citizenship. The co-ordination and correlation of learning in science, arts, social science and Home Science assists them in finding solutions to home and family problems.

Home-making education in the secondary school attempts to provide pupils guidance and opportunities to grow in social graces, managerial ability, and competence in home-making skills. Planned units and sequences help pupil to assume the management of a home and a family and or become wage-earners in activities related to the home and also guide them to personal and family relations.

What should be taught in Home Science classes to help pupil develop their personalities and prepare for their future homes? A good Home Science programme should be built around their needs and interests. The major phases of Home Science are:-

1. Foods and Nutrition;
2. Household Management;
3. Textiles and Clothing ;
4. Health, First Aid and Home Nursing;
5. Child Development;
6. Human Relationships.

(I) *Foods and Nutrition*

The main purpose in teaching this area is, for pupils to recognise that nutrition is important for healthy living and that health is essential for success and happiness. The section on Foods and Nutrition includes suggestions for experiences that will help pupils to select, prepare and combine foods in nourishing meals. Through practical activities in the foods class, pupils are taught items such as: the daily food needs of family members, the cost involved in fulfilling them through the available foods in the locality; planning, purchasing, preparing meals, storing and preserving of food; entertaining friends; hospitality through food; and feeding children, old

and sick persons. Arrangement of the different types of equipment and chullahs in the kitchen; colourful combinations of food; cooking and serving meals attractively; and such activities arouse pupils' interest in procuring better diets for themselves and their families. Cookery classes are popular in high schools because, through them, pupils become aware of the relationships between food, health and personal appearance. They have opportunities to express creativity, their talents and appreciate the aesthetic and psychological factors in food.

(ii) *Household Management*

The major objective of teaching this-area is to develop in pupils an appreciation of management in the economical use of time, energy, money and other material goods, as well as the human resources to derive maximum joy in home life. Pupils study space, time, effort and finances available for meeting the demands of family life. Good management is getting what one wants, with what one has. It is concerned with all aspects of family life-managing food and time; spending money wisely; planning activities to save energy and labour; catering to the needs of every member of the family; cleaning; clothing; decorating, etc. Girls get practical experience in learning to care for the house, to select and use utensils, to choose furnishings, to arrange furniture, to decorate the home, to maintain accounts, to budget time and money and to save for the future. Economical work habits, distribution of work among members of the family, use of labour-saving devices and modern equipment, care of family possessions, adjusting to income and making wise choices are stressed.

(iii) *Textiles and Clothing*.

The aim of this area is to help pupil recognise the aesthetic, hygienic and economic values of clothing as an asset to personality. The clothing needs of the family, the money to be spent in meeting those needs, knowledge of fabrics from the standpoint of cost, durability, nature of textile fibres and sewing equipment are taught. Making garments, methods of washing clothes, caring for clothing (alteration, repair and storage) and such experiences are included to give an understanding to pupils about textiles, clothing and laundry.

(iv) *Health, First Aid and Home Nursing*

The purpose of teaching this area is to develop the appreciation that maintenance of good health is the key to happiness, and the duty of every educated person. In Home Science classes, girls have opportunities and experiences, to practise the principles of mental health and physical health and improve their health habits. They study how diseases are spread and how a healthy environment prevents diseases, and also care of the sick in the home, feeding the sick, prevention of illness, safeguard health, hygiene, physiology, community health, home sanitation, personal grooming, and first aid measures. Such knowledge is necessary for every home-maker.

(v) *Child Development.*

Through observations on children, the inherent interest of adolescent pupils in children receives fulfilment. This area develops an eagerness in pupils to take care of and to love children. Pupil learn to do things with and for children. They plan activities and experiences for them. They learn to select and tell stories in the nursery or pre-basic schools. They make toys for their younger brothers or sisters. Information on feeding, clothing, and entertaining children are included in this area. Through these experiences, pupil begin to understand stages of child growth and development.

(vi) *Human Relationships*

The area of human relationships in Home Science is important because it deals with getting along with people. Good relationship between the members of the family, classmates and friends is essential for healthy growth and happiness. Through active participation in family celebrations, festivals and other important days, good human relationships are fostered. Individual and group recreation, leisure time activities, civic and social responsibilities are included in this area. Democratic procedures adopted in Home Science classes result in greater respect for human personality and appreciation for the worth of each individual.

Throughout the Home Science programme, spiritual and moral values should be emphasised. A deep respect for moral standards (individual and collective) should be developed. The place of religion in the home, ethical standards, sportsmanship,

understanding oneself and others, developing loyalties and tolerance, importance of devotion, honesty, trustworthiness, dependability and integrity as essential to successful home and family living must be stressed.

All aspects of Home Science are closely inter-related with each other and with pupils homes and family problems. For example, providing adequate nutrition for the child is not just a problem of food, but also involves money management, human relationships, health, child development and ethics. In the same way, all family problems involve several or more than one areas of Home Science.

In teaching Home Science in high schools all the above mentioned areas should be divided into connected units spread over the three years of high school. Home Science education aims at contributing to the growth and development of the pupil. The progress a pupil makes towards desired goals will be reflected by her.

1.4 Self Check Exercise

1. Define Home Science and elaborate the different branches of Home Science
2. All aspects of Home-Science are closely related to each other. Explain.
3. Discuss briefly the various components of Home-Science.
4. Discuss the scope of Home-Science with respects to its different areas.
5. What are the goals of Home-Science education.

Philosophy of Home-Science

Structure

- 2.0 Objective
- 2.1 Philosophy of Home-Science
- 2.2 Self Check Exercise

2.0 Objectives

This chapter gives a through understanding of the philosophy of Home-Science.

2.1 Philosophy of Home Science

The philosophy of home science is linked with the philosophy of home. Home stands for the material and emotional well being and security of its residents and, therefore, which could contribute towards the fulfilment of these objectives. Some home scientists consider strengthening of the family life as a major component of the philosophy of home science. But, to use the direct approach, the philosophy of home science is strengthening of family life for the purpose of development and gratifications of human beings.

Many individuals are deprived of development which is the responsibility of their family. The families have not been able to meet the basic needs for food, shelter, and clothing and the emotional needs for affection and belongingness. Such families are, obviously, not touched by the knowledge of home science and, therefore, they have not contributed to the development and satisfactions of their individual members. Such families have just grown accidently without knowing or living the philosophy home science.

The philosophy of home is the first concern of the home scientists, and their secondary concern is the profession of home science which has now gained wide recognition in modern India. Home science is called home economics in the Western world. What Ellen Richards as the first president of the American Home Economics Association said in 1909 about the philosophy of Home Science is the foundation on which home science has developed. 'Home Economics' she said, 'Stands for : the freedom of the home from the dominance of things and their due subordination to ideas, the simplicity in material surroundings which will free the spirit for the more important and permanent interests of the home and the society. (Richards, 1959).

The original concept of home economics was to achieve freedom of the home from dominance of any idea that was against the interests of home and the society. Today, the philosophy includes several other concepts. Rajammal Devadas, who was president of the Home Science Association of India for many years, in her speech at the 12th Biennial Conference of the Association in 1974, thus described the philosophy of home science.

Home science deals with all aspects of the life of the community and the nation.....It integrates the application of knowledge synthesised from different sciences and humanities to improve the human environment, family nutrition, management of resources, child development, and consumer competences. (Devadas, 1974).

Home science has apparently moved out of the homes to reach the community and the nation. Although the contribution of home science to the society was visualized as early as 1909 by Richards, the philosophy of contemporary home scientists has been increasingly affected by their awareness of the potential of home science to reach out to the community and nation. A few new ideals have since been added to the philosophy of home science which are very relevant in the present socio-political context. One idea is the conviction that human population must be controlled and that home science has a role to play in combating the problem of population explosion. Services to family and improving family life have been the accepted as philosophies of

home science but grading the family against it is unmanageable expansion in addition to this philosophy. As a commitment to this new philosophy, materials by home scientists have been prepared on population education with special reference to family planning. Graduate students and teachers of home science have undertaken research in population education with special reference to family planning. Graduate students and teachers of home science have undertaken research in population education to create teaching materials and methods as also to study the knowledge, the opinions and the attitudes of various sections of population regarding family planning.

Though the family is still the nucleus of home science philosophy, it has, nevertheless, tried to reach community and nation. The philosophy was more family-oriented, and is even increasingly so, but the note worthy change in the philosophy of home science has been that it has now broadened to relate the nucleus of family to the national economy, the national educational system and even the national political system.

The second change in the basic philosophy is the inclusion of extension services in home science. In developed and developing countries there are thousands of families which are not reached by the formal home science institutions. By broadening the philosophy so as to make available the knowledge of home science to those families, the concept of extension of home science has developed. Probably the basic philosophy of home science implied improved family life for all persons but in the beginning of home science, only the family who benefitted were those who had received formal home science education.

The Government of India has also accepted the concept of extending home science to village and has, therefore, introduced home science training for village extension workers-Gramsevikas and Mukhyasevikas. Extension of home science knowledge to the rural families is carried on by an organized network of functionaries for more than 25 years now. The philosophy of extending a knowledge of the subject beyond its formal institutions has been practised in medicine, agriculture and education but in home science although a new innovation, it has come

with considerable force and speed due to the recognition of the significance of home science in national development by the Government. With the opening of agricultural universities, there had been increasing emphasis on reaching out even to the families of those who have not enrolled into home science colleges. The agricultural universities have been instrumental in broadening the philosophy and the arena of functions of home science. Extension of home science knowledge along with agricultural knowledge is being carried out in the agricultural universities of India. The home science colleges, especially in the agricultural universities have accepted and practised the concepts of extension of home science knowledge outside the four walls of home science colleges.

Perhaps the greatest change in the philosophy of home science is the encouragement of all women to be gainfully employed - to seek and accept paid jobs. The home science students of today have demanded job opportunities as a result of having a home science degree. The change towards job orientation in home science courses can be seen clearly if we look back at the writings on home economics of 1940's even in the USA where jobs have attracted women since long. 'For building a broad home economics programme at the college level'. wrote Spafford :

Several studies made by the home economics departments show that approximately 75 per cent of the students are married within five years of the time they leave college. Homemaking, then is their ultimate goal, and preparation for it should be the underlying purpose in a large portion of their study in college. (Spafford 1940, p. 402).

The modern home science students marry probably earlier than within five years of the time they leave college, but their ultimate goal is definitely not only homemaking. The goal of homemaking has lost its first priority as a goal to receive home science knowledge. The goals of personal development and professional competence have now gained the priority over homemaking. The philosophy of home science at college level has changed correspondingly to prepare the students not only for homemaking but for professional life also. The change since the time of Spafford is that students and teachers of home science have become more consciously interested in jobs as a result of education in home science. Spafford herself (pp. 332, 406-407) has suggested vocational preparation of home science

students as the students need to be self-supporting. Today the economic need has motivated the home science graduates, like all other graduates in India, to seek vocational preparation in home science colleges. There are yet the goals of self-fulfilment and social prestige in accepting a job, besides a sheer economic need.

In 1958, the Ministry of Education, Government of India published a booklet, Home Science in Colleges and Universities in India, sponsored by the Home Science Association of India. It discussed what home science is, and described home science as :

An academic programme which includes the basic and the applied disciplines.

A multipurpose programme of study which allows differentiation in emphasis and affords opportunity to develop students' interests and capacities.

Prepares for the greatest of all professions- that of wife and mother.

Supplement and improve the students training in the care and management of the home.

Develop awareness of the needs of all families in a community.
Prepares for careers.

Obtain graduate and post-graduate training in home science to meet the need for research and for leaders in home science programmes.

An educational programme of special value for women which is designed to :

Provide general education.

Extend intellectual horizons.

Provide specialized education.

Develop leaders.

The philosophy of home science at college and university levels, as described by the committee of the Home Science Association of India in 1958, thus included academic, homemaking and educational aspects in home science. Home science was first described as a field for development of students, both through homemaking and career training. That home science has educational and, therefore, academic basis is implied in this philosophy.

In 1961, Williamson and Lyle described the philosophy of homemaking education in nine concise statements of beliefs. They said ;

1. Decomocratic family life contributes to our democratic form of national life.
2. Families have different beliefs about social and economic values and concerning what makes a desirable family life.
3. Democratic family life is co-operative family life.
4. Satisfying home and family life is essential if an individual is to develop to his maximum.
5. Every member of a family contributes to that family life.
6. Relations between family members are important.
7. Each person in the family should work co-operatively for a satisfying family life.
8. Families can make the best of what they have.
9. Effective use of family facilities affects family life.

These beliefs were unquestioningly accepted by the home scientists until the beginning of the present decade. These beliefs are still relevant but new additions to these beliefs seem necessary. The nine beliefs were developed to define the homemaking education in high schools, but the beliefs have been accepted for college homemaking programmes also. It can be readily seen than the homemaking education was meant to be for family living only. Homemaking education was "family living education". In these beliefs, the role and function of a member of a family are conceived primarily for a demoratic family life. An individual has a place

in the family because the individual contributes to family life.

The modern home science programmes have the philosophy that home science is for the personal and professional growth of the individual, and through her personal and professional growth, an individual contributed to the family life and the life of the community. An individual is an integral unit of family and, therefore, the advancement of each individual contributes to the advancement of family. Williamson and Lyle (1961) primarily advocate the contribution of a member to the family only.

Today the individual is prepared to extend her contribution to community and nation, not only through her better family living but through her professional commitments. Thus the philosophy of home science has broadened to include professions for home scientists. Once the home scientists believed that home science knowledge should be aimed at changing the values, attitudes and interests of people and not at developing particular skills of homemaking. Although the narrowest comprehension of earlier home scientists was to aim at development of homemaking skills, there was a reversion in this attitude and home scientists preferred to impart knowledge of affective nature with, and without, much emphasis on homemaking skills. It was considered more sophisticated and intellectual to educate for changing concepts, beliefs, opinions and values regarding homemaking rather than merely concentrating on developing homemaking skills.

The present philosophy still remains the same in advocating change in the affective and cognitive behaviour of individuals with reference to homemaking skills, although the development of physical and psychomotor skills has now been greatly aided by use of machines and appliances. Today, the philosophy of home science consists of not only the development of homemaking skills but also of the so called competencies outside the home, required by the world of employment. The modern home scientist needs to be an efficient homemaker, but she is also required to have additional skills to be employed on a job : 'Vocational home science' is the term used for new or job-slanted courses within the home science structure. For example, the foods and nutrition departments offer courses in dietetics so that home science

graduates can be employed as dieticians. The home management departments offer courses in institutional management to enable their graduates to find jobs as hostesses in hotels. The child development department offer courses in nursery school education so that their graduates can find employment as nursery school teachers, or supervisors.

The specializations within home science have deviated from the older philosophy of 'home science for better homemaking only'. Beyond this philosophy of homemaking, has developed the philosophy of 'home science for paid employment'. Women have thus found various positions in the work-world so far dominated and monopolized by men. The students choose a particular specialization of home science partly because that specialization offers more and better job opportunities. This deviation in the philosophy of home science has coincided with the beliefs of Women's Liberation Movement. 'Women's Liberation had been striving to achieve equality in employment opportunities for women, which implies that women will have to be trained for all and any kind of employment. Home science has already started its vocational programmes, preparing home science graduates for various employments. With the expansion of vocational programmes of home science, the competition between men and women for the same types of jobs is bound to increase and such a competition will force home science quality. The home science colleges will have to provide better quality in training their graduates so that they can compete in the world of employment or they will be pushed back to their narrow philosophy of home science for homemaking only. A retreat will be dangerous because the future homemaking may need not be taught in home science colleges. It may still be taught as that kind of homemaking which is conditioned by time and labour saving devices, ready made food products, and ready made synthetic garments, all requiring hardly any skill which needs to be learnt in a formal institution of home science.

To recapitulate the modern philosophy of home science, one needs to move away from the narrow concept of only homemaking to homemaking and profession. The philosophy of today, underlines the development of the individual in family as well as in profession. The family and its satisfactions have remained the goal of home science but the goal of vocational preparation has been added. The knowledge and services to families outside home science colleges are extended and the benefits of

planned parenthood and the dangers of population growth, brought to the knowledge of every family. The contemporary philosophy then, reaches the individuals with the message of personal and professional advancement through contemporary knowledge in home science.

2.2 Self Check Exercise

1. Write down the history and Philosophy of Home-Science.
2. What is the Philosophy of Home-Science.
3. Philosophy of Home-Science is Philosophy of Home and family. Justify.
4. Do you think Philosophy and scope of Home science has changed substantially over the past few decades ? Express your views citing relevant examples.

Development of Home-Science as a Discipline

Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Depth and breadth of Home Science knowledge.
- 3.3 Research in Home-Science.
- 3.4 Structure and function of Home-Science.
- 3.5 Self Check Exercise

3.0 Objectives

After going through this chapter you will be able to know about :-

- * History and Philosophy of Home Science.
- * Structure and functions of Home-Science.
- * Scope of research in Home-Science.

3.1 Introduction

Home science began as field of study in a minor, and auxiliary manner and was originally designed only to make women better homemakers. Today, home science has become an education, a profession, and a discipline of higher education. A college education has become a necessity for a person to be called a home scientist. A definition of a home economist as used by the U.S.A. Government in 1961 is as follows :

A Home Economist is a college graduate with a major in home economics who applies this knowledge and skill in a professional home economics positions and in her own home. (Lippeat, 1965, p. 89).

Regardless of any definition or its implication, home science must be viewed in the setting of higher education, in the light of its development. The development of any field is not only in its expansion in terms of colleges and schools, but development also refers to the depth of the knowledge of a discipline and the scientific application of this knowledge find their places in higher education because they contain complex dimensions, of facts, theories, and principles as a fundamental requirement. Because home science stands for the development of the individual and improvement of family life, it proves to be of benefit to all; but these objectives alone do not qualify home science to be a discipline of higher education. Higher education is the education offered by universities and colleges in form of degree programmes of three years, duration as minimum for the first degree. So much can be said about what comprises higher education but here the point of reference is why home science is a discipline of higher education.

3.2 Depth And Breadth of Home Science Knowledge

The fact that the five areas of home science have developed, so as to offer bachelor's masters' and doctorol degrees is the first indication of home science becoming a discipline of higher education. Within each area also, there are sub-specializations or optional groups of subjects. For instance, at the Faculty of Home Science in Baroda, the departments of Clothing and Textiles, Home Management, and Education and Extension offer a choice within these specializations by giving optional groups of courses at M.Sc. level. The possibility of having choices within a specialization, indicates the breadth and depth of knowledge in these specializations. The extensiveness of knowledge is reflected in the many courses offered and the depth at which the students could reach in gaining knowledge. One criterion of a body of knowledge becoming a discipline of higher education is the extent of scientific knowledge in that discipline. Home science fulfils this criteria by offering specialization at B.Sc., M.Sc. and Ph.D. degree levels based on learning of various

scientific knowledge. The Ph.D. degree programmes have yet not been developed in many colleges in India but they are bound to develop as material facilities and qualified teachers become available. The Faculty of Home Science at Baroda has already made its beginning in offering Ph.D. degrees, and several other colleges are known to start preparations for the same.

3.3 Research In Home Science

Research activity in a field is another criterion for a field of knowledge to be recognized as a discipline of higher education. In home science, research has been done by students and teachers in various areas. With the increase in the number of M.Sc. students, research has increased but research by teachers need to be furthered too. A discipline of higher education needs to carry on its research to add to its body of knowledge, to varyify knowledge that may have become less useful and to find new ways to apply knowledge.

3.3 (i) Scientific Methods For Teaching, Research And Extension

A discipline of higher education scientific methods in its teaching, extending its knowledge outside the college, and of course, in doing research. Standards are set for each of these academic activities and the high quality of teaching, research, and extension is to a great extent, dependent upon use of systematized and tested methods of work. Home science uses scientific methods in teaching, in research, and in extension as a discipline of higher education. As a discipline, home science must continually attempt to find better ways of teaching, research, and extension in all its specializations.

3.3 (ii) Professional Preparation

The changing concepts of liberal education have affected the social sciences and applied sciences like home science, to include a professional orientation to their curricula. Likewise, home science as a discipline of higher education, has become professionally oriented. Professional preparation for various job has been taken up by the home science colleges in India. Although all the graduates of home science may not want a job, majority of them do so and hence, home science as a discipline in the university has a contribution toward professional preparation of its graduates. As

back as 1958, the home scientists recognized the need for professional preparation of home science students: Indications are that job opportunities will expand and that colleges offering home science will need to train more young women to fill these jobs.

Professional preparation through home science college will gradually become one of the most important contributions to the enlightenment and education of Indian women but at present, efforts are still needed, to develop more job-oriented courses and apprenticeships.

These criteria qualify home science as a discipline in higher education. Many universities have accepted home science in their academic programmes by opening a college or a faculty of home science. Yet in several universities, usually the home science college is one of the smallest colleges or departments on the campus. Because of its low enrolment of students and limited strength of teachers, there is a tendency to underestimate its worth as an academic discipline. Home science has to make more concerted efforts to secure its due recognition as a discipline of higher education. Such a growth will be possible when all the four criteria mentined here, are met in increasingly better ways, each year. In short, home science at college level must increase and deepen its knowledge; must increase its research production and utilization; must be more scientific in its teaching, research and extension activities; and must offer more and better professional preparation to its students.

3.4 Structure and Function of Home Science

Ever since home science became a field of study in the institution of higher education, the need to identify the structure and functions of home science has been felt. It is the continuing development of home science as a discipline which has made it imperative to clarify and interrelate the structure of home science to its fullest functions. The structure of home science began to be formed about 65 years ago when courses in domestic science were first offered to selective groups of young girls. In course of time the simple structure of home science came under the social and educational influences prevailing in India at various stages. The structure which

has come into being as a unicell of a single course of study developed into several areas of study and research. The present structure of home science has components as varied as human nutrition- the basic physiological need of mankind to education for lifelong development - the supreme need of mankind.

The need upon which the original structure of home science was built was limited to personal lives of students, whereas, the present structure of home science represents not only the personal needs, but also the familiar and national needs. The structure of any discipline is the framework which serves as the skeleton and boundary marks for the discipline. The structure of home science needs to be understood by students and teachers of home science so that they can identify themselves with the particular component of the entire field of home science. To those who happen to be in smaller institutions of home science where the various components of home science are not compartmentalized in form of administratively separate departments, the structure of home science should serve as a mental guide in absence of the actualization of the components of the structure. A structural view of home science can serve two needs. First need is the primary need of comprehending an entire discipline so as to identify the inter relationships of the various components and their contributions to the totality of the discipline. Knowledge of one's own specialization within home science is indeed very essential but an absolute unfamiliarity with other specializations will cause a myopic and lop-sided view of home science. It will also make a person underestimate the role and contributions of other components of home science to its totality.

The second need to know the structural aspect of home science is to be able to delineate one's own area of home science so as to guard it from unnecessary diffusion with seemingly related areas within or outside home science. A person lacking the knowledge of area of extension within home science may devote herself to basic research in nutrition whereas she should devote herself to application and dissemination of knowledge of nutrition. One's own specialization may be neglected if undue ventures are made into other specializations. A meaningful research, teaching and extension within and among various specializations is always to be encouraged but not at the cost of negligence of any one specialization.

The structure of home science can be visualized in two ways for sake of study. One structure is the conceptualization of the various specializations within home science which are commonly known as the departments of home science colleges. The other structure consists of levels of knowledge of home science. In some colleges the departments are not developed but the distinct units of home science are recognized by assigning these units to the specialists within home science. The other structure is a higher mental conceptualization of all the existing knowledge in home science. The knowledge and its ultimate uses are the frame of reference in this conceptualization.

The structure depicting the various specializations with their root sciences is comparatively easy to comprehend and hence, it is presented first. Home science is structured upon the fundamental, or, root sciences such as physical, biological, social and humanities. Home science is then visualized as divided out in five components. Each component is described in its widest subdivision, leaving out many smaller and implied subdivisions, For example, in the component of Foods and Nutrition, several subdivisions dealing with Food Science are not mentioned on the assumption that their inclusion is implied by using inclusive terms such as Food Production, Preservation and Preparation. In Education and Extension Specialization, the subunits of audiovisual aids, curriculum planning and evaluation are not mentioned as their inclusion is implied in preparation of Home Science Educators. The structure of home science is divided into five specializations, each contributing to the professional and personal life of the home scientists. Each specialization has its roots into all the three categories of sciences and humanities. It is implied that home science mainly concerns itself with application and diffusion of knowledge derived from the root disciplines, Although certain fundamental research can be and has been carried out in home science, the larger proportion of home science activities centre upon applying and spreading knowledge generated from basic disciplines and conducting research regarding application of knowledge. Home science is thus the carrier of knowledge and services based on proven knowledge regarding mankind and his development in this social milieu. With the present rate of knowledge explosion, the specializations may grow to be independent disciplines, forcing home science to be either a mere commercial service agent or a giant discipline, combining several independent but interrelated disciplines.

In order to maintain its boundary, home science must be well informed about the root sciences but avoid unnecessary inclusion of these sciences. Home Science must most efficiently utilize the knowledge of root science to provide better information and services to individuals and families in order to maintain its place. Home Science

must serve as an indispensable link between knowledge of root disciplines and its use for mankind. It is the discipline of home science that must process the basic knowledge for its utilization by the masses. Home Science must serve as an indispensable link between knowledge of root disciplines and its use for mankind. It is the discipline of home science that must process the basic knowledge for its utilization by the masses. Home science must continue to strengthen its structure by making each of its specialization a unique one in terms of its contribution to the professional and personal lives of the individuals. If home science has a definite professional and personal contribution to make to the well being of mankind, its structure will solidify and it may even widen its scope by adding new specializations within its framework.

There is also some possibility of change within the specializations. A specialization may concentrate on one or a few of its subunits and neglect other subunits. For instance, Food and Nutrition specialization may concentrate on food services neglecting food hygiene and nutrition. Education and Extension specialization may concern itself with preparation of college teachers and neglect its role in non-formal education of the deprived masses, such negligence if continued, may narrow down the field of home science.

On the other hand, a specialization may widen its horizons to include new units of study and research and thus may strengthen the structure of home science. Any one of the five components widely known as specialization may weaken or strengthen the structure of home science, by either narrowing down itself or by unwise inclusion of other disciplines in the specialization.

The functions of the structure are specified as contributions in Figure 1. The purpose of having a specific structure in home science is to serve specific objectives. The many objectives selected by the home science institutions are the functions performed by the structures of home science. The specific structural design of any home science college is a means to the end of making contributions to mankind. If a college finds that the traditional five component of home science are not relevant in the light of its social and educational environment, the structure should be changed. Any structure of home science would be functional only when it relates itself to its surrounding sociopsychological, and even political contexts. The excellence of a home science structure is not only in its theoretical soundness but also in its relevance to, and the extent of utility, those for whom it is created. The functional aspect of

home science structure will be known by continued demand for home science graduates in personal, social and professional life. Studies by graduate Students in a few home science colleges have shown that a large percentage of home science graduates were employed. The future needs in terms of employment will be different and the structure of home science ought to be changed accordingly. Probably the demand for nutrition and home management specialization may exceed that of other specializations. One definite discrepancy in the present structure is that of deprivation of sufficient subject matter knowledge for those who choose the specialization of education and extension. The structure of education and extension component should allow a broad margin for inclusion of subject-matter knowledge of home science. In fact, a more realistic and functional structure should include fundamentals of education and extension in every component of home science rather than isolating education and extension as an independent component. Education and extension may be assigned to a department within the home science college but the course may be all necessary for the other specializations as an auxiliary service to the utilization of specialized knowledge in home science.

Another alternative in the present structure of home science is that the component of education and extension could be offered to only those who desire to enter teaching, extension, and research work. In such a case, education and extension component, could be offered as a post-graduate work and should undoubtedly lead to another degree, after a home science degree. Such a change in the home science structure would better prepare individuals for all teaching, extension and research related jobs.

The other structure of home science can be visualized on the basis of levels of knowledge and skills gained through home science. Such a structure is an aid to curriculum planners who can determine the sequences of various knowledge and skills in home science. The rudimentary levels of knowledge are the facts and principles required in home science, whereas the highest levels are those of developing internal convictions and choices which are commonly called as values. All home science courses start with basic facts and principles and many of these courses lead to inculcating higher values and attitudes in students. The structure of home science shown in Figure 4 depicts the level of home science knowledge and skills and affective behaviour resulting from or based on knowledge and skills.

3.5 Self Check Exercise

- Q1. Home Science is a multi-disciplinary subject. Discuss?
- Q2. Give the Structure and function of Home Science?
- Q3. Give the Importance of research in Home Science?

Linkages of Home-Science with other related subjects

Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Linkage of Home Science with Physics
- 4.3 Linkage of Home Science with Chemistry
- 4.4 Linkage of Home Science with Biology
- 4.5 Linkage of Home Science with Physiology
- 4.6 Linkage of Home Science with Psychology
- 4.7 Linkage of Home Science with Sociology
- 4.8 Linkage of Home Science with Economics
- 4.9 Linkage of Home Science with Agriculture
- 4.10 Self Check Exercise

4.0 Objectives:-

The objective of the chapter is to apprise the learner about :

1. Interdisciplinary approach of Home Science
2. Linkage of Home Science with other Sciences

4.1 Introduction:-

A Professional home scientist requires a combination of knowledge from specializations. A home maker requires varied knowledge from various source to fulfil his tasks. The home science therefore draws knowledge from other disciplines. Such knowledge is applied for preparing individual or professional roles as well as for the role of home making.

The interdisciplinary approach of home science has increased in course of history because the professional role has changed their nature and new roles have become possible for professional home scientist. The philosophy of home science has also changed to prepare individual for professional roles, rather than to prepare them for home making. In fact, home science is no more considered to aim predominantly at home making but it is increasingly to aim at preparing professional workers such as teachers, extension personnels, research associates, designers, administrator. Therefore interdisciplinary primary approach of home science has taken a new dimension. Extension Education specialization with home science has accepted communication, journalism, social work, rural urban sociology, psychology as its inter disciplinary partners. Child development has interdisciplinary connections with child psychology, social work, extension, pediatrics, family planning and other. Food and nutrition has interdisciplinary callaborations with biochemistry, microbiology, dietetics, social medicine and other. Home management callaborates with physics, economics, and having other and textiles have interdisciplinary approaches to textile chemistry, weaving textile designing, and garment production industry.

4.2 Linkage of Home Science With Physics:-

Physics is directly linked with different subjects of home science naturely foods and Nutrition, house hold management concept of calories in foods and nutrition is derived from physics, weighing foodstuff, time of cooking, method of cooking, different food items and their Nutritive value, test of starch, methods to calculate food value etc are directly associated with physics. Not only there are different kinds of electric gadgets optical use of electricity, use of microscope, over head projectors, principal of heat as applied fuel such as irons, heaters etc, are all studied under home science and all of these topics are related to the branch of pure-sciences i.e Physics.

Ours is a scientific age. The convenience of life itself depends upon the development of science (Science is a systematized investigation of knowledge). The knowledge of physics plays a very important role in home activity. It is Physics which gives a person knowledge of everyday. Mechanical appliance and electrical equipments such as pressure cooker, milk boiler, toaster, iron, refrigerator, electrical cooking range, television, washing machine, radio, air conditioners, fans, coolers etc. How to use these appliance or how the handle electrical appliances, their helping to boiling, servicing is learned in physics. A part from this, science also teaches us how to correct minor defects at home. Thus through physics one gets the knowledge regarding efficient use of equipment including the selection of the lighting machine and different electrical terms with, volt, fuses, circuits etc. there careful and correct use as well as their care and handling.

4.3 Linkage of Home Science With Chemistry:-

Chemistry is another subject which is related to Home-Science i.e nutrition, initial health and home nursing. Chemistry gives the knowledge about various metallic and non-metallic elements. We study about the nature of various chemical compounds, acids, bases and solution. In this we study about various chemical used for dyeing, bleaching agents, colour fastner etc. which are used in our daily life. We learn about the chemical nature and behaviours of different textiles, the nature of synthetic fibre, like rayon, nylon etc. All this is related to chemistry and even the finishing of fabrics. We also study about chemical use the soap, detergents, chemical used for the purification of water. It also gives us knowledge of how to use these chemicals, which to use and where to use them. Also other things like lipsticks powder, shaving creams, soaps, medicine which we use in our day-to-day life are concerned with knowledge of chemistry. It is reaction to nutrition also we learn about the preservation of surplus food, the biochemical change that the food undergoes in the body. It gives the knowledge for the preservation of pickles and the chemical which are used in this preservation like citric acid, benzoate, potassium metobio-sulphate.

In chemistry we learn about different medicines. These are used in the home. So health and home nursing is related to chemistry. In short, it gives the knowledge of various fibres insecticides, pesticides, medicines, germicides, colouring agent, sweetening agents, oils, flavouring agent and essences.

4.4 Linkage with Biology:-

Biology is the study of life and living organism. It is derived from the Greek word "Bio" and "Logy". Bio means life and logy means knowledge. This subject, traditionally is divided into two branches i.e. Zoology and Botany. In Zoology, we learn about the different animals, micro-organisms, pests etc. But in Botany we study about various plants. So biology is related to Home Science Subject like home making, health, Child Development. So the solution of some of the problems like health, food, shelter are all expected from the knowledge of biological sciences. It is through biology that one gets knowledge about the growth of various parts of the body, food required for proper growth, nutritional deficiencies and in cases resulting from such deficiencies are co-related to nutrition. So, the study of nutrition plays a very important role to maintain the health of the family. Biology also tells about the bio-chemical changes the food undergoes inside the body. Moreover with the knowledge of this science we can know about the science of good health. It is also related to health because we are affected by different micro-organisms like bacteria and viruses etc. So with the knowledge of these bacteria, which we are learning from the science, help us to protect the different members of the family from disease caused by these micro-organisms and viruses.

4.5 Linkage of Home Science With Physiology:-

Physiology is a science in which we study about the working and functioning of different organs in terms of the human body i.e., it is the study of various parts of the body structure, functions and relationships to one another. It gives the knowledge regarding the various systems as circulatory, skeleton system, digestive system, excretory system. It also gives the knowledge regarding the various hormones necessary for the proper functioning of the body. So we see that H.Sc is very closely related to physiology because the different subjects of Home Science like child development, nutrition, health and home making. It is related to child development because in this we study the overall development of child i.e. pre-natal, post-natal. In nutrition, we study about the vitamins, minerals, fats, carbohydrates and proteins and their sources, functions and their deficiencies in the body. Physiology is related to home nursing also. In home nursing, we study about high blood pressure, artificial respiration, how to take temperature, how to use thermometers etc. These are all included in physiology. The branches of Home Science are significantly associated with Home Science as it studies human physiology in many of its specialised branches.

Topics such as functioning of different parts of body (internal) viz. heart, kidney, lungs digestive system, eyes, ears, etc, test of haemoglobin, various bones and Joints present in human body and their functioning etc are studied under it. The above topics are directly associated with home-science but few are indirectly related to it such as different body postures both sitting and standing etc.

4.6 Linkage of Home Science With Psychology:-

In psychology we deal primarily with man's behaviour and the adjustment to his environment. It impinges every area of human life. As a science, psychology has its worth in the laboratory of real life. Developmental psychology is concerned with the chronological and progressive changes in man's capacity to deal with his environment. Other areas of psychology deal with those particular aspects in which one achieves a more or less satisfactory relationship with object and people. Some other deal with personality of its development. Some concerned largely with learning process and some deal with interpersonal relationships and adjustments made by individuals in achieving and maintaining healthy social behaviour. All these have significance to the studying of the laws and principles that give the unique developmental and behavioural characteristics of each individual. Home Science as a stream deals with the psychology of human being so this can be understood in a better way. Physiological length is also studied by home science professional to attain qualitative information. The cognitive and effective behaviour of human beings is studied under home-science. Attributes of values, knowledge and practices as well as opinions and expectations of all groups of society covers under it so clear changes in one's behaviour can be made. Thus psychology helps to get an insight into the intricacies and glories of our common heritage, human nature. It also unfolds the amazing depth of the endless possibilities of the human mind.

4.7 Linkage of Home Science with Sociology

Sociology is scientific knowledge about the behaviour of human beings in orientation to other human beings. It is concerned directly with man's behaviour in reaction to the various human groups in which he holds membership especially those with which he is closely identified, and in which more or less participate directly in structuring his personality and behaviour patterns. The family is the basic unit of all such groups. Since the growth and development of the child take place first in his family setting sociology has great bearing on human development. Sociology helps to interpret the nature of the family and other social groups which play a vital role in the development of the child and how the nature of society and the various situations in society influence the thoughts, feelings and actions of the child and adults. Perception of the physical world is coloured and determined in a large measure by the character of the social institutions. Sociology explains the powerful role played by the different socializing agencies, such as the home, schools and community, in overall development of human beings. The basic nature of human beings can not be separated from the social environment, the milieu in which human is personally moulded.

In society we also study different cultures, following norms, values, ethics. Cross cultural variables are also studied under home science, so sociology helps us to provide information of different children's wealth in terms of food patterns, child rearing practices, clothes, housing and family pattern. It is a science which studies the inter play between man and his environment i.e. society and the world sociology has been derived from the later word "Socio" means associated companies and the Greek word "logos" meaning theory. Man is a social animal. He is the happiest in society amongst people. Sociology is the study about human beings. How to live in the society, how to cooperate and deal with others in the society. We come to know about the civics and it helps us to cooperate in modern society. As well as know that family is the basic feeding social organisation of humanity. In this we study how to bring up as a citizen in the society. How to teach habits like toilet training, sleeping at right time and good manners etc. The first world and the first school for child that means it is related to human and child development. We also study about the various problems as what should be the mode of the system of marriage, age of marriagee, mode of device and inspiration. What should be the relationship between husband and wife. So child development is the subject of home science. Thus Sociology is very closely related to home science because in Home Science we deal with different problems of society. It tells us how to adjust according to the environment of society. It also

teaches us how we can progress in our life through material co-operation. All things which are needed in society comes under Home-Science. It prepares a person for a social satisfaction and society by teaching all the inner and outs of the society thus leading towards social adjustment. It is also related the home management because in this we study about the interior decoration of house by keeping the task of other people like the use of colour in living room should be such that liked by the guests.

4.8 Linkage of Home Science with Economics

As under the stream of home sciences students study the buying and purchasing power of the individuals and accordingly make the supply of goods. It also studies various factors influencing the process of decision making. It includes management of all the three and to ensure maximum utilization of all the resources without wasting any of these. It also involves the process of budgeting, savings etc to that reasons for deficit budget can be identified and measures will be suggested to overcome these factors.

4.9 Linkage of Home Science with Agriculture

Home Science is an extension of Agricultural university. In many Agricultural universities like Punjab Agricultural University home science Extension Department is a part of it. Not only this Indian council of Agricultural Research and Indian Agricultural Reserved Institute too have posts for home scientists. It studies various methods to improve seed quality and soil fertility. As a home science worker measures can also be suggested to improve their present practices through the means of audio visual aids. It is the study of the science and art of production of plant and animals useful to men. It include the cultivation of land and grading and management of crops and animals. It is derived from latin word "Agre" which mean field. We are all dependent upon agriculture for our food, clothing and shelter and for many other thing we use in our daily life. In agriculture science are closely related to the Home science. The knowledge of educational institution and Research laboratory to the form of the community has been recognized in many countries. The working of the community development and national exterior in India recovered that any attempt in improving community living required for the activity, co operation of the worker in the house. For this purpose, a large number of trained workers which are called gramsevikas are required. The ministry of food and agriculture through directorate of extension education

established a home science section in 1954 for training gramsevikas. The original 24 wings of Home science have now increased to 44 gramsevikas. Training centres spread all over India form an integral part of agricultural training centres. So agriculture is related to Home science. In Agriculture, we study about the education of the villagers and how to train them. Agricultural knowledge is applied in the field of house garden, kitchen gardens etc which are located at home. It tells us how to maintain the soil and to improve its fertility. It also tells us about the use of chemical fertilizer when others are not available. It also gives the knowledge of various diseases of plants and animals. We also learn about different types of crops that are related to food and nutrition because we learn about different types of vegetables and fruits and their growth.

4.10 Self Check Exercise

- Q1. Discuss the linkage of Home Science with Psychology and sociology.
- Q2. Discuss the relevance of Home Science in relation to other related subjects.

Job Opportunities in Home Science

Home Science Education at various levels - School/ College/ University/Research.

Structure:-

- 5.0 Objectives
- 5.1 Introduction
- 5.2 Home Science at various levels
- 5.3 Home Science at College and University
- 5.4 Self check Exercises
- 5.5 References

5.0 Objectives :-

This chapter will enable the learner to understand

- 1 The role of Home-Science at various levels of education.
- 2 To know the importance of Home-Science education from school years to research.

5.1 Introduction

Any plan of teaching or learning Home-Science must begin with a comprehension of the discipline of Home-Science and understanding of the concept of Home-Science. The simplicity of the term "Home-Science" makes it possible to explain the meaning of Home-Science.

The science of Home means the development and judicious use of all resources to achieve a maximal satisfying life for all members of family.

Home-Science education is found at all levels of education whether it be primary, secondary or higher-secondary. As, Home is the place where life begins and school is the place where formal education begins, hence, what has been generated at home can be further enriched at school. Home-Science is for the betterment of all homes, where individuals of both sexes and all ages are found. If all such homes can be improved, it is possible that persons of educable ages can learn about home and its sciences, and can also contribute to betterment of the Home.

The objective of Home-Science at various levels of education is principally of imparting knowledge pertaining to home, its maintenance and happiness therein. The basic knowledge of nutrition, cookery, Home furnishings, work simplification, garment making, selection and storage, childhood guidance and Child care, family creations, is included in school syllabus of Home-Science.

5.2 Home Science education at various levels

(i) Home-Science in the Nursery School

Children in pre nursery of Kindergarten learn Home-Science through such activities as keeping themselves clean, washing their hands, utensil serving and eating food, playing together, keeping their things at right places, taking care of their belongings etc.

(ii) Home-Science in Elementary Schools

In the elementary schools regular courses have been outlined, and definite period of term are allotted to the teaching of Home-Science. In some schools, Home-Science is taught as part of health and hygiene. Some lessons are related to nutrition, food groups, cooking, budgeting, cleanliness, decoration of the homes etc.

(iii) Home-Science in High Secondary Schools

In number of States development of education have made provisions for the teaching of Home-Science at the secondary levels either as an out of school or optional subject. Madras was the first state to introduce Home-Science as a bifurcated course in 1948. Secondary Education Commission appointed by the Govt. of India pointed out that the then existing system of education did not especially in the case of girls provide general education and that the education should be more closely connected with the Home and the community. Therefore, it declared that the teaching of Home science in girl school is essential and that it should become an integral part of the education of the girls in High or Secondary Schools.

The S.E.C gave importance to Home science as an important group of subjects to be taught during the last 4 years of secondary school. The All India Secondary Education council further included Home science as one of the subjects in other elective groups. The government of India have encouraged the starting of Home science classes in several Higher Secondary and multipurpose High Schools in the country. A draft curriculum for 3 years was prepared in 1956 and next to the state boards of secondary education who have adopted it with suitable modification. This subject exists at primary, secondary and higher secondary levels. The syllabus consists of the topics to be:-

- | | |
|---------------------------------|-------------------------|
| 1. Anatomy | 2. Physiology |
| 3. Hygiene | 4. Food |
| 5. Personal Hygiene | 6. Household management |
| 7. First aid | 8. Child care |
| 9. Textile laundry and clothing | |

Ample provision has been made for the learning of the Home science through such activities as preparing food, serving food, calculating the nutritive value, preserving food, keeping the home and its surrounding clean, personal hygiene, applying art and beauty in everyday life, management of money and other resources subsiding the income through crafts such as:- spinning, paper-making weaving and caring for the children.

The curriculum for high schools and intermediate level has been framed on the following basis:-

- 1) It covers all the five major subjects in the area of Home science :-
 - a) Home Management
 - b) Clothing and Textile
 - c) Food and Nutrition
 - d) Child development
 - e) Extension education
- 2) The layout and pattern of the syllabus is on the basis of modern curricula of the Home science Association of India.

- 3) There is continuity of topics from High School to inter mediate level so that the course is co-ordinated and meaningful.
- 4) A clear concept of what is Home science is laid down in High School. The weightage of the course gradually increases from High School to inter-mediate levels from a fundamental to a slightly higher level.
- 5) The course will form a base for foundation for under-graduates and post-graduates Home science education.
- 6) If the student decides to leave education for the sake of getting married, they will find the Home science educatons, both at the High School and inter-mediate level more useful.

Thus, in the present revised scheme, it is possible for a girl to take Home science completely as a diversified subject or one of the trany subjects in the optional groups such as the sciences, humanities and fine arts.

Through these courses at primary, secondary and higher secondary levels the students acquire knowledge and skills essential for successful living i.e. preparing for life by the knowledge of Home science by virtue of its intimate relationship with and concern for individual and community life have a tremendous scope in general education.

(iv) Home Science in Extension Services:-

The need for extending the knowledge from the educational institution to reach laboratories and to the homes and farms of the community has been recognised in many countries. The working of the community development and national extension services in India revealed that any attempt at improving community living requires the active cooperation of the women in the house. For this purpose a large no. of trained women workers (Gramsevikas) have been engaged.

The ministries of food and Agriculture through its directorate of extension established a Home science section in 1954 for training Gramsevikas. The original Home science wings have been increased and the Gramsevikas centre spread all over

India and form an integral part of agriculture extension training centre. In each of these wings, 40 Gramsevikas undergo a one year training programme:-

1. Agriculture and allied subjects
2. Home science subjects including food and nutrition, mother and child care, clothing for family, household management, health and sanitation, human relationships.
3. Handicrafts and cottage industry.
4. Co-operation
5. Extension philosophy and methods co-related with village work.
6. Office procedure such as the maintainance of record, diary and writing of report.

The Gramsevikas after completing their training in Home science extension techniques will live in villages and try to bring about improvement in rural standard of living. They will study the needs and remove weakness of rural homes and gives directives to the laboratory regarding the time of research required to those who-need long before the government of India took up the task of training Gramsevikas. The Kasturba National trust started preparing gram sevikas for social welfare work. For a long time they assited central social welfare board in training gram Sevikas. for their Welfare extension projects. The ministry of community development Mukhya Sevika unit in different states. The training programme for the Mukhya Sevika includes practical training, practical and field work in the following ways:-

1. Promotion and development of the large for better living in village, improvement of the home and community.
2. Organisation and promotion of family and child welfare activities.
3. Establishment of women's organisation dealing cultural and recreational and other programmes.
4. Promotion of education among girls and improvement of the standard of living through same economic programme such as that of crafts.

5. Helping village women to adopt improved agricultural and alike practices.
6. Preparation and use of audio-visual aids.
7. Development of minimum programme for women and children and the family preparation of work plans in coordination with the village community and other extension workers.
8. Establishment of a working relationship with other organisation which are active in the same field. For example:- Sarvodaya Bharat Seva Samaj.
9. Participation in people's programme such as Panchayats, co-operatives etc.
10. Guiding and supervising the women staff in the blocks.
11. Evaluation of the programmes.

v) Home-Science education at colleges and univesities :-

In many instiution, Home Science is one of the optional subjects. In some institution, there is full facility of Home-Science. In colleges where there is full Home-Science three or four years Home Science curriculum with basic arts and special areas of Home-Science subject has been outlined leading to the university degree. Any college curriculum in Home Science. should be built around these disciplines as sciences, humanities and fine arts. There colleges offer Home science at Bachelor's degree:-

1. Sciences - Physical, and Biological Science
2. Humanities and Social Sciences
3. Fine arts

1. a)Sciences-physical Sciences:- It includes physics, chemistry with theirapplication in nutrition, textiles, home-nursing health, home and hygiene, management of house hold equipments.

b) Biological Sciences:- It includes physiology, bacteriology, hygiene with their application in nutrition, health, child development, home-nursing.

2. Social Sciences:- It includes economics, psychology with their application in home management, household and consumption economics, child-development, family-relationship, food and nutrition, clothing and textiles.

3. Fine arts:- Fine arts with their application in housing, home-furnishing, food preservations or food preservation, textile, clothing, art in everyday life. It is necessary that the quires subject and their requirements prescribed for Home science in the different universities have a basic, common, minimum qualification to enable students graduating from one university to get admission in another university for post-graduation training courses without difficulty. The curriculum of university for post-graduation in Home-Science are:-

- a) Food and Nutrition
- b) Clothing and Textiles
- c) Child Development
- d) Home Management
- e) Extension Education.

5.3 Home Science at College and University

The objectives of home science are the indicators of its functions. The activities of home scientists are guided by the objectives of home science programmes. These are the objectives which determine in what directions the home scientists must function. The objectives of home science for higher education are selected by the specialists in each of home science. Two kinds of home science programmes are offered in Indian universities; one having specialization in various areas of home science and, the other, having a general home science programme without offering any specialization. The objectives of general home science programmes are broad in scope, whereas the objectives of specializations are specific and limited to the given field of specialization.

In 1959, the American Home Economics Association formulated a statement of philosophy and objectives which included the following:

Educating the individual for family living

Improving the services and goods used by families

Conducting research to discover the changing needs of individuals and families and the means of satisfying these needs

Furthering community, national, and world condition favourable to family living.

These are the broad objectives of home science as accepted by the American home economists regardless of affiliation to schools or colleges. These objectives indicate home science is primarily concerned with strengthening family life.

In 1964, Chandra and Chaudhari conducted a survey of objectives of home science colleges in India which revealed the following general or broad objectives:-

1. To educate the individual for family living.
2. To manage the use of resources so that the values and goals of the individual, the family, and the society may be attained.
3. To achieve a satisfactory and functional philosophy life with emphasis on personal and family living.
4. To unify knowledge from related sciences and arts in order to widen the horizons of home science.
5. To develop a wholesome personality.
6. To interpret home science to students and public in the light of the larger needs education and basic social needs.
7. To establish values which give meaning to personal family and community living for selecting goals, application appropriate to these values.
8. To prepare students for employment in home science and related fields.
9. To solve problems through constructive thinking.
10. To help students understand themselves for cultivating wholesome relationships with others.
11. To help students develop a sense of beauty in every phase of daily living.

This survey of objectives of home science colleges included responses from 46 colleges. As only 61 percent of the colleges had responded to the survey checklist, generalizations on commonly accepted objectives cannot be satisfactorily made. However, the objectives stated here are the ones which were accepted 70 percent and more colleges of the 46 which responded. These 11 objectives of home science can thus be considered the most commonly accepted objectives.

All these objectives show a general overriding thought of preparing and individual for a better self and for a better family life. The objective of preparation for employment, was recognized a decade/ ago. It is important to note that the home science colleges in India saw the need for employment of home science graduates as early as 1964 and probably even earlier. But the importance given to the objectives of contributing to home and family life was greater than those given to employment preparation.

The least accepted objective according to this survey was to conduct research to discover changing needs of individuals and families and the means of satisfying these needs. Only 25.3 percent of the home science colleges of India in 1964 identified research as one of the objectives. This finding reflects several factors which have underestimated research in the decade of 1960. Lack of expertise and facilities to carry on research are the major factors in underestimating the role of research in home science. But this unfortunate state of neglecting research did not continue for long. In later 1960's several home science colleges introduced master's degree programmes and research became partial requirement towards getting a Master's degree in home science. With the exception of one or two colleges, research has been a compulsory part of the Master's degree in home science.

As recently as 1975, the Faculty of Home Science at Baroda was considering seriously of a choice in conducting a research or a Master's thesis should be given to the students. Such a trend may seem to weaken the objectives of home science but it is not correct conclusion. Although research is an integral part of post-graduate studies, there will be some students who will be outstanding in carrying out small projects and studying various home science courses, though they may show little, or, no ability for research. Instead of forcing every student to do research and thereby

accepting an inferior quality of research (because of the prescribed requirements) an option to students should be given in conducting research as a requirement. By accepting only capable and genuinely interested students to do research, the quality of their research work can be maintained.

A Master's thesis by Roy (1975,p.101) at that Faculty of Home Science, Baroda, revealed that the students were undecided about having a choice in dissertation-writing. But when dissertation was considered instead of project work, as many as 100 to 43 per cent of students (p.102) and 43 per cent of teachers in various departments preferred project work. When students teachers were not in favour of making all students write a dissertation. The difference between the students' and teachers' opinions was statistically significant (p.104).

Studies on student's ability and aptitudes for doing research need to be conducted. Students' research form a great proportion of the total research conducted in home science. There is also a pressing need for research in home science. The quality of students' research must be improved by permitting only more intelligent and interested students to do research, but at the same time, research by teachers needs to be expanded.

A survey of home economics in America, in 1968, by Mc-Grath (p.58) indicated that home economics research in America had a strong agricultural orientation. 'The Purnell Act', McGrath observed, aimed at 'the development and improvement of the rural home and the rural life...not home and family life generally'. (McGrath and Johnson 1968, pp. 58-59) As a result, the direction of home economics research in land-grant colleges has been bifurcated. On one hand it relies on agricultural facilities, and on the other it is expected to transcend its agrarian tradition and benefit family life throughout the society.

With the establishment of the agricultural universities in India on the pattern of the land-grant colleges of America, the home science research in India will also tend to have an agricultural orientation. India does need a tremendous amount of research in agriculture and home science has an obligation to contribute to research of agrarian utility and tradition. However, research in all areas of home science need

also to be carried out for the urban home and family life. Home science colleges located in big cities must form nucleus for such research.

The survey by Chandra and Chaundhari (1964) also included objectives dealing with the five specializations in home science. The findings on the objectives for specializations showed that all the five specializations at undergraduate level were represented by the 46 colleges of this survey. Very few colleges aimed at preparation of students for employment with respect to their specialization, although in general most of the colleges agreed upon this objective.

In Foods and Nutrition, the objectives dealing with the preparation of students to work in institutions such as cafetrias, school lunch rooms and hospitals were recognized by the least number of colleges, i.e., only six out of 46 (Chandra and Chaudhari, 1964, p.22). The foods and nutrition objectives that were checked by 50 percent and more colleges were as follows:-

To develop an ability to plan well-balanced diet for individuals at different income levels.

To develop an ability in using the correct methods in cooking.

To develop an ability to apply scientific principles for the solution of problems in cookery.

To develop knowledge about the principles of preservation of different foods.

For the specialization of home management, none of the given objectives was checked by 50 percent or more colleges although all the objectives were checked by 40 percent and more of them. Home management objectives were thus not perceived commonly by the 46 colleges. The objectives checked by 45 percent and more colleges were as follows:

To develop an understanding of the meaning of home management.

To develop the recognition of the factors within and outside the home that influence family's financial decisions.

To develop an ability to make wise choices in the use of family resources.

To be able to choose and construct home furnishings and recognize the importance of their care and use.

To develop an understanding of housing as it affects family welfare and social relations.

To develop skills in managing household activities.

The specialization of education and extension was offered by very small number of colleges-two colleges offered education and five offered extension (including the two which offered education). Out of the five colleges the objectives of education and extension checked by all five or four colleges were as follows (Chandra and Chaudhari, 1964, p.21).

To develop recognition of the importance of home science in extension.

To develop an awareness of problems and techniques to solve them in education and extension.

To develop an awareness of various factors that underline successful teaching.

To develop an understanding of evaluation in learning teaching processes.

To develop an understanding of the extension methods.

To have direct experiences in observing and participating with village level workers.

For the specialization in Clothing and Textiles only three objectives were recognized by 40 per cent and more home science colleges:

To help students become self supporting and self-reliant consumers of clothing.

To develop an ability to make garments for the family.

To develop an ability to apply scientific principles to the selection and use of fabrics.

For the Child Development specialization, the least recognized objective was to train teachers for nursery schools and kindergartens. Only eight out of 18 colleges offering Child Development major at the undergraduate level checked the objective of training nursery and kindergarten teachers. Four objectives were checked by colleges in the range of 40 to 46 percent:

To develop an ability to recognize individual difference in children and to respect them.

To increase knowledge of the development tasks, needs, and interests of children of various age groups.

To develop an understanding of the inter-relationship between the physical and psychological aspects of human behaviour.

To develop an awareness of the problems of adolescence.

The general and subject-matter objectives of home science, based on the survey indicated a strong orientation towards personal and family life improvement. All the objectives recognized by the majority of home science colleges in 1964, reflected the philosophy of home science knowledge for the development of self and the contribution of a well-developed person to her family. It can be inferred that the 'individual within her family' was the central theme of home science a decade ago.

Two objectives which were not widely recognized were those of preparing students for employment related to their specialization in home science, and, conducting research in all areas of home science. Today, both of these objectives are unquestioningly accepted. The social and educational context for women has changed rapidly in India and so new objectives are necessary for the guidance of home science programmes.

Comparing today's world with the world of 50 years ago, it is easy to identify social, economic and educational changes in the philosophy and objectives of home science. The greatest effects have been created by industrialization, urbanization, working women and population explosion. Industrialization has change the living and working conditions in the cities of India. The facilities resulting from industrialization, for instance, a sewing machine, a pressure cooker, and a refrigerator, to name a few, have provided economic motivation to urban people for seeking better jobs. Women have entered the work-world out of economic necessity and as a result of newer concepts of roles of women. Population growth has, on the other hand, created stiff competition in employment opportunities. Urbanization has given new opportunities to urban population but has also created problems and challenges to traditional home making activities. Consumption of goods in families has increased so that each one, or as many as possible can, in a family, aspire to have a job.

Educational and employment opportunities to the women have brought about great change in the roles of women and attitudes toward women. In many urban communities higher education for women has become a necessity. Women have themselves demanded revolutionary changes in their familial, social and professional roles. Social legislations have raised the status of women through such laws as Sardar Act which aim to safeguard the interests of women. Special education for women and special instiutions for education of women only, have aided the cause of changing the status of Indian women. Colleges of Home Science and Universities like Shreemati Nathibai Damodar Thackersey Women's University (S.N.D.T) have given a special recognition to women's abilities and contributions.

Such social, economic, and educational changes have made it imperative for home science to have a critical look at its objectives. Home science, being predominatly studied by women, needs to revise its objectives in the light of changes in the status and roles of women. By and large, the status and roles of Indian rural women have not changed. But with industrialization and urbanization spreadint ro rural areas, the rural Indian women will also accept these changes, in course of time.

At present, all the home science colleges catering to the needs of urban and

suburban women need to reformulate their objectives. The revised objectives must be broad in scope so that each specialization of home science can contribute to the achievement of such objectives. The broad objectives of home science colleges in India can be described as follows:

Development of individual within family, community and nation.

Improvement of family life by using modern knowledge in sciences and technology.

Development of employment potential in and related areas of home science.

Development of research in all specializations of home science for increased and improved application of scientific knowledge.

Development of individual within family, community and nation. The development of the individual is dependent as well as contributory to family, community and nation. All home science knowledge concerning nutrition, home and its equipment, textiles and clothing, and human development, need to be utilized for a better fed and glad person with a well-developed personality in a well-managed home. For such a wide utilization of home science knowledge a basic home science knowledge of all subject-matter areas at undergraduate level is a prerequisite. More of general, and less of specialized, knowledge is necessary for the fulfilment of this objective. An individual who is enriched by the basic knowledge of all areas of home will be able to enrich the family, community and nation to which she belongs.

Improvement of family life through knowledge of science and technology. When there is such an enormous amount of knowledge in science and technology which form the root disciplines for home science, home science must find new and increased use of knowledge for improvement of total family life. The knowledge of family planning and population growth should be used to protect the family planning and population growth from hazards of unplanned families. Knowledge in managing homes, adding facilities to houses should be used by home science. Scientific knowledge in nutrition and textiles and child guidance needs to be used for better meals, clothes, houses and for better development of childcare. The functions of family have changed, if not increased, and home science must contribute to family in carrying on its functions to promote better growth and more satisfactions,

through the application of modern scientific knowledge, and technological development.

Development of employment potential in and related areas of home science. In order to make wider application of home science knowledge, home science graduates must seek professional engagements. An educated woman has better opportunities to contribute to community and national life because she can reach a wider population through her professional commitments. Being on a job gives more chances to a home science graduate for improving family, community and national life. There will be, however, exceptions for some women to have jobs. But, by and large, a woman must seek and prepare herself for a gainful employment. Home science must have more objectives that have vocational orientation. Each specialization in home science must increasingly aggressive in finding more and new jobs for its graduates. With the collaboration of business and industries, home science must find new employments in these areas. In the teaching profession and to some extent in extension, home science has made excellent headway, but in India, business and industries have not been tried for employment of home scientist. For conducting research in business and industries which relate to purchasing and consumption by homemakers, to population education of industrial workers, and to the welfare of their children. home scientists have a contribution to make. In order to achieve this objective, the home science curriculum and research need to be broadened.

Development of research for increased and improved application of scientific knowledge. As home science is a science of application of knowledge for better living, research in how to apply scientific knowledge, should be of paramount importance in home science. Better ways of food preparation and preservation should be learnt and publicized by the nutrition majors. Improvement in meal planning and management of cooking and food catering agencies, like canteens, messes in hostels, dining cars on railways, kitchens in hospitals, etc., need to be undertaken by nutritionists. The area of foods and nutrition has great potentials for applied and fundamental research. The varieties of groups that this specialization can reach for its research are also many.

Research in home management must, and can, widen its horizon in several ways. This is one specialization which can make tremendous headway into business and industries by research with their collaboration. Research in testing new equipment and appliances put in the market by industries could be carried out by home management specialists employed there. Publicity of new equipment, new housing designs and materials also can be done by home management specialists. Another area of research here is the management of service institutions like hotels, hostels, canteens and similar institution.

Human development as an area of specialization has many avenues of research open to it. Research in better ways on understanding and guiding persons of all age groups is of fundamental importance to this specialization. The cognitive and affective behaviour of human beings could be understood and shaped by researching in these areas. The increasingly high incidents of delinquency, mental unrest, alienation from society, marital problem, subordination of women and children in social, professional, and even legal matters call for more and varied research activities on part of human development specialists. A wider collaboration with disciplines of education, sociology, psychology, law, medicine, and social work is possible for the specialization of human development.

Clothing and textiles have opportunities for applied as well as fundamental research. Some of the areas where research is most needed are selection, preparation and use of all the new kinds of garments for men, women and children. Designing the garments as well as fabrics can be done increasingly by clothing and textiles specialization in collaboration with cloth mills, cloth merchants and consumers. Appliances and equipment for clothing and textiles can also be made and tested by these specialists. Research in better ways of teaching clothing and textiles can also be undertaken in collaboration with education and extension specialization.

The specialization of education and extension must continue to do research to find improved methods of teaching, extending home science knowledge and evaluating the tasks of learning-teaching. Opinions and expectations of all groups of teachers, students, administrators and lay persons should also be studied as these

factors influence teaching which means changing one's behaviour. As home science education must be imparted with full understanding of social, psychological and sociological context, research in home science education must involve collaboration with these related discipline. As for research in home science extension, it must have agrarian as well as the home science subject-matter orientation.

The four objectives presented here must not be viewed as the final aims of home science colleges. Parallel to socio-economic conditions of India, these objectives will also be subjected to change. New objectives, although centered around individual and family, may emerge with future social changes, especially in the roles of women in the professional world.

5.4 Self Check Assessment

- Q1 Discuss the role of Home Science at various levels.
- Q2 How is Home Science education beneficial to us. Explain with example.

Job Oriented Courses: Nutrition, Dietetics, Food Preservation, Housing

STRUCTURE

- 6.0 Objectives
- 6.1 Introduction to Scope of Home Science
- 6.2 Home Science at School level in Multi Purpose School
- 6.3 Home Science at school level in Technical School
- 6.4 Home Science at school in vocational stream.
 - 6.4.1 Home Science in Higher Education
 - 6.4.2 Home Science in Women's Polytechnic
- 6.5 Bachelor of Arts degree programme in Home Making Education
- 6.6 Masters of Arts Degree in Home Making Education
- 6.7 Bachelor of science programme in Home making education
- 6.8 Master of science programme in home making education.
- 6.9 Bachelor of school education with home science.
- 6.10 Honour Programme in Home Science
- 6.11 Master of Philosophy in Home-Science
- 6.12 Doctor of Philosophy in Home Science
- 6.13 Home Science in Agricultural Universities

6.14 Diplomas in Home Science.

8.14.1 U.G. Course in Early Childhood Education

8.14.2 P.G. Diploma in Preschool Education

8.14.3 P.G. Diploma in Dietetics

8.14.4 P.G. Diploma in Institutional Management

8.14.5 U.G. and P.G. Diplomas in Interior Decoration

8.14.6 P.G. Diploma in Extension Education

6.15 Self Check Assessment

6.0 OBJECTIVES

After going through this chapter learner will be able to know about

1. Educational Scope of Home Science.
2. Educational Scope of Home-Science at various levels
3. Job oriented courses in different branches of Home-Science

6.1 Introduction to Scope of Home Science:-

The scope of Home Science is as wide as the scope of living itself as it deals with the very art of living. Today Home Science Education is not limited to training good housewives or ideal mothers only. It is more to train youngsters for improved

quality of life. It deals with every aspect of living within the home as well as in relation to the larger society of which home is a part Home Science today aims at furthering conditions in the Community, Nation and the World at large which will be favourable to promoting better quality of family life.

Today Home Science is applicable in various situations of life. It is not limited to home making only. It has broadened its visits of work and has covered all aspects of life ranging from human growth and development to the management of institutions other than home for the promotion of better standard of living for every individual in the society.

The scope of Home Science can be broadly classified into two aspects. The educational scope of Home Science and the vocational scope of Home Science. It contributes to the attainment of the goals of general education which besides being concerned with personal and social development also involve developing of creativity, decision making and problem solving skills, so also promoting learning to be co-operative, developing good judgment, achieving better human relationship and improving personality. When Home Science has to fulfill its educational purpose of contributing to the students personality development, preparation for marriage and family life as well as worthy citizenship. Its scope of training needs to be broad enough to encompass the real life problems of family in contemporary society.

Keeping these factors in mind different programmes of education in Home Science have been formulated.

Home Science in early 20th Century:-

Home Science in early 20th Century or even in late 19th Century was not offered as a discipline but was more a subject of study. It was offered in selected schools aiming at preparing future housewives for aristocratic families. It was then referred to as 'House Craft' and 'Domestic Science' As Domestic Science, It had an eminent place even at the college level for women. In Karve University which is now known as SNDT Women's University, Domestic Science was a popular subject.

However Home Science as it stands today is over fifty years old it has come up as an educational discipline due to social need. It came up as a supplementary

training programme in Home making. It has now grown up to be a professional discipline itself.

Today Home Science is offered at various levels of education and in various programmes of education, development and welfare.

6.2 Home Science at School level in Multipurpose Schools:-

In 1954 Mudaliar Commission also known as Secondary School Commission pointed out that the then existing system of education was too academic and artificial which called for education providing for opportunities for development of self as an individual as well as a worthy component of society. The commission recommended that if education is to be provided for and satisfy the needs of all adolescents it needs to offer programmes which will offer opportunity to meet these needs and interest of the pupils. As a result of this recommendation the multipurpose programme of education came into being. Home Science as a course of study was included as one of the seven options under this programme. This Programme aimed at providing to each individual pupil an opportunity to utilize and develop his/her natural tendencies through the special elective chosen by them in these schools. This diversified curriculum offered seven alternatives namely (1) Humanities (2) Sciences (3) Technical subjects (4) Commercial subjects (5) Agricultural subjects (6) Fine Arts and (7) Home Science.

Students were expected to choose any one of these as a special field and with this field they had to learn usual subjects like languages, general science, social studies and crafts.

6.3 In Technical Schools:-

The main aim of starting technical schools at the high school level was to impart practical knowledge regarding different fields. Home Science was not taught as a subject in its true sense. What was included in these schools was an experience in related fields which concerned home such as tailoring, dress designing, handicraft, cooking and food preservation. Today there is a scope to broaden its curriculum beyond these areas.

6.4 In Vocational Stream:-

With the revision of educational system in general and introduction of 10+2 system in particular, Home Science was offered as one of the three streams of education at plus 2 level Upto 10th Home Science is offered in form of Work Experiences in line with the content offered in Technical Schools However at + 2 level the main aim of offering Home Science through Vocational Stream was to prepare individuals for various vocations which are existing so that at the end of the 12th standard pupils can enter into the related jobs to get into further studies at colleges and universities.

6.4.1 Home Science in Higher Education:-

Home Science at college level was offered as early as in 1932 at the Lady Irwin College at the initiative of All India Women's Conference. This college also offered a Post Graduate Diploma in Education and Teachers Training to produce teachers to take positions in schools as well as newly opening colleges of Home Science. Today Home Science is being offered by over 150 institutions of higher learning through private colleges as well as universities.

Home Science has not only increased in its number of institutions offering programmes of Home Science Education. Today there are different kinds of institutions offering Home Science through their curriculum as an academic subject. Today Home Science has a place in Technical Institute of higher learning namely the Women's Polytechnic as well as in programmes of Arts and Science.

6.4.2 Home Science in Women's Polytechnic:-

This once again is an attempt to produce technical hands needed for home related agencies. The programme of education includes mainly courses in tailoring, dress and costume designing, textile, printing, handicrafts, baking as well as food processing and preservation. A lot more needs to be included in areas such as interior decoration, furniture designing and furnishings as well as architectural and housing designing assistance alongwith household equipment designers. Home Science in these institutes is still not viewed beyond cooking and stitching with which it was so closely associated, earlier.

A lot need to be done to get a coveted position and the required importance in the technical programme of education if it has to product technical hands, with orientation to education for better home making. It calls for researches, innovations, creations and above all conviction about its basic potential to contribute to this male dominate area of specialization.

6.5 Bachelor of Arts degree programme in Home Making Education:-

Home Science is offered in many colleges offering degree programme in arts as one of the major areas of study. It consists of composite programme of home making education offering preparation generally in all the five areas of specializations. Home Science is just one of the many options offered at B.A. level. The evaluation is in each area through a combined paper or through separate papers in each of them. Though a combined paper or through separate papers in each of them. Though this programme tries to reach the breadth it often fails to achieve the required depth in terms of its content. This kind of programme is offered in both colleges those for women alone as well as co-educational. Under colleges of arts Home Science functions as one of the departments and follows the scheme of evaluation applicable to that college.

6.6 Master of Arts degree in Home Making Education:-

Home Science programme offered at M.A. level is more of a continuation of Bachelors programme. This too is offered either by colleges both for women as well as co-educational or by university department of Arts. This too has a paper in each of the specialized areas. It may or may not have research as a requirement for masters degree.

6.7 Bachelor of Science Programmes in Home Making Education:-

This programme is a fulfilled programme of Home Science at under graduate level. It has two types of programmes. In one of the programmes a general programme of Home Science is offered undergraduate level dividing the time equally for each of the five areas of Home Science. In the other programme specialization in each of the five areas is offered either right from the first year of entry in the college or at the 2nd or 3rd year.

In general B.S.c. programmes of Home Science evaluation is done through independent papers in each of the five areas of Home Science. In specialization programme each department has a certain number of written papers as well as practicals for final evaluation.

B.Sc. Home programme is offered by faculties universities which are also engaged in extension as well as research programmes in Home Sciences.

6.8 Master of Science programmes in Home Making Education

This programme is offered both at the college level as well as at the Post Graduate departments and Faculties at University level. Masters programme is offered with papers as well as with papers and research. This programme is considered more professional as it develops scientific thinking based on research.

6.9 Bachelor of Education with Home Science:-

This programme is offered by Teachers Training Colleges preparing secondary school teachers to teach Home Science at school level. The programme offered in this colleges has more courses in the field of teacher's training, administration and programme planning. However a course in special methods for teaching is offered to train Home Science teachers. Since it is a postgraduate degree programme the main degree in Home Science is a must for admission to this course of study.

6.10 Honours Programme in Home Science :

Many colleges offering general Home Science programme offer a one years honours degree programme before enrolling students for masters studies. The courses offered in such programme strengthen one of the five areas of Home Science thus preparing them for specialization at masters level.

6.11 Master of philosophy in Home Science :

This is a recent addition offered beyond Master's degree. Today there are limited university department and faculties offering M Phil in Home Science and that too in fewer specializations. However there is an increasing trend to offer this degree before Ph. D. in Home Science.

6.12 Doctor of Philosophy in Home Science :

Very few institutions offering Home Science programmes offer the degree in Doctor of Philosophy in Home Science. At present only Faculty of Home Science, M.S. University, Baroda offers a full-fledged Ph.D. programme in Home Science in all five areas of Home Science. Many post graduate departments of social and behavioural sciences as well as humanities in some universities enrol students with masters in Home Science for Ph.D. There are institutes offering Ph.D. in Home Science in only specific areas.

6.13 Home Science in Agricultural Universities:

Home Science is offered in agricultural universities in India. Today there are over 26 agricultural universities which are having colleges of Home Science offering both undergraduate as well as postgraduate programmes in Home Science. The courses offered in five areas of specialization are same, however the orientation through learning experiences offered is based more on agrarian rural homes and families. They offer degrees from B.Sc. (Home Science) till Ph.D. in Home Science.

6.14 Diploma in Home Science :

Diploma Programmes in Home Science are offered at both the undergraduate as well as post graduate level. These diplomas are generally offered in various areas of specializations in Home Science. They vary in the duration as well as in nature of training. The main three areas in which such diplomas are offered are Child Development, Foods and Nutrition and Home Management. Recently post graduate, diploma in Extension Education at M.S. University is also started.

6.14.1 U.G. Course in Early Childhood Education.

This is offered at undergraduate level after 10th. This course aims at training nursery school teachers to maintain the municipal corporation as well as rural pre schools. They are more teacher training programmes. Some institutions offer this diploma for a duration of one year whereas some offer them for over a period of two years. The duration of time indicates the richness of program content in terms of learning theories as well as practical experiences. This course is more competency based and does not prepare students for entry to full-fledged B.Sc. (Home science) programme.

6.14.2 P.G. Diploma in Preschool Education.

This diploma is generally offered for a period of one year after graduation, The graduates are drawn not only from the field of Home Science but also from related fields such as Sociology and Psychology. General aptitude for running a preschool is the major indication for qualifying for this diploma. Since it assumes adequate learning in subject matter, it concentrates more on the educational, organizational and programme planning aspects of the training for promoting preschool education.

6.14.3 P.G. Diploma in Dietetics.

This diploma is offered after graduation. The specialization required is in the area of foods and nutrition. Graduates from other areas of sciences especially from bio-chemistry and chemistry too are encouraged to join this diploma. It deals more with training in dietetics in three main areas: administrative, therapeutic as well as clinical. Though this diploma does not necessarily mean services rendered to hospital and allied institutions, training given under this programme is more oriented to hospital dietary services.

6.14.4 P.G. Diploma in Institutional Management.

This diploma too is offered to graduates in Home Science having specialization in Foods and Nutrition. Home Management as well as General Home Science. The courses offered deal with management of hospitality institutions such as Hotels, Hostels and Hospitals. Training given in this area includes over and above dietetics, house keeping and interior decoration, accounting, office administration, book keeping, telephone and PBX operations.

6.14.5 U.G. and P.G. Diplomas in Interior Decoration.

Interior decoration is considered a part of Home Making Education.

Many institutions other than colleges of Home Science offer these diplomas which are based more on application of art principles in every day living through decoration in house and housing, furnishings and furniture designing along with drapery.

Most of these diploma call for practical training as well as apprenticeship and/or internship. With more and more of vocational opportunities more and more of this vocationally oriented diplomas involving Home Science learning will come into being.

Besides these formal educational programmes offered in Home Science there are many non-formal and informal programmes of education offered continuously to meet the demands and needs for trained personnel in the field of Home Science Education.

6.14.6 P.G. Diploma in Extension Education.

A one year P.G. Diploma in Extension Education is offered at the Department of Home Science Extension. The programme offers theory course in Extension Education dealing with History, Philosophy and Development of Extension in India Programme Planning, Monitoring, Supervision, Evaluation and Follow up programmes in Extension. Contemporary Programmes in Extension, Teaching Materials, Methods as well as Media and Communication in Extension. It provides field work Experiences as well as field stay for two weeks. The diploma holders get jobs in Urban and Rural Extension Projects.

6.15 Self Check Assessment

- Q1. Discuss the importance of Home Science education at various levels.
- Q2. Describe the role of Research in Home Science at College and University levels.
- Q3. Discuss the growth of discipline of Home Science in reference to job opportunities in Home Science

Textiles and Clothing, Interior Design, Pre-School education and extension.

STRUCTURE

- 7.0 Objectives
- 7.1 Introduction
- 7.2 Nutrition and Dietitics
- 7.3 Food Preservation
- 7.4 Housing
- 7.5 Textile and Clothing
- 7.6 Interior Decoration
- 7.7 Pre School Education
- 7.8 Self Check Excercise

7.0 OBJECTIVES

After going through this chapter lesson will be able to understand the

- Educational Scope of Home Science.
- The Job opportunities a valuable in the subjects of Home Science.

7.1 INTRODUCTION

The Home Science College offer Post graduate and under graduate diplomas in and related Home-Science Subjects. These are areas where jobs are open to Science graduates with specific qualifications. Food and nutrition Child-development and clothing and textiles have found al being offered. For instance, food and Nutrition departments offer diplomas in institution management and dietitics and therapeutic nutrition. Some of these diplomas are offered to those who have a B.Sc. degree in Food and Nutrition. Some child development departments offer diploma in nursery school education of management. Clothing and textiles departments offer diploma in tailoring and cmbroidery. Some departments and small home science colleges do not offer diploma but organise short term courses in related area. Some of these courses are as follows:-

7.2 Nutrition and Dietitics:

In food and nutrition we study the scientific facts including nutritional requirement for growth and maintainence of body, food required for different stages of growth and for different age groups, nutritional deficiency diseases their causes, preventions and remedies. Various job oriented courses in nutrition and dietitics all are as follows:-

Job Oriented Course in Nutrition:-

- (a) Course for nutritionist
- (b) Course for nutrition management
- (c) Course for presevation of nutrients
- (d) Course for food preservation
- (e) Course for nutrition counsellors
- (f) Course for food education
- (b) Course for catering
- (h) Course for presevation of low cost
- (i) Course for recipie ready to eat.

Job Oriented Course in Dietitics:-

- (a) Course for Counsellor for administration of catering institutions
- (b) Course for treatment of various diseases with the help of diet.
- (c) Course for administration of hostels and other boarding institution, hospital and delivery kitchen.
- (d) Courses of research work in dietitics.

7.3 Food Preservation:-

Under food preservation students gain knowledge of principles of nutrition, course of food spoilage and how to control spoilage of food, the use of chemical presevatives and their effect on quality of food. Skills in preparing Jams, Jallies and beverages, methods of picking and standardisation of the procedures for preparing

processed foods are covered. The latest techniques of food preservation such as irradiation, freezing are also mentioned:

Job Oriented Courses in Food Preservation:-

- (a) Courses for preservation of food with the help of chemicals, dehydration etc.
- (b) Courses for preservation by technical drying
- (c) Course for preservation by pickling
- (d) Courses for preservation with salt, oil and vinegar

7.4 Housing:-

- (a) In house keeping students learn about various types of lands suitable for having various types of building materials used for construction of houses.

Job Oriented Courses in Housing:-

Various job oriented course in housing are as follows:-

- (a) Courses for selection of areas for housing
- (b) Course for building materials
- (c) Course for management for resources
- (d) Course for use of household gadgets
- (e) Course for making of house plants.

7.5 Textile and Clothing

This section include aesthetic, hygienic and economic value of clothing, knowledge of fabrics, the fabric that leads to their durability and maintainence, reaction of clothing and knowledge about the clothing construction etc.

Job Oriented Course in Textile and Clothing

- (a) Course for textiles fibre designing
- (b) Course of weaving
- (c) Course of dyeing

- (d) Course for boutique
- (e) Courses for dress designing
- (f) Course for mending
- (g) Course of finishing

7.6 Interior Decoration:-

This course include basic facts of principles about housing designs, furnishing which will save money and provide beauty, ventilation, care of movement and functional efficiency

Role oriented courses in Interior Decoration

- (a) Course for interior decoration
- (b) Course for placement of furniture and following
- (c) Course for colour combination for housing, offices, industries etc.
- (d) Course for flower arrangements
- (e) Courses for flour decoration.

7.7 Pre School Education

This course deals with organisation and management of pre schools

Job Oriented Course for pre-School education

- (a) Courses for teacher training programmes
- (b) Course aims at having nursery school teachers
- (c) Course for early childhood care and education
- (d) Course for organisation and management of pre-School Centres

7.8 Self Check Assessment

Q1. What are the Job-oriented courses in the subject of colthing and textiles and extension education ?

Q2. Write short notes on

- 1) Jobs in Research.
- 2) Jobs in extension and social welfare.
- 3) Jobs in field of Nutrition

Vocations Within and Outside Home Science Institutions

STRUCTURE

- 8.0 Objectives
- 8.1 Vocational Scope of Home-Science
- 8.2 Need and Significance of Vocationalization of Home Science
- 8.3 Reasons for vocationalisation of Home-Science.
- 8.4 Job opportunities of Home Science in various fields.
- 8.5 Vocationsn within and outside Home Science Institutions
- 8.6 Vocations within Home Science Institutions
- 8.7 Vocations Outside home Science Institutions
- 8.8 Influence of Vocations on Home Science
- 8.9 Self Check Assessment

8.0 OBJECTIVES

After studying this chapter learner will be able to understand:-

1. Vocational status of Home Science.
2. Reasons for vocationalisation of Home-Science.
3. Various job oppurtunities for Home Scientists.
4. Vocations within Home Science Institutions.
5. Vocations Outside Home Science Institutions.

8.1 Vocational Scope of Home Science

The term vocation refers to an impulse to perform certain functions or enter a certain career. It is function or career towards which one believes herself to be called. The term vocational education refers to education or training intended to prepare one for an occupation, sometimes specific in a trade.

Vocational Home Science thus can be defined as education or training intended to prepare one for occupation related to home making. According to Saraswathi (1976).

Vocationalization of a particular field of study is a process of orienting the field for specific jobs, or in other words, the process of helping the students pursuing the field of study to develop knowledge, attitudes and skills necessary for carrying out specific jobs considered suitable or available for them after the completion of their degree or diploma.

8.2 Need and significance of vocationalization of Home Science :

Vocationalization of education and reorganization of educational programmes have been accepted as essential steps for national development. Education is viewed as an important process for national development and planned social change in any country. The main aim behind vocationalizing any education is to provide that education and training to students which allows them to contribute their best to the development of the society around them and to employ the skill so developed to their own satisfaction as well as towards building up of the society in which they live.

In the recent years Home Science as an educational discipline has gained considerable importance. It has been included in all forms of education namely formal, non-formal and informal. It is also included at various levels of education viz. high school, higher secondary school, college and university level.

A birds eye view over the turnover of graduates in Home Science necessitates the thinking for vocationalization of the field of Home Science. As indicated by Saraswathi (1976) Home Science was being offered by over 58 institutions affiliated

to 40 out of 75 universities of India. These institutions together had a turnover of 5,000 undergraduates and about 500 graduate students respectively of which 10% of undergraduates and over 55% of graduates on an average are found to be working in wage earning occupations. Today there are over 150 institutions of higher learning in Home Science. Thus the percentage of graduates working or seeking work will be more than double of that envisaged earlier.

Now, for over 30 years Home Science is being offered at high school level. In many states of India, it is offered as an additional stream of education in Higher Secondary Education Programme. It is also included as one of the many courses offered by Technical and Vocational schools as well as women's polytechnics. Thus vocationalization of Home Science Education has become inevitable.

The idea of vocationalising Home Science is not new. As early as in 1966, The Home Science Association of India emphasized the need for publicising this field for job opportunities.

This is indicated in its objectives such as

- preparing for the greatest of all professions i.e. wife and mother.
- Preparing for career.
- Training graduates in Home Science to meet needs of research and Training for leadership in Home Science programmes.

Even the Education Commission as early as in 1964 recommended that Home Science in addition to giving General Education should equip its students on a scientific basis for work in the professional fields. Therefore if Home Science Education has to be vocationalized, it will have to follow a systematic approach. The line of procedure to be followed for this as indicated by Saraswathi (1976) calls for six sequential steps namely.

- 1 - Identifying Home Science requisite jobs.
- 2 - Identifying the knowledge and skills specifically needed for the successful performance of these jobs.

- 3 - Incorporating learning experiences for acquisition of the knowledge and skills needed for these jobs.
- 4 - Publicising the training given to the Home Scientists striving for actual employment.
- 5 - Actual placement effort and
- 6 - Evaluating the training imparted in terms of the quality of Job.

It calls for systematic promotion of an understanding of vocationalization of Home Science. The basic idea of vocationalization, vocational development and vocational guidance comes from one of the basic subjects namely psychology. Systematic application of the theory behind vocational development is the only way for successful vocationalization of Home Science.

8.3 Reasons for vocationalization of Home Science :

Vocationalising the field of Home Science Education has become intense as well as almost imperative. The reasons for this are:

- 1 *National Investment* : Expenditure on education is a national investment, thus it is expected to have its returns in the form of the services of the graduates for the welfare and progress of nation.
- 2 *Potential job offerings* : With the change in social composition of the students enrolling in colleges and Institutions of higher learning offering Home Science, the percentage of students pursuing jobs is considerably increasing. They are looking for job potentials for gainful employment in this field too.
- 3 *Tremendous increase in* : There is tremendous increase in the student population coming for Home Science Education. Of

these a large proportion of students look for gainful returns for gainful employment.

4 Varied areas of specialization : The field of Home Science till recently was restricted to a few areas of specializations. With more and more expansion broadening of this discipline. Various areas of specializations too are cropping up. This is a positive indication for development of Home Science as a vocational field.

There is a clear indication about Home Science having excellent job-potentials. The educationists and leaders in Home Science present an exhaustive list of job possibilities for Home Scientists. However they are not based on matching of the skills needed for the specific job or skill developed by home scientists during training. They are mainly based on the information about the actual jobs done by the students which are not necessarily the jobs suitable to the training given.

The empirical researches though limited point out towards a definite gap between the picture of employment given by the leaders in Home Science showing variety of employment possibilities and the actual picture of major jobs available to qualified Home Scientists.

8.4 Job Opportunities in Various Field of Home science

However the job opportunities for Home Scientists can be broadly classified in seven major areas of work namely :

1. Teaching
2. Research
3. Institutional Management
4. Extension and Industrial concerns
5. Business and Industrial concerns
6. Communication and
7. Self employment.

Teaching Jobs :
Preschool teacher,
Secondary school teacher, Higher secondary school teacher, College Teacher, university teacher.

: If one carefully analyzes the history and development of Home Science Education in India, one would realize that Home Science was offered at higher level of education for two main reasons namely to impart supplementary education in home making as well as to train teachers for promoting Home Science at high school level. Thus teaching becomes the very first gainful vocation thought of for Home Scientists.

Educator or Instructor in training centres for workers of special education programmes such as: Adult and Continuing, Extension, Nutrition and Health, Child and Family welfare, Population Education.

Today Home Science Education offers training for teachers at every level of formal education as well as for various non formal programmes. It trains pre-school teachers, it is included as a part of training programme for secondary and higher secondary school teachers also. Thus it prepares for teaching at high school and higher secondary schools.

Home Science Education offers training for teachers at every level of formal education as well as for various non formal programmes. It trains pre-school teachers, it is included as a part of training programme for secondary and higher secondary school teachers also. Thus it prepares for teaching at high school and higher secondary schools.

The Masters as well as Ph.D.programme in Home Science also prepares the students to take up teaching positions in colleges and universities. Besides these one finds home scientists actively involved in imparting Nutrition and Health Education, Adult and Continuing Education as well as Extension Education.

Research

: Besides teaching, research is another field of work for which Home Scientists are prepared. As indicated in the objectives of Home Science Association of India, training for conducting research is also one of the objectives for promotion

Jobs:
Lab, research:

(Education and
Industrial institutes)
Research Associate
Research Assistant
Fellow Senior Research Fellow

of Home Science education. Since the very Programme of Home Science is based on biological and physical as well as social and behavioural sciences, it trains students to carry on research in Laboratories as well as in the Field (community or Society).

Field Research:
Consumer
Researcher, Market
Researcher Baseline
Researcher field
Resercher investigator
Surveyor

Thus Home Science graduates can successfully engage themselves in laboratory researches in educational as well as industrial organizations mainly in the field of Foods and Nutrition, Home management and Clothing and Textiles.

The field researches in social sciences aiming towards development of communities are needed as basis for programme planning Hence such researches are called for to promote programmes of family and child welfare, nutrition education, environmental improvement programmes, housing projects, and population education as well as family planning programme. Thus Home Scientist a get sample scope for active participation in field researches too.

Institutional
Management and
Hospitality
services
Jobs:
Administrative
dietician,

Impact studies conducted to study the effect of new Technologies and Sciences on everyday living is a new vista for researches. Home Scientist are found to play significant role in these kinds of studies.

As most aptly discribed by Philips Home Science has ample scope in offering hospitality facilities as many of the members of the home are being cared for by institutions other than home. There is a great

Therapeutic
dietician Chief,
Housekeeper
Assistant Floor
Housekeeper
Banquet
Manager
Superintendents
Wardens.

scope for Home Scientists to man these institutions offering hospitality namely the cafes, resturants, fast food centres, hotels, hostels and hospitals. The main areas of work in the diet service and Housekeeping services.

**Extension and Social
Welfare:**

Jobs:
Extension
Educators,
Extension
Supervisors,
Field Supervisors,
Programme Officers,
Programme
Coordinators,

One of the recently emerging roles of Home Scientist is that of a community worker. They are looked upon to actively participate in programmes of community development. Home Science Extension has played significant role in this programme since 1954. Besides being the instructors in training programmes for workers in the institutes, Home Scientists can take up key positions as most of these programmes rotate around welfare of child, mother and family and has aspects such as nutrition, child care and health as well as proper resource management and improved environmental sanitation. These jobs are not only available in rural areas. They are also available in urban sectors.

More and more voluntary agencies are coming forward to undertake these schemes and look for

Business and Industrial Concerns:

Jobs:
Designers,
Quality
controllers,
Sales
Managers,
Officers,
Sales girls,
Marketing
Managers

qualified Home Scientists to take up jobs with them.

Many business and industrial concerns have started looking forward for expertise regarding consumer articles from Home Scientists. Industries dealing with production of food stuffs, household equipments and products, ready made garments and textiles as well as certain art pieces look upon use for consumer research as well as special comments and suggestions with regards to composition, design, functional aspect, durability, trends in use and so on. Since home today is predominantly a centre of consumption home scientists can serve as best guides for most suitable products. Besides these they offer opportunity for employment in quality control, research and development, sales and marketing as well as publicity and public relations.

Communication:

Jobs:
Radio and Tv
Programme advisor,
Programme officer
Programme coordinator.

No matter how best quality goods and products are available it is the consumer education and publicity that will help to sell it. Home Scientists if offered courses in journalism and production of suitable literature for women can actively work in departments of publicity, public relation and consumer education as experts on the goods and services produced for utilization at home by families.

Journalism:

Radio and T.V. programme planners and

Columnist
Consultant Foods,
fashions and
grooming.

Counsellor child
guidance, family
guidance Audio Visual experts
Free lancer

Self Employment:

Venues:
Day-Care centres,
Creches, Boutiques
Consultancy services
for children, married
couple, young girls and
boys for furnishings
furniture and textiles,
dress designs

promoters can also be a challenging positions. Journalism in women's magazines or in columns dealing with women is also a venue for Home Scientists. Free lens journalism is yet another field for gainful activity.

Probably on other field than Home Science has the inherent potential for self-employment. The skill development in specialized areas like child care and family welfare, interior decoration, furnishings and furniture designing, food services as well as dress and textile designing and handicrafts including knitting and embroidery provide ample scope of running consultative and guidance services, production as well as selling centres. A Home Scientists can couple-up one of the many jobs in this area with successful home making to be gainfully employed for personal satisfaction. This will also give her enough scope to serve the community by meeting its needs without disturbing her schedule of being a wife, mother and home maker with more and more poverty alleviation programmes aiming at income generations Home Science can promote more of self employment units and provide a 'feeding' agency for the families below poverty line.

However as rightly pointed out by Sarswathi (1976) there seems to be confusion regarding

_Goals of Home Science education at university levels as to the preparation of students of Home Science for gainful employment besides home making.

_Depth of training in terms of knowledge and skills required for a few particular jobs.

_Proper communication between Home Scientists, Home Science Institutions as well as private and public institution regarding mutual benefit from each other which limits the scope of Home Science vocationally.

If some workable solution can be found to straighten up these problems vocationalisation of Home Science Education as a vital field for promotion of gainful employment of its ever increasing graduates will be within reach. It would thus be an asset not only to the individuals but to organizations who need their expertise. This will result in richer and fuller home life which is an ultimate goal of Home Science Education.

8.5 Vocations Within and Outside Home Science Institutions

As Home-Science is expanding its boundaries it becomes rather difficult to determine the vocational opportunities for Home-Science graduates within and outside Home-Science. The employment opportunities have certainly increased and it appears that the scope is still wider. The job opportunities open to Home-Science graduates can be classified as those within the Home-Science institution and those outside the Home-Science institutions. The Home-Science colleges schools offering Home-Science and government departments dealing with Home-Science institutions are agricultural research or educational agencies, extension directorates in the government industries and teacher training colleges [Fig. 1]

home science. The employment opportunities have certainly increased and it appears that the scope is still wider. The increasing opportunities mean greater responsibilities for the home science colleges in India. Formerly the home science graduates found only teaching jobs. Today teaching is still the main avenue of employment for the majority of home science graduates but on the other hand, several other jobs are also open for the home science graduates. Not only the home science students have become more job-oriented but the home science colleges have also recognised the need of preparing students for employment.

8.6 Vocations within Home Science Institutions:-

Teaching Vocations within home science institutions include teaching in high school all subject matter areas of home science; or, teaching in a department of a college, or the faculty of a university as professors, readers and lecturers.

Assisting Research. Doing research work under the guidance of a college teacher in any area of home science or area related to home science is another vocation within home science institutions.

Dietician. Large home science colleges have cafeterias for their students and teachers. Such cafeterias can employ a dietician or a food scientist.

Nursery School Superintendent. Those home science colleges which offer post-graduate specialization in child development require a laboratory nursery school, Graduates of home science with post graduate specialization in child development can find such jobs.

8.7 Vocations Outside Home Science Institutions:

Teaching in Training Colleges Larger teacher training colleges need a home scientist on their staff to guide the preparation of prospective home science teachers for high schools. Some colleges have a home science teacher on their staff whereas some have arrangement with home science colleges for such teachers to be obtained periodically.

Home Scientists in Extension. Supervising the work of Gramasevika and Mukhay Sevika, assisting in their home science training, and initiating research are the tasks of home scientists in extension. Such jobs in extension are open in the

government and there are several posts, namely, senior home economist, regional home economist, assistant director and director of home science. There are training centres for gramsevikas and mukhya sevikas which employ instructresses in home science.

The Indian Council of Agricultural Research and Indian Agricultural Research Institute in Delhi also have posts for home scientists.

Designer: The industries for preparing ready made garments need services of home science graduates with specialization in clothing and textiles. Dress designers for garments of men, women and children are needed. Home science graduates can open their own tailoring classes as well as shops and boutiques to do a business of their own. They could also develop various patterns for all kinds of dresses and be the leaders of fashion design.

Dieticians: Hospitals and big hotels employ dieticians and food scientists who could plan diets for patients, and tasteful and variety of menus for hotel residents, Home science graduates with foods and nutrition specialization along with a diploma in dietetics or hotel catering would qualify for such jobs.

Interior Decorator: A home science graduate with specialization in home management can become an interior decorator who selects and designs the interiors of houses, hotel rooms, guest houses, clubs, and other public places. Such a job is not yet in demand in India but still has vast potentialities.

Journalist: Home science graduates of any specialization, especially of education and extension, could become journalists for women's magazines as well as other popular magazines and newspapers which publish articles, stories, food recipes and the like, of interest to women. Women's magazines are now published in all major Indian languages. Home science graduates can attempt to write professionally not only in English but also in their mothertongue. In fact, the knowledge of home science needs to be communicated to women through their mother tongue especially to those women whom the home science colleges do not reach.

Radio Artist: The All India Radio and its substations have regular women's and children's programme which could be very well produced by home science graduates. Programme on nutrition, food selection and preparation, child psychology and

several other topics can be presented on radio by the home scientist as a radio artist.

Several other vocations can be taken up by the home science graduates provided that they are prepared for them. In teaching, research, extension, social work, population education, journalism, and business new types of jobs for home science graduates will emerge. The undergraduate students need to start planning for their vocations from the first year of their college life.

8.8 Influence of Vocations On Home Science:

The need for vocational preparation in home science colleges and the desire of students to seek vocations have brought about certain changes in home science colleges. These changes are described below:

1. **Specialization in Home Science.** Specific jobs have demanded deeper specialization in home science. Specialization in nature of jobs has made specialization in home science necessary. In larger home science colleges, specialization in at least one area of Home Science was given from their beginning but more areas of specialization, with deeper and wider knowledge of various subjects have been the results of vocational needs of home science students.
2. **Increasing enrolment in home science colleges.** The employment potential of home science has increased the student enrolment in home science colleges. More and more students are drawn to home science colleges every year mainly because home science offers jobs along with a knowledge for home making.
3. **Training programmes other than degree programmes.** The traditional educational programmes in home science colleges have been for B.Sc., M.Sc., and Ph.D. degrees. Besides these degrees, some home science colleges have also started offering diplomas in dietetics, institution management, nursery school education, and the like. Some colleges conduct short term courses for tailors, farm men and women, Gramsevikas, school teachers, nursery school teachers and several other groups. The degree programmes are still the major

responsibilities of home science colleges in India, but the additional programmes have broadened the scope of home science. In future several more of such programmes may be necessary.

4. Problem and solution oriented courses in home science. Requirements on jobs will force home science courses to be increasingly problem oriented. The knowledge will have to be of high utility through its application to job and homemaking. The general information given in courses has been substituted by specific knowledge, skills, and values and these changes will be continued. Those areas of home science which have higher employment potential will need to be more up-to-date in their knowledge and its application.
5. Dependence on science and scientific method of work. Home science has from its beginning emphasised the use of science in achieving its objectives. With the demand, or, in some cases, with the openings of jobs, home science has slanted more towards root sciences to make itself a better organized discipline of knowledge. The ways of doing many tasks, for instance making garments, preserving foods, managing homes, teaching and extending home science beyond schools and colleges, have become more scientific in their approach. Methods of doing several homemaking and professional tasks have acquired a scientific nature. Of course, the advancement in root sciences has also brought about this change but requirements by jobs have also necessitated this wider acceptance of scientific way in home science.
6. Collaboration and co-operation with other agencies in teaching home science. Because home science graduates have these areas have been approached by colleges of home science to teach some courses. For instance, social work, medicine, education and other areas have employed home science graduates, which has led to their contribution to teaching home science students. On the other hand, in colleges of education, home scientists have also co-operated in training home science teachers. With increasing jobs for home scientists in related areas and,

with increasing need for inter-disciplinary teaching, such two way co-operation will also increase.

7. Professional and social prestige of home science. As the home science graduates have found professions suited to them, home science has gained prestige as a discipline. The recognition of home science has become clearer as home science graduates have made their contributions through their professions. Vocational orientation has improved the public image of home science and academically it has gained a stable place in universities. Vocations taken up by home scientists have broadened the academic scope of home science and, widened the utility of knowledge of home science. Home science has thus reached to individuals and families outside the home science orbit. The wider scope and utility of home science has given it profession, and social prestige.
8. Academic Excellence. The vocational orientation within home science has given it new objectives to achieve. In order to prepare its graduates for a variety of vocations, the curricula in home science have widened and acquired depth. Academically, home science has grown by revising and introducing new courses and methods of teaching them. The changes have come not only in the courses with vocational bias, but also in the courses of purely academic nature.
9. New Directions in Research. The research undertakings in home science have taken a new turn towards finding out specific vocational opportunities and preparations needed by home science graduates. The beginning is just made but it could progress. The needs of employed home scientist could be studied in order to revise some college curricula. The schools, colleges, and other institutions which have employed home science graduates can co-operate in research to improve and add to the competences of home science graduates. From research topics related to subject matter, the move towards topics related to utilization of home science on jobs and effectiveness in teaching home science has been made and could be continued. Research on vocational interests of home science

students is also of significance. Surveys to find out new job possibilities for home science graduates should be continually done by all large colleges of home science.

8.9 Self Check Assessment

- Q1. Discuss the need and significance of vocationalization of Home Science.
- Q2. State the steps to be followed for vocationalising Home Science Education.
- Q3. Discuss the main reasons for vocationalising the field of Home Science.
- Q4. "Home Science has the rich Potential for self employment" discuss.
- Q5. Write short notes on
 - 1. Jobs in hospitality services.
 - 2. Jobs in business and Industrial concerns.
 - 3. Jobs in Communication.
 - 4. Jobs in Research
 - 5. Jobs in Extension and Social welfare.
- Q6. Write down about various vocational opportunities for Home Science student.
- Q7. Home-Scientists have job opportunities even outside their field. Discuss.

Qualities of a Good Home Science Student

STRUCTURE

- 9.0 Objectives
- 9.1 Introduction
- 9.2 General Characteristics / Requisites for students of home science
- 9.3 Self check Assessment

9.0 Objectives:

The study of the lesson gives a detailed knowledge of the qualities a Home science student possesses.

9.1 Introduction

Today home science is described as a multipurpose programme of study which takes care of individuals which takes care of individuals need and interests and develops needed abilities and capacities for successful homemaking in dynamic society. Training in home science is not meant to substitute that additional training received at home. In fact in the changing social scenario, Home science has emerged as academic discipline. It has come into being as a social need. Home Science Education is supplementary training for better familial and social ties and thus a fulfilling life for individuals.

The students of home science exhibit all characteristics and these characteristics can emerge at different times as the individual develops cognitively, socio-emotionally and physically.

9.2 General Characteristics/ requisites for students of home science.

A good student is usually well focused on his or her work, while at the same time , taking classes , seminar ,etc and fulfilling other requirements of being a student of Home science . He / she needs to be able to manage to find time to relax. Since the programme is intensive .Thus, to be able to carry on well enough throughout the course and onward .He /she needs to equilibrate or balance work with personal life.

- A good student needs to be goal oriented. He /She must organize his or her goals and work towards its fulfilling a great deal of independence is an asset.
- They learn to be Independent but capable of working in a team, self motivated , enthusiastic , efficient logical , well –rounded and good communicator
- The exhibit exit and save knowledge base is science and are able to relate that knowledge base to new problems and topics.
- Demonstrate the ability to integrate information and concepts into the existing knowledge base.
- They can perceive connections between Home science and other disciplines.
- They are capable to making generalization and assumptions based on data.
- Most important they view problems in a holistic manner.

Moral Values

- Students studying Home science highlight moral values in all spheres.
- They imbibe godly qualities.
- It develops national pride and love for the country.

- They consider nation above self.
- Adhere to communal harmony and Gandhian principles of Ahimsa.
- Believe in National Integration.
- Be an example for others to lead well disciplined life.

Care of Child

- Home science alerts students to the importance of keeping children healthy, happy and secure.
- They learn to be surrogate mothers for younger children in the home.
- Teaches children develop self reliance and self esteem.
- They learn the skill of keeping the children constructively occupied **when their parents are busy.**

Nutritional Needs

- Home science education can help students to produce more food and utilize food effectively for individual, family and society.
- He or she learns the principles of nutrition for optimum health.
- The subject gives thorough knowledge about the use of protective foods which are rich in nutrients and simultaneously low cost and indigenously available, such as leafy green vegetables, high lysine maize, ragi and many others. This will give them nutritional supplement without incurring any extra cost. Learn about these inexpensive food supplements which are now produced in the country such as the Indian Multi-purpose Food, Malt in the place of costly chocolate milks, infant foods, canned foodstuffs etc.
- Develop skills and learn proper methods of cooking, which conserve nutrients.

- Get trained to avoid extravagance, conspicuous consumption and display of affluence during festivals and entertaining guests, and sensitivity to over-eating.
- Techniques of preservation so as to make surplus food available in place, and times of scarcity.
- Make best possible use of the space available, for raising kitchen gardens to help increase food production and healthy foods for local consumption.
- Make utilization of the skills for spreading the principles of good nutrition in the community.

Home Management

- Home Science helps students recognize how good management in the home making makes full use of their resources and abilities.
- Spending every paisa wisely so that maximum money could be saved for familial and national growth.
- Gain expertise in money management, budgeting the home finances, savings for short term and long term requirements.
- Spending time productively in simple and creative wealth producing activities such as gardening, spinning, knitting and garment making etc.
- Time is efficiently managed to release adults from their household responsibilities for more urgent tasks
- Good Keepers, taking care of personal property as well as of school or place of work.
- Good workers contributing time and energy for social service activities

- Practice and promote economy in the use of electricity and other fuels, water and other utilities.

Home and Family welfare

Home Science education impresses upon students the importance of adequate housing, good health and comfort.

- understanding the requirements of good housing.
- maintaining cleanliness in the house and surroundings to maintain health.
- avoiding accumulating unnecessary articles in the house and surroundings to reduce negative aura.
- contributing whole heartedly for social service.
- avoiding extravagance in the use of space.

Textiles and Clothing

Home Science helps students understand the principles and practices important in the selection, care and repair of textiles, and clothing in day to day life .

- The relevance of having minimum amount of comfortable essential clothing, regardless of fashions and notions.
 - Cleanliness and maintenance of clothes properly.
 - Making clothes attractive, to enhance one's own personality.
- Storage of clothes so as to increase its longevity.
- Mending clothes promptly to extend their usefulness.

Consideration of various aspects of Home Science emphasizes how closely they need to be interrelated to help pupils with their home and family problems. For example, providing food for the family is not the only requirement. It also has spiritual, physiological and psychological dimensions. Harmony, comfort, health, economy, beauty and convenience contribute to the well being of the family. The study of Home Science has, therefore, a wide appeal to pupils who are the future parents, citizen and leaders. It is necessary to include home Science as one of the subjects in schools for boys and girls.

Teachers of Home Science face tremendous challenges as the attempt to develop the kinds of programmes that will meet the needs of their pupils. Theirs is the most rewarding vocation since they assist students to cope with, and meet the demands of home and family living today, are to make plans for their own homes in the future.

Modern philosophy of Home Science takes one away from its narrow concept of home making education for home making only. Philosophy of home science is linked with the Philosophy of home and family as emphasized traditionally through Indian culture it stands for material as well as emotional well being and security of its residents.

Slowly Home Science as a professional discipline is gaining a position in the Indian society. With the changing roles of home maker from that of a wife and a mother to that of a wage earner, a community worker, and others. A strong need is emerging to vocationalize the programme of Home Science Education. The changing nature of home from a center of production to a center of consumption is also to a very great extent responsible for adding this new dimension of professionalism to the philosophy of home science.

In nut shell a Home Science student must have the following:

- a) Innovativeness and artistic.
- b) Good health and good nutrition.
- c) Capacity to achieve a satisfying personal and home and community life.

- d) Optimum utilization of resources to the betterment of the family and the society.
- E) Positive and constructive thinking.
- f) Cultivating fruitful relationships with others.
- g) Good personal hygiene, grooming and leading to poise and confidence.
- h) Develop qualities of leadership.
- l) Capacity to distinguish between progressive traditions and superstitions.
- j.) Progressive thinking and capability to change with changing times and act as a change catalyst.
- k) Last but not the least and keep abreast with the advancements of technology.

Use this technology for their self betterment and thus betterment of the community.

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HOME SCIENCE IN ACTION PROGRAMMES

Integrated Child Development Services

STRUCTURE

- 10.0 Objectives
- 10.1 Introduction
- 10.2 The Package
- 10.3 Beneficiaries
- 10.4 Supplementary Nutrition
- 10.5 Nutrition and Health Education
- 10.6 Immunization
- 10.7 Health Check up and Referral Service
- 10.8 Parent and Community Education
- 10.9 Selection of Block/Project Area
- 10.10 Beneficiaries
 - 10.10.1 Organization
 - 10.10.2 Training
- 10.11 Role of UNICEF and Other agencies
- 10.12 About ICDS projects

10.13 Achievements of ICDS.

10.14 Weakness of the programme

10.15 Self Check Assessment

10.0 OBJECTIVES

After going through the chapter, the learner is equipped to answer queries related to

1. ICDS Programmes
2. Objectives of ICDS
3. Beneficiaries of ICDS Programme
4. Role of ICDS in upliftment of women and children
5. ICDS Programmes in India

10.1 Introduction:-

In early seventies, there was a realisation that the various child development programmes introduced in the post-independent period could make only a limited contribution. Under some of the programmes, the vulnerable child under three years was by-passed for lack of machinery. The mere feeding programmes did not yield the expected result unless they were combined with other service like those of health, nutrition, medical care etc. The Applied Nutrition Programme evolved around education on production and consumption of nutritious food could not generate the desired awareness. The already available staff like Block Development officer could be involved adequately, in child development programmes as they were sufficiently loaded with normal duties. It was also discriminatory to pick and choose some places for assistance leaving others at the mercy of nature. As a result of a series of inter-ministerial discussions held on the reports of the inter-ministerial study teams, it was decided to launch 33 experimental projects for pre-school children called the Integrated Child Development Services (ICDS) in 1975-76 as a centrally sponsored scheme. The evaluation of these projects showed that the health and nutritional status

of the children improved and considerable portion of child population benefited by the scheme belonged to the scheduled castes and scheduled tribes and other poorer sections in the society. The Government of India decided to expand the programme. By the 31st March, 1995, there were around 4000 (and around 250 state sponsored central ICDS projects all over the country, located in rural, tribal and slum areas.

Objectives:-

The main objectives of the ICDS are:

- (i) to improve the nutritional and health status of children in the age group of 0 to 6 years.
- (ii) to lay the foundations for proper psychological, physical and social development of the child:
- (iii) to reduce the incidence of mortality, morbidity, malnutrition and school dropout: and
- (iv) to enhance the capability of the mother to look after the normal health and nutritional needs of child through proper nutrition and health education.

10.2 The Package

Based on our earlier experience the most important principle was a policy decision on the concept of providing a package of services based on the consideration that the overall impact will be much larger if different services developed in an integrated manner, as the efficiency of a particular service depends upon the support it receives from the related services. For instance the provision of supplementary nutrition is unlikely to improve the health of the child, if continues to be exposed to diarrhoeal infections or unprotected drinking water supply.

The selection of services to achieve the package in the ICDS scheme is based on the following considerations:

- (i) need for different types of services;
- (ii) Inter-dependence and mutual support relationship
- (iii) cost effectiveness and
- (iv) administrative feasibility.

The following package of services is provided in an integrated manner in the ICDS scheme :

- (i) Supplementary nutrition
- (ii) Immunization
- (iii) Health check-up
- (iv) Referral services
- (v) Nutrition and health education
- (vi) Non-formal education

These services have to be supplemented and supported by what is called parent and community education which has replaced the functional literacy programme for women. It has been argued that any non-formal education for the mother has to be child development oriented in the context of ICDS and that literacy alone is not a pre-condition for the mother to enhance her capability to look after the normal health and nutritional needs of the child at home.

10.3 Beneficiaries

The Scheme provides integrated services to the:-

- (i) children below the age of 6 years;
- (ii) expectant and nursing mothers; and
- (iii) women in the age group of 15 to 45 yrs.

As may be seen from the following table, early childhood as the pre-school age itself has become reclassified into different age groups taking into consideration the package of services provided in the scheme to meet the different needs of the target group.

Beneficiary Service:-

1. Expectant and nursing mothers.
 - (i) Health check-up
 - (ii) Immunization of expectant mothers against tetanus
 - (iii) Supplementary nutrition

- (iv) Nutrition and health education.
- 2. other women 15-45 years, Nutrition and health education.
- 3. Children less than 1 year
 - (i) Supplementary nutrition
 - (ii) Immunization
 - (iii) Health check-up
- 4. Children 1-2 years
 - (i) Supplementary nutrition
 - (ii) Immunization
 - (iii) Health check-up
 - (iv) Referral services.
- 5. Children between 3-5 years
 - (i) Supplementary nutrition
 - (ii) Immunization
 - (iii) Health check-up
 - (iv) Referral services
 - (v) Non-formal pre-school education.

10.4 Supplementary Nutrition:-

In all developmental plans, an attempt has been made by the planners to keep the nutritional needs of the child in focus. It started with free milk distribution from UNICEF and CARE which was later supplemented by other types of food immediately after independence. It was then realized that merely feeding the children with food from outside particularly from foreign agencies will not pay much dividends. What was necessary was that the food was locally produced and there was an element of nutrition education, so that in due course of time, the dependence on government subsidies for food distribution would be minimal as it was felt awareness and knowledge about the nutritional needs of the children what to eat, how

much to eat, how to cook, how to serve, etc. Some of local practice based on ignorance regarding weaning breast feeding etc., also create problems of malnutrition. Moreover, earlier nutrition programmes neither focussed on a particular malnourished child for a given period nor related nutrition programme with other services like sanitation, immunization, ORT etc.

Under the ICDS supplementary nutrition is given to children below the age of 6 years and to nursing and expectant mothers from low income families. Special attention is paid to the delivery of special nutrition of the children below three years of age through the mothers as they do not attend anganwadies like the pre-school children in the age group of 3 to 6 years. Funds for supplementary nutrition are provided in the State Plans under Minimum Needs programme. Sufficient funds are also provided for therapeutic foods for severely malnourished children. The amount and the type of food depends upon availability of local resources and the incidence of malnutrition in the particular areas. Priority has to be given, therefore, to the locally available food. The new projects are as far as possible located in the area already covered under SNP programme.

Supplementary nutrition is given to children for 300 days in a year through state budgets for moderately malnourished children and severely malnourished children. However, this has to be supplemented by the food from the stage itself. In any cases, supplementary nutrition as is the case today should not be given free to the people. They should be encouraged to contribute something to supplement this food and at the time of harvest or inculcate the habit among children at home every day some day cooked or uncooked, howsoever inadequate it may be.

10.5 Nutrition and Health Education

Nutrition and health education is given to all women in the age group of 15-45, priority to be given nursing and expectant mothers. Cases of severely malnourished change age to be followed up in order to combat malnutrition. The methods of carrying the message of health and nutrition education

- (i) Use of mass media and other channels of publicity.

- (ii) special campaigns at regular intervals like festivals, marriage, other ceremony fair;etc.
- (iii) home visit by the anganwadi worker.
- (iv) specially organised short term courses in the village for about 30 women at a time.
- (v) demonstration of food processing, preservation, cooking and feeding; and
- (vi) utilization of the nutrition education programmes of the Ministry of Health and Family Welfare, Rural Development. Department of Food, Directorate of Agricultural Extension and Healthy Education Bureau.

10.6 Immunization

Immunization against diphtheria cough, Tetanus Poliomyelitis and Tuberculosis carried on in the project area, Immunisation against measles should be given to all Children. Since Tetanus among new born is common and is usually fatal, all expectant mothers are given immunization against Tetanus.

10.7 Health Check-up and Referral Services

Health check up and referral services include:

- (i) ante-natal care of expected mothers;
- (ii) post-natal care of nursing mothers and care of new born infants;
- (iii) care of children under six years of age.

10.8 Parent and Community Education

The main objectives of parent and community education are:

- (i) to educate the community about the policies and programmes related to child welfare/development.
- (ii) to provide meaningful education to the parents and community so as to enable them to participate actively in the development of their children; and

- (iii) to educate the community in order to enable them provide organisational support for efficient delivery of health, nutrition and medical services.

Areas of Parent and Community Education

- (i) Resolving conflict between traditional superstitions and modern scientific knowledge;
- (ii) Family planning-population education and its importance;
- (iii) Knowledge about common childhood diseases-where to get them treated and how to care for them at home;
- (iv) Importance of sanitation and environmental hygiene;
- (v) knowledge of first aid;
- (vi) Need and importance of safe drinking water and methods of purification;
- (vii) Knowledge of the importance of following the immunisation schedule of their children.
- (ix) Importance of breast feeding when and how to introduce supplementary feeding;
- (x) Basic knowledge of nutrition, selection of food
- (xi) Providing the right environment for physical and emotional development of children; and
- (xii) Importance of civic responsibilities.

10.9 Selection of Block/Project Area

After a block is selected for starting an ICDS Project and also budgetary provisions are made, efforts are made to locate anganwadies in the project area. In selecting the project area and villages for anganwadies, the following factors are taken into consideration:

- (i) areas predominantly inhabited by tribes, particularly backward tribes;
- (ii) backward area;

- (iii) drought-prone areas;
- (iv) areas inhabited predominantly by Scheduled Castes;
- (v) nutritionally deficient areas; and
- (vi) areas poor in provision of social services.

Thus, in location of an anganwadi in a village, preference is given to areas predominantly inhabited by poorer sections of the community, scheduled castes, scheduled tribes etc. For selecting a project area or while implementing the programme in the project area, coordination amongst the various programmes launched by Health and Family Welfare Ministry through Primary health centre and Department of Rural Development etc., is also kept in view. Thus the success of this programme to a large extent would depend upon departmental coordination.

10.10 Beneficiaries

The demographic and other characteristics of beneficiaries vary significantly from block to block. A Rural Project (a community development block) is assumed to have a population of 1,00,000 of which 17 per cent i.e., 17,000 are less than 6 years, 3 per cent i.e. 3,000 are less than 1 year, 6 per cent i.e., 6,000 are 1-2 years and 8 per cent i.e. 8,000 are 3-5 years; the number of women in the age group 15-45 years is estimated at 20,000 of this, the number of nursing and expectant mothers at any point of time is estimated at 4,000. The number of villages in rural project is assumed to be 100.

A Tribal Project (a tribal development block) is assumed to have a population of 35,000 of which 17 per cent i.e., 5,950 are less than 6 years 13 per cent i.e. 1,050 are less than 1 year, 6 per cent i.e., 2,100 are 1-2 years and 8 per cent i.e., 2,800 are 3-5 years); the number of women in the age group of 15-45 years is estimated at 7,000. Of this, the number of nursing and expectant mothers at any point of time is estimated at 14,000. The number of villages (as also Anganwadis) in a tribal project is estimated to be around 50. Around 15 million children and 30 million mothers were benefited by the scheme up to 31st March 1994. Anganwadi

The local point for delivery of these services is the anaganwadi centre which is run in a building made available free of charge by the local community, Panchayat,

Mahila Mandal, youth club etc. Anganwadi woman worker is a local honorary worker who is paid honorarium. By virtue of her training of four months, she is expected to provide the package of services in the area of pre-school education, health and nutrition etc.

The staff of the PHC undertakes health check-up, immunization and provides referral services.

It is for this purpose that in addition to a medical officer additional LHVs and ANMs are provided in an ICDS block to supplement the strength of Primary Health Centre. In order to provide other services effectively, linkages have also to be established with other functionaries at the Block level such as extension officers, gram sevaks and gram sevikas.

Staffing Pattern

In addition to a local voluntary woman who functions as anganwadi worker after training, 20 anganwadis are supervised by a supervisor/mukhya sevika who is generally a graduate and undergoes training. The work of five to six supervisors is supervised by a CDPO who generally holds a Master's Degree in Social Sciences, Home Science and or has a considerable experience in social welfare/rural development.

10.10.1 Organisation

At the state level, the Department of Social Welfare/Rural Development/Tribal Development/Health is the nodal department for planning, implementation and monitoring the ICDS programme. In some States, like Maharashtra, urban ICDS are looked after by the Departments of Social Welfare whereas Rural and Tribal ICDS are looked after by the Rural Development Department. There is, therefore, a State Level Coordination Committee chaired either by the Minister Incharge of Nodal Department for ICDS or by the Chief Secretary in order to ensure coordination and provide mechanism required for co-ordination and provide mechanism required for co-ordination of child welfare schemes with ICDS. In Gujarat and Sikkim programme is sponsored by Health Department.

10.10.2 Training

Training is one of the crucial components of ICDS Scheme. This is one scheme where in the government attaches highest importance to the training. No project is started unless trained functionaries become available. Therefore, the Government has created infrastructure for training and given its full support including finances. The National Institute of Public Co-operation and Child Department (NIPCCD) at New Delhi is responsible for organising training to ICDS functionaries. In its efforts to provide training to ICDS functionaries particularly Supervisors. NIPCCD is assisted by home science colleges, schools of social work, state institutes of community development etc. The training of the anganwadi workers is the responsibility of the State Government, which receives funds from the Government of India, Ministry of Social Welfare. Training to Anganwadi Workers is provided through 300 anganwadi workers training centres, run by the Indian Council for Child Welfare, voluntary organisations, Home Science wings of the extension training centres, Gram sevika training centres, Home Science Colleges etc.

10.11 Role of UNICEF and Other Agencies

The UNICEF have deep and keen interest and participated in the programmes of Child Development in India. It is eager to participate in the successful implementation of the present programme. It gives assistance for supplies and training in ICDS. The USAID, the World Bank have also provided assistance for ICDS.

10.12 State ICDS Projects

ICDS is the only centrally sponsored programme which has been picked up and adopted by the State Government to such an extent that some of the State Governments took initiative in establishing similar projects out of the State funds. The names of States of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Haryana, Jammu and Kashmir, U.P. etc., may be mentioned in this regard where little less than 200 state projects are being run. Although, there are some variations between the Central ICDS projects and the State Project and there are variations among the States in terms of budgetting and staffing pattern, contents of package delivery system etc., yet, by and large the concept of integrated approach to child development has been accepted by the States.

10.13 Achievements of ICDS

The following are some of the salient features and achievements of ICDS:

- (i) ICDS is the first major child development programme in the country which has recognised the differential needs of the Children of 0-3 years age group, making it as a special group under the programme for delivery of social services particularly those relating to health and nutrition.
- (ii) The programme is selective on clientele and, therefore, economical. It gives priority to the backward communities and backward classes; confines the services to the most vulnerable period of child's growth (0-6 years) and among women accords a high priority to expectant and nursing mothers. As it caters to the groups which need it most, the programme contains and has in built element of cost effectiveness.
- (iii) The structure visualised for delivery of services to children between 3-6 years is that of Anganwadi and not of Balwadi. Anganwadi emphasises the non-formal aspects of pre-school education through recreation and play. The dilution of the Balwadi concept to Anganwadi concept has afforded a saving in the remuneration to the staff and costly equipment leaving a bigger chunk of funds for the services of health and nutrition.
- (iv) ICDS ensures universal coverage of (a) of all the villages in a selected block and (b) all the needy pre-school children in a village even if more than one anganwadis have to be set up in a village of more than 1000 population.
- (v) The essence of the programme is 'integration'. The services complementary to one another are integrated into a package to enhance the overall effect. The organisation is also integrated through coordination at various levels in the management of services by different departments/agencies running the programme which is inter-sectoral.
- (vi) Whereas the earlier programmes for pre-school children took it for granted that if a Balwadi was started, related health and nutrition services will be forthcoming from the other agencies like the PHC

and ANP, the ICDS Scheme ensures through the budget provision the necessary direct inputs of health by strengthening the staffing pattern of the PHC, mechanism of proper coordination between health personnel and child development personnel, and organisation of training and orientation for these functionaries.

- (vii) ICDS also ensures supplementary nutrition for 300 days in a year separately for children below 6 years and expectant and nursing mothers. Consistency in nutrition supplementation helps in producing a sustaining effect.
- (viii) The provision of appointing an Anganwadi Worker, who is (a) an honorary woman from the village, (b) irrespective of her educational qualification, and (c) is paid honorarium and not salary, recognises the vital importance of community-based local worker and tries to involve the community in the programme to some extent.
- (ix) For the first time, arrangements have been made for a strong and close supervision of the work of grass-roots level functionary, Anganwadi worker by appointing five to seven supervisors per project.
- (x) ICDS relies on effective delivery system with the help of cadres of co-functionaries along with strongly supported inputs of health and nutrition components.
- (xi) A senior officer of the rank of Block Development Officer is CDPO who is a head of the project team who brings about necessary coordination between the functionaries in the project on one side and block authorities, PHC and other institutions/agencies on the other.
- (xii) ICDS has a very comprehensive and massive programme of training.
 - (a) All functionaries have to be trained before the project is started.
 - (b) There is an element of refresher courses for all functionaries and;
 - (c) It recognises the need of organisation of orientation workshop for project functionaries and co-functionaries like MOs, BDOs, and other staff.

- (xiii) The academic and technical institutions such as the medical colleges under the leadership of AIIMS have succeeded in proper monitoring of the programme and its strengthening through training and retraining of the functionaries.
- (xiv) Similarly, institution like Home Science Colleges, Schools of Social Work, Institutes of Education are also being involved in monitoring and strengthening of social aspects of ICDS such as pre-school education, community education, parent and community education etc.
- (xv) At the State level there is a Coordination Committee with Minister incharge of the Department of the Chief Secretary as its Chairman. Members of the Co-ordination Committee are drawn from other departments such as Health, Social Welfare/Rural Development, Tribal Development, Community Development, Education, Social Welfare Advisory Board etc.
- (xvi) Every State has a Programme Officer incharge of the programme who assists the State Government in bringing about necessary coordination and monitoring of the programme and the training. In districts where there are more than five ICDS projects, there is a district level Programme Officer for this purpose.
- (xvii) One of the very important inputs in the ICDS project is pre-project survey, project formulation, constant monitoring with special reference to health and nutrition and evaluation of the programme.
- (xviii) Very important characteristic of the programme which has contributed to its success more than the other child development programmes are its simplicity and clarity. The blueprint is well drawn in terms of target groups, services, management, training and funding, the role of different functionaries, monitoring and evaluation. Again commitment on the part of the Government for child development programmes of the nature like ICDS has given the programme sufficient impetus and momentum to enable it to spread at a fast pace.

10.14 Weaknesses of the Programme

However, despite the fact that the programme has many strengths, still it has

some weaknesses, some of these are highlighted in the following paragraphs. These need to be overcome:

- (i) Although the children in the age group 3 to 6 are supposed to be reached through an Anganwadi and are delivered a package of services, yet one is not so sure whether the children in the age group of 0 to 3 get the same attention in the absence of any special institution or machinery for them.
- (ii) Sometimes health and nutrition services do not converge on the same children at the same time as the pre-school education because of procedural delays, different sectorial responsibilities, absence of constant and close monitoring etc.
- (iii) In certain areas, pre-school education tends to become formal - pre-poning the primary education. The parents and the community have to be properly educated about the concept of the pre-school education as different from primary (formal) education.
- (iv) The element of community participation is very weak, since this does not form a part of the scheme itself in a pronounced manner. However, through training the need for community participation is being emphasised and re-emphasised. Community involvement is necessary to make the model still low-cost for larger and quicker replication and for better supervision to avoid wastage.
- (v) The cost of programme has still to be reduced, in order to cover all other children within next five years. The programme at the present pace would be covering not more than 25 per cent of the children by the end of 1995. This, therefore, calls for community participation in order to meet some of the expenditure provided in the ICDS budget such as honorarium to a helper, followed by community bearing the expenditure on honorarium given to the anganwadi worker in a phased manner, supplementary nutrition, buildings of the anganwadi to be provided by the community etc. This should be built into the scheme itself.
- (vi) In many project areas, the expected coordination and cooperation from the health staff, block staff, municipal bodies is not forthcoming to the desired extent for a variety of reasons. This is perhaps due to

the fact that there is lack of coordination between different departments at the state level.

- (vii) Supplementary nutrition programme covers all children from all families irrespective of the economic status of the family or the nutrition status of the child. There has to be some selective approach and need for screening of children, if the supplementary nutrition is meant to combat malnutrition and not to feed children already properly fed.
- (viii) The supervision of the project has to be strengthened through revision of job chart of supervisors and orientation to them as the supervisor's perception of their role is only as an inspector and not as a guide, friend and a philosopher.
- (ix) The complaint that the anganwadi worker is not paid adequately is likely to create some more problems particularly on the phasing out of the functional literacy. This problem could be tackled by giving them different incentives such as cash incentives, promotion, awards and supplementing of their income by charging token fees from the parents so that in the long run the community itself bears a portion of the honorarium of the anganwadi worker.
- (x) The academic institutions like the schools of social work and home science colleges, institutes of education should more intimately be involved in monitoring and strengthening of the ICDS and training of functionaries.
- (xi) Phasing out functional literacy component of the programme was a step in the right direction. Parent and community education is to be built into the training of ICDS functionaries.
- (xii) In regard to reaching the unreached i.e., poorest of the poor, scheduled castes, scheduled tribes, the other backward classes and girl children there is still much to be desired. In all developmental programmes this is the most difficult task. However, institutions have to be created and mechanisms have to be found by which the richer section should pay for the services by contributing in cash and kind whereas the poorest sections could contribute in the form of voluntary labour to run the services.
- (xiii) The block level functionaries such as gram sevika, mukhya sevika

and other extension officers should be effectively utilised in enriching the programme. In fact, the block mukhya sevika could be treated as one of the five supervisors, so that the salary of one of the supervisions could be saved to exercise economy in the programme. This will also ensure proper participation of the block staff in the ICDS programme as at present in many areas there is not sufficient amount of coordination between the ICDS project staff and staff of municipalities and the block staff.

- (xiv) With a view to educating the community about the objectives, concepts and the benefits of the ICDS to the children and to ensure their maximum participation, the community has to be involved from the very beginning-planning through implementation, supervision, monitoring and evaluation of the programme which should give sufficient time for the preparation of the project and inter-action of the workers in the community. This will prepare the community not only to receive the programme but participate in the programme whole-heartedly.
- (xv) There should be refresher courses/orientation courses for anganwadi workers also at the block level.

The ICDS programme which has been based upon the accumulated experiences of the last four decades of planning and implementation of the programmes for children is undoubtedly better conceived and implemented programme conceptually than any other previous child intervention programme. The soundness of the programme has been amply demonstrated by the success it has received in raising the health and nutritional status of children as well as the decreasing infant mortality and morbidity as revealed by several studies conducted by health consultants, the Programme Evaluation Organisation of the Planning Commission and the National Institute of Public Co-operation and Child Development. This is one programme which has really tried cover target population in a comprehensive manner. It is but in the fitness of things that the ICDS programme should continue to expand so as to cover the entire child population of 200 million. However, the statement should not lead to complacency. As pointed out above improvements and modifications should be a continued process to make it is better social intervention programme as also more economical with much larger coverage and a strong contribution of community.

10.15 Self Check Assessment

1. Write a short note on role of ICDS in upliftment of women and children.
2. When was ICDS launched in India and write about its various programmes.
3. Discuss the salient features of ICDS.
4. ICDS plays an important role in immunization of women and child. Discuss?
5. Since every coin has a darker side. Write about the weaknesses of ICDS in this context.

Integrated Rural Development Programme (IRDP)

STRUCTURE

- 11.0 Objectives
- 11.1 Introduction
- 11.2 Objectives of the programme
- 11.3 The Target Group
- 11.4 Extent of poverty
- 11.5 Financial Provisions
- 11.6 Policy measures
- 11.7 Impact and Assessment
- 11.8 Self Assessment Exercise

11.0 OBJECTIVES

After going through this chapter learner will

1. Know in detail about IRDP
2. know about the beneficiaries of the program
3. know about the impact of the programmes

11.1 Introduction :

The concept and approach underlying the IRDP programme was outlined by the Union Finance Minister while presenting the Central Budget for 1976-77.

In his Budget Speech, the Finance Minister inter-alia stated that, "I would like to emphasise that an effective on rural poverty and under development can only be planned in the framework of an integrated programme of rural development based on detailed knowledge of local needs, resource endowments and potentialities. The focus must be on maximum utilisation of locally available resources, including local manpower, rather than the introduction of large inputs from outside. We have to evolve operational district plans which fully take into account the precise and separate requirements of each area. We have to make full use of the potentials offered by modern science and technology for the regeneration of our rural economy".

When the programme was started in 1978-79, initially 2300 block in the country were taken up. Of these some 2000 blocks were already covered by special programmes, such as, Small Farmers Development Agency (SFDA) programme, Drought Prone Areas Programme (DPAP), and the Command Area Development (CAD) programme. The IRDP got extended to a total of 2600 blocks as on 31st March, 1980. Besides, small and marginal farmers, the agricultural workers and landless labourers, and the rural artisans were also brought within the purview of this programme. *It means that, this programme has replaced the on going SFDA/MFAL, and all other programmes for the benefit of target group below poverty line in rural areas. Infact, these programmes have been an integral part of the new programme and have been merged under this new programme of IRDP.*

On October 2, 1980, the IRDP was extended to all 5011 blocks of the country and made a major component of the NEW (Revised) 20-point programme. With effect from the same date the on going programmes such as SFDA/MFAL and other such programmes have been merged under this new programme of IRDP.

11.2 Objective of the Programme:

The aim of IRDP is to raise the level of living of the poorest families in the rural areas above the poverty line on a lasting basis by giving them income generating assets and access to credit and other inputs. Thus, the object of the programme is to life the poorest families in the rural areas above poverty line by providing them with productive assets and employment. To put it differently, the programme aims to assist

the families in rural areas below poverty line by taking up selfemployment ventures in a variety of activities like agriculture, sericulture and animal husbandry in the primary sector, weaving and handicrafts etc., in the secondary sector, and services and business in the tertiary sector.

11.3 The Target Group:

The target group includes small and marginal farmers, agricultural and non-agricultural labourers, rural craftsmen and artisans, scheduled castes and scheduled tribes and virtually all families of about 5 person with an annual income level of below Rs.3500. However, a significant change has taken place during the Seventh Plan in the identification of target group families. For instance, the cut off point for the identification of the poor has been fixed at Rs. 4800 with the stipulation that all families below Rs. 3500 shall be taken up first. However, both these levels are substantially lower than the cut-off income of around Rs.6400 at the poverty line. It means all families whose income is below of Rs.6400 are considered as poor. Thus, all families below Rs. 4800 comes under target group.

The Thrust of the Programme: The thrust of the programme is on raising incomes and generating opportunities for employment through schemes pertaining to agriculture and other activities, cottage and small scale industries as well as other viable form of economic activities suiting to the target group families. Support to these families in the form of supply of raw materials, training and upgradation of skill has also been emphasised in the programme. Thus, the thrust of the programme is at making the target group families economically viable and self-sufficient and generate additional employment opportunities in rural areas.

11.4 Extent of Poverty:

At the beginning of the Seventh Plan, it was estimated that 222 million persons in rural India and 55.5 million in urban areas lived below the poverty line. In terms of percentages, the poverty ratio was 39.9 per cent in rural areas and 27.7 per cent in urban areas in 1984-85. The Seventh Plan aimed at bringing down the poverty ratio to 25.8 per cent by the end of the Plan. It is expected that the process of general

economic growth itself will contribute to the alleviation of poverty to a significant extent. The Seventh Plan reiterates the goal of bringing down the percentage of population below the poverty line to less than 10 by 1994-95.

Implementation of the Programme: The Ministry of Rural Development recommended the setting up of District Rural Development Agency/Society (DRDA) and the District level headed by the Collector/Deputy Commissioner and a full time executive officer responsible for planning, project formulation and implementation of IRD programme. The implementation of the Programme in the field was to be done through the DRDA with the assistance of Block machiner, i.e., BDO/Extension officers and the Village Level workers.

11.5 Financial Provision:

The asset provided to the selected households were Government subsidies and institutional credit on an average subsidy credit ration of 1:2, Thus, the financial provision for the programme was almost entirely for guidance, supply of inputs, marketing support, etc. Besides, it covered vocational training for rural youth (both men and women) belonging to poor families in various crafts, under the programme, a subsidy at the rate of 25 per cent and 33.3 per cent of the capital cost of the asset was to be provided to small and marginal farmers/rural artisans respectively and 50 per cent in case of scheduled tribes. A family could receive upto Rs. 3000 by way of subsidy. In drought prone areas, the limit of subsidy was Rs.4000 while for tribal beneficiaries it was Rs. 5000.

During the Seventh Plan an outlay of Rs. 2,642.00 crores has been provided for the programme in the central sector to be matched by an equal amount by the states and target is to cover 20 million beneficiaries.

11.6 Policy Measures:

In order to reduce the incidence of rural poverty, three broad policy options have been pursued. First, to increase the asset holding to the poor, redistributive land reform measures have been adopted in the past and special programmes of assistance for creation of better productive asset base have been introduced in the more recent years.

Second, augmentation on wage income has been sought through expansion of employment in agricultural and non-agricultural activities in the rural areas, and special employment generation programmes have been initiated to provide supplementary employment.

Third, provision for improved access for the poor to important service like education and health has been sought to be made through other programmes like Minimum Needs Programme (MNP).

Further efforts have been made to minimise the erosion of the real incomes of poor due to price rise, by ensuring supplies of foodgrains and other essential commodities through the public distribution system. Besides, special programmes to provide opportunities of betterment of life have been developed for the specially disadvantaged groups like Scheduled Castes and Scheduled Tribes and women.

In sum, distributive justice has been sought to be administered by raising income levels of the poor through growth and redistribution, and special programmes for income and employment generation for the poor and weaker groups, particularly in rural areas.

Progress of the Programme: Upto the end of 1979-80, the number of blocks covered under IRDP was 2600 and the total number families identified was on order of Rs. 32.50 lakh. In 1980-81, the coverage of the programme was extended to all 5011 blocks in the country.

The Mid Term appraisal of the Seventh Plan pointed out that a survey covering 16101 beneficiaries was conducted in 1985-86, which revealed that poorest of the poor, persons with income less than 3500, had 75 per cent coverage. Forty five per cent families had no over dues. Incremental income of Rs. 1000 and more was generated in 50 per cent of the beneficiaries crossed the poverty line of Rs.6400, though 54 per cent crossed income level of Rs.3500.

The Experience in the implementation of this programme has shown that provision of the assets in itself can not guarantee income unless the asset matches with the traditional skill and other endowments of the households matches on the one hand and the demand, the supply, and infra structural characteristics of the area on the other.

Thus, greater attention will, therefore, have to be paid on selection of viable schemes, meeting the credit and raw material requirements and marketing needs of the beneficiaries. In addition the programme will have to be implemented in an integrated manner with other special programme of development, such as, Rice Production Programme in Eastern Region.

11.7 Impact of the Programme:

The Programme Evaluation Organisation Planning Commission, Government of India, made an evaluation of the programme. (IRDP) and came out with the following observations:

General Impact:-

1. Nearly 90 per cent of the selected sample beneficiaries felt that, they had benefited from the IRD Programme, about 9.5 per cent reported that, they had not benefited and the remaining about 1 per cent did not express any views.
2. Nearly 91 per cent of the selected households, expressed the view that as a result of IRDP their family employment had increased. Another, 9 per cent of the households reported that, there had been no change in their employment position due to IRDP.
3. About 36 percent of the total reporting sample households were of the view that, there had been some increase in their family assets after being coverage under IRDP. However, about 63 per cent of them that, there had been to increase in their family assets position.
4. Again, about 77 per cent of the selected household reported that their consumption level had increased after being provided with IRDP benefits. But, 23 per cent of the households, however, felt that, there was no change in their consumption level.
5. A significant majority of the total sample households (about 64 per cent) also felt that their over all status in the village society had been elevated as a consequence of their coverage under IRDP. About 36 per cent did not notice any change in this respect.

1.8 Self Check Assessment

- Q1. Discuss in detail the IRDP.
- Q2. Who are the beneficiaries of IRDP.
- Q3. Write down impact of the programme.

National Rural Employment Programme and Training of Gram

STRUCTURE :

- 12.0 Objectives
- 12.1 Introduction
- 12.2 Objectives of the programme
- 12.3 The Programme Component
- 12.4 Financial Provisions
- 12.5 Self Check Assessment

12.0 OBJECTIVES :

After going through this chapter you will be able to know about

1. National Rural Employment Programme, its concept, components and provisions.

12.1 Introduction:-

Poverty and unemployment are the main problems of our rural society. The existence of unemployment is mainly because of under-employment. When the agricultural operation is not in full swing, the sizeable number of rural population becomes Jobless. Growing poverty as well as mal-nutrition are the resultant of this situation.

NREP, which replaced food for work programme has been designed chiefly to provide employment to the needy and rural areas in the slag season when the

operations are in a low key. Apart from maximising employment opportunities this programme aims at strengthening the rural infra structure also with a view precisely to provide direct boost to rural economy and raising the standards of rural life. In order that the investment plan under this programme yields the maximum benefits, Guidelines have been framed providing directions for the preparation of shelf of project in respect of each block. The Govt. of India is trying gradually to strengthen the machinery for technical guidance and supervision of the programme. The programme was originally started in April 1979 as a non-plan scheme augment the resources of the state Govt. for the maintainence of public works on which large investments have been made in the past.

Undoubtly, the programme became quite popular among the people. However with regard to its implementation certain deficiencies and short-comings throughout various states and union territories were observed. As such the programme requires re-vamping, re-naming and re-structuring. It was re-named as NREP in October 1980. It aims at providing supplementary employment opportunities to work seekers during lean employment period of the year. The programming is doing development works ensuring that employment and development become catalysts of each other its benefits to the community are maximised.

12.2 Objectives of the programme

According to the guidelines circulated by the Ministry of rural development the programme has 3 basic objectives:-

1. Generation of additional gainful employment for the unemployed and under employed persons both men and women in rural areas.
2. Creation of durable community assets for strengthening the rural infra-structure which will lead to rapid growth of rural economy and steady rise in the income levels of the rural poor.
3. Improvement of the nutritional status and the living standards of the rural poor.

12.3 The Programme Component:-

Economy and the quality of life in the villages can be taken up under the programme. According to Guidelines the type of works that can be taken under the programme are as follows:-

1. Afforestation and Social forestry works on Govt. and Community lands including lands belonging to local bodies like panchayats etc. road side plantation, plantation along canal banks and on waste lands on sides of railway lines etc. plantation of trees in the divided forest areas and other land unfit for cultivation, plantation of fuel, fodder and fruit trees.
2. Drinking water wells, community irrigation wells, group housing and land development projects for schedule caste and schedule tribes.
3. Construction of village tanks, repairing, developing and re-generation of existing tanks for providing water for human use or for cattle, for developing irrigation or fisheries etc.
4. Minor irrigation works which include those relating to flood protection, drainage and construction of intermediate and main drains, land levelling etc. in the command area of irrigation projects, cleaning and distilling of water resources, etc.
5. Soil and Water conservation Land reclamation.
6. Rural road subject to standard specifications, where specific financial provision exists for their surfacing, cross drainage, maintenance, etc.
7. School balwadi building, panchayati ghars, community centres, drinking water wells, drinking water resources for the wild animals in the forest area, cattle ponds, community poultry and piggery houses, bathing washing platforms, community toilets, community garbage pits, community biogas plants.

While formulating the programme priority was given to works that provide a direct boost to rural economy. Guidelines suggest that special attention should be paid to projects on which can be gainfully employed.

1. Works which are needed to be taken up in these areas which have predominant

population of schedule castes schedule tribes.

2. Works in those pockets in respect of which persistent complaints are received about existence of concealed bonded labour.
3. Works in areas which are identified low wage pockets in which there are reports in under payment to agricultural labour by paying wages lower than the prescribed minimum wages in contravention of the law.

A substantial reduction in poverty is possible only when there is determined effort for distribution of income consumption in favour of poorer sections of the population. For this purpose it is necessary that employment opportunities in rural areas are significantly increased. NREP which replaced food for work programme aims at achieving this objective. No doubt, if the programme implemented effectively, within years to come, it will help much in solving the problem of rural unemployment will certainly go a long way in removing the poverty from our rural scene.

12.4 Financial Provisions:-

During the 7th plan an outlay Rs.2487.47 crores (to be scored equally between the centre and state) has provided and the target is to generat a total employment of 1445 million mandayi. It has been observed that allocation of funds is gradually increases over the years under the programme. The achievement by way employment generation has exceeded the targets set out for 1985-86 and 1986-87, Performance, under social forestry has considerably unproved due to earmarking of bigger amounts sector, even through the earmarked funds have not been fully utilised in all the states mainly because of lack of personnel for planning, formulation and implementation of the projects and emergence of drought conditions in some states in recent years.

However, not much effort has been made to direct and monitor wage employment opportunities occurring through this programme to members of the target group including those identified for assistance under the IRDP.

The programme have been evaluated by the Programme Evaluation organisation, the National Institute of Rural Development, Indian Institute of Public Administration and Gandhi Labour Institute. These institutions, highlight some positive points such as promp payment of wages, creation of durable assets and implementation

of works through Panchayati Raj Institutions rather than departmentally.

Drawbacks: However, these studies have also brought out some area of concern as well. It is revealed that employment being provided under the programme is for a very short duration and can not make an impact on the levels of the living of the rural people. Besides, the wages paid under NREP are often lower than the market wage rates. The selection of beneficiaries is not proper, in as much as the poorest of the poor for whom the programme is meant, are sometimes left out altogether.

It has also been pointed out that selection of projects is not always made keeping in view the felt needs of the local people. There is no provision for the maintenance of the assets created. Under the Social forestry programme the survival rate of the samplings is very low as the community is not involved in the choice of samplings and has therefore, no interest in the maintenance of trees planted. The number of incomplete road works is increasing. Besides, the lack of technical as well as administrative supervision has resulted in the technically inferior quality of the works.

Measures Proposed in the Seventh Plan:

The National Rural Employment Programme will be continued the Seventh Plan as an important component of the anti-poverty strategy.

The same principle would apply in the choice of projects which would, therefore, have to take account of labour-intensity of projects their capacity to provide reasonable long spells employment during implementation.

The broad objects of the programme:-

While remaining the same as in the Sixth plan, would have to conform to the above priorities.

The Sixth Plan experience has shown that the distribution of foodgrains has not kept up to the stipulated level of 1 kg per manday for a variety of reasons relating to problems of storage and movement, quality of foodgrains and diversion to the public distribution system, and in some cases because of local preferences for coarse grains. The importance of foodgrain distribution under the programme cannot be over-emphasised in

view of its effects both on stabilization of prices and the improvement of nutritional standards of workers.

With the comfortable food stocks, an additional, 1 million tonnes of foodgrains will be provided for the programme over and above its normal requirements. The quantum of foodgrains distribution per worker per day would also be stepped up.

Efforts have been made successfully in some States to distribute other commodities such as sarees as wage payment in kind. Such efforts would be encouraged in other areas also in such manner as to provide encouragement to decentralised production of handloom textiles, etc.

The provision allowing for spending upto 50 per cent of the allocation on materials would be continued in the interest of ensuring the durability of assets created. Since the relative costs of labour and materials for different projects would vary, the stipulated ration would be maintained for the district as a whole which allow substantial flexibility in the context of decentralised economic planning.

12.5 Self Check Assessment

- Q1. Discuss in detail objectives and components of National Rural Employment Programme.
- Q2. Describe the financial Provisions of the National Rural Employment Programme.

**Training of Gram sewikas, Mukhya Sawikas, National Adult
Education Programme**

STRUCTURE:

- 13.0 Objectives
- 13.1 Introduction
- 13.2 Training of Gramsevika
- 13.3 Selection of Gramsevika
- 13.4 Programmes offered under Training of Gram Sevikas
- 13.5 Self Check Assessment

13.0 OBJECTIVES:

1. This lesson apprises the learner about
 - (i) Role of Home Science extension
 - (ii) Training of the Home Science extension personnel.

13.1 Introduction :

The Community Development Programme was launched on October 2nd 1952 with a view to affect all-round development of rural people. The purpose of this programme was not only greater agriculture production but was also intended basically to raise the standard of living of the rural people of India and influence them to aspire for higher and healthier living standards, consonant with their tradition and Culture. From the very beginning, the planners of community development programme realised that the programme can not advance rapidly unless the women from the community are included as important component in this programme.

Home Science Extension was thus included in 1954 as a programme for preparing village women to participate in Community Development programme. It was entirely a new concept and faced number of difficulties in implementing this programme.

Home Science Extension could be described as a method of informal, out of school educational services for rural families. While the basic objectives are in

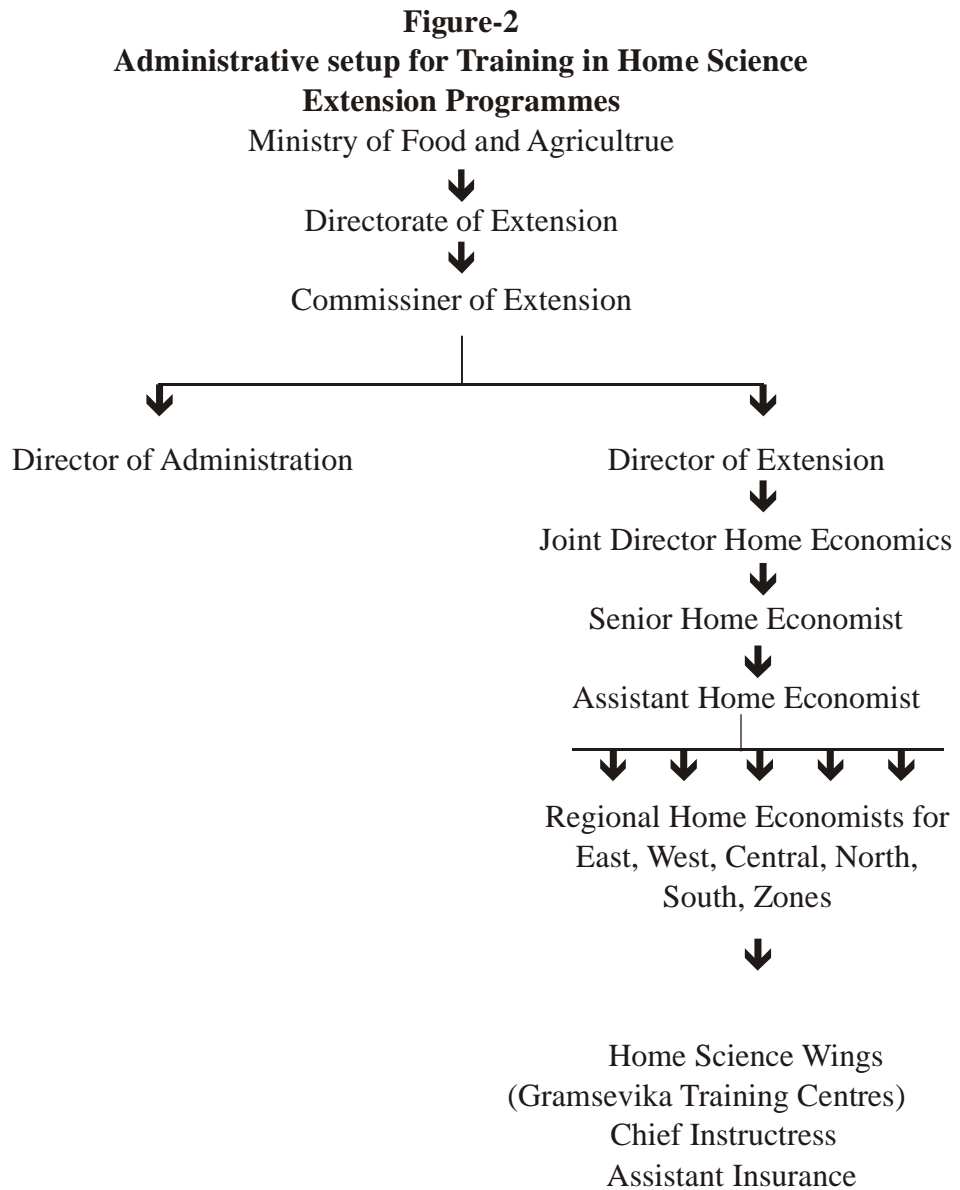
with other services of Community Development, Home Science Extension Services carry out their responsibilities through education in improved techniques or practices in all phases of the farmer's homes and their families. The National Home Science Extension Programme was initiated on May 24th 1954 with the cooperation of the United States of America's T.C.M. (now known as Foundation).

To start with in 1955-56, twenty seven Home Science wings were opened at the Extension Training Centres in different states to train the village women workers known as Gramsevikas, in improved home making practices, extension methods and techniques. The programme expanded and seventeen more wings were added bringing the total number to 44 Gramsevika Training Centres which were also known as Home Science Wings.

The Directorate of Extension under the Ministry of Food and Agriculture in Central Government undertook the training of gramsevikas. This was necessary in order to equip the programme for development of women in rural community. There was a need for suitably trained staff. Extension Directorate headed by Extension Commissioner was assisted by Director of Administration and Director of Extension Training. The Director of Extension Training was further assisted by Joint Directors, Senior Home Economist, and Assistant Home Economist. In addition there were 5 Regional Home Economists to provide guidance to the trainers of various training programmes in Home Science Extension.

The training of personnel in extension work was considered of particular importance because of the vital role they were required to play as human change agents in the process for Extension Education in order to:

- Change the conservative outlook of rural people mainly women and
 - Reach people in village with various planned programmes aiming at bringing about desirable change in them.
- The various difficulties faced by the Programme of Home Science Extension were:
- General apathy prevailing among the villages for development of women.
 - Unwillingness of qualified women to go and work in village



- Need for suitable and safe accommodation for women village level workers.
- Lack of experience in the field work on the part of women willing to take up these jobs.

The immediate need for personnel for the training programme under Community Development for women extension workers was felt at three levels. Therefore a three tier training programme was undertaken :

Training of:

- (i) Gramsevikas or multipurpose female village level workers
- (ii) Instructors at the training centres and
- (iii) Technical personnel and administrative leaders.

13.2 Training of Gramsevikas:

Each Gramsevika Training Centre had one Chief Instructress and three Assistant Instructresses who were either graduates or diploma holders in Home Science or were trained in Home Science through especially planned short courses offered in selected Home Science Colleges sponsored by Government of India.

The Chief Instructresses of initial 25 Home Science wings of Gramsevika Training Centres were trained by the Government of India in Allahabad Agricultural Institute, Faculty of Home Science, M.S. University of Baroda, Kasturba Gandhi National Memorial Trust, Indore besides Institutes at Hawi, Japan and some training centres in USA for about a year.

The Chief Instructresses were helped by Assistant Instructresses who too were qualified in various specializations of Home Science.

Training of Gramsevikas: The training programmes for Gramsevikas was of ten months duration followed by two months internship in Block Development Offices.

The objectives of this training programme were as per the following:

- (1) To train the gramsevika to enable her to guide the village woman in simple improved home making practices.
- (2) To equip the gramsevika with subject matter knowledge and ways of extending it to the rural families.
- (3) To train the gramsevika in practical and managerial skills in Management of Home.
- (4) To equip the gramsevika to work in coordination with the Block Team for carrying our Extension and Development Projects.
- (5) To equip the gramsevika to help the village women to be better home makers and efficient mothers.

13.3 Selection of Gramsevikas:

Gramsevikas were recruited and selected from rural areas. The minimum qaulifying requirement was as per the following:

Education	: Matriculation (S.S.C.) relaxable in case of backward areas
Other requirement	: Good health, Aptitude for village work and age between 18 to 25 years

There was provision for 40 trainees at every Gramsevika Training Centre.

By 1963, through the 44 Gramsevika training centres 4,613 Gramsevikas were trained and 1,133 were undergoing training. Each block required two Gramsevikas to work in a Unit of 10 Villages within the radius of 5 Kilometers which was considered at walkable distance for a Gramsevika. A block under community Development Programme comprised of 100 villages or 66,000 population.

13.4 Courses offered under Training Programme for Gramsevikas:

The main courses offered to Gramsevikas were grouped under two main headings:

1. Home Science subjects which included
 - (a) Family Food and Nutrition
 - (b) Clothing for family; selection, construction and laundering
 - (c) Mother and child care
 - (d) Housing and management of home
 - (e) Health and sanitation
 - (f) Handicrafts and Cottage Industries as well as.
 - (g) Home Science Extension which included topics related to Rural Sociology, Rural family, Psychology, Extension Methods and Community Recreation.

Besides these courses, since women in rural India were found to be working along side with men in the fields, courses in Agriculture and allied fields were also included. These were.

- (a) Farming
- (b) Kitchen Gardening
- (c) Dairy
- (d) Poultry
- (e) Bee Keeping as well as
- (f) Cooperation.

The Gramsevikas were also trained in simple office procedures,

maintainance of diary and simple accounts as well as writing official letters and reports. The syllabus was revised from time to time at the Regional and National seminars held at various places in India.

Field Work:

The training had an in built provision for field work. During the course of institutional training for about 10 months the trainees had to undertake field work for 120 days in the villages around the training centres which came to about 12 days in a month. During the field work the trainees were guided not only by the instructors but also by the block staff. The entire training culminated with pre service internship in selected blocks for 2 months.

Besides this pre service training for Gramseviksa, there were several inservice training programmes which were offered to update their knowledge about new programmes launched for Community Development as well as for keeping them informed about new scientific and technological innovations concerning homes in rural areas. These courses were called refresher courses and were offered for two months at various Gramsevika Training Centres for those who have completed 4 to 5 years of service after their initial preservice training at the Gramsevika Training Centres.

13.5 Self Check Assessment

- Q1. Discuss the history of Extension Education.
- Q2. Diagrammatically explain the administrative setup for training of gram sevikas.
- Q3. Briefly Disccuss the Selection and Traning of Gramsevikas.
- Q4. What are the various courses offered under training programme of gramsevikas.

ROLE OF HOME SCIENCE IN WOMEN'S EMPOWERMENT

STRUCTURE

- 14.0 Objectives
- 14.1 Introduction
- 14.2 Role of Home Science in Women's Empowerment
- 14.3 Self check Assessment

14.0 OBJECTIVES

This chapter will help:-

- to know the role of Home-Science in women's upliftment and empowerment.
- to know the contribution of Home-Science in upgrading the status of women.

14.1 Introduction:-

India is an under developed country having 80% population of rural character. After achieving independence several programmes were launched to conquer rural poverty which included a national programme of economic and social re-construction known as, community development programme. The community development programme was launched on 2nd october 1952 at National level and in JandK state it was started in 1956.

Community Development is a process of change from the traditional way of living to progressive ways of living. It is a method by which people can be assisted to develop themselves with their own capacity and resources. It is a movement for progress.

Home science, the science of the home, has the overall purpose of improving

homes to that the families living in them may lead a more abundant life. Home science deals with in the human values-moral, social, aesthetic, economic and physical. These are values most families respect either their family circle, their community, their nation. Home science is concerned with creating a healthy family atmosphere which is the best medium in which respect for others can grow-respect which is the best guarantee for the stable family, community, nation and world situation.

Home science does not deal with crafts as a major subject, but deals with education through which desirable changes are brought about in family living. It lays emphasis on scientific findings and skills selected to the home and the family and on the understanding of the sound scientific principles and their application in various situations. Learning to make decisions and choices based on an understanding of the principles involved is a very important part of home science education making permanent changes in the thinking of the members of a family is a fundamental for home science. Housing foods available, size of family ways of crossing a living, cultural patterns and other variations in areas and regions require emphasis on principles.

The 5 main fields of Home Sciences, Home Management, Child Development. Clothing and Textiles, Food and Nutrition, Extension Education cannot make the needed impact on family living unless they are related to the health and agriculture, psychosocial and sociological aspect of the family, community and addition.

The main objective of community development is to create self-reliance in the community. The people must learn to stand on their own feet. Through in a progressive way and mobilize their resources both human and material for their betterment and welfare. In short the Community Development Scheme is both voluntary and democratic. Of course it has to rely on Govt aids and help. It means that community can develop when every home involves itself in the developmental process. So home science of course forms the backbone of the community development programme.

The family is the most powerful agency for moulding the citizens of the future and inculcating the desirable values in them. Home science with its falerum revolving around the home has an important message for the masses. The universal message of home science is spiritual, scientific and educational. The nation is measured by the status of its family life and standards of living of its communities. By

its nature home science cuts across every aspect with its components, Food and Nutrition, home management, clothing and textiles child development and Extension Education. Home science is the qualified discipline which can help in the maximum utilization of resources, human as well as non-human. The success and progress of a family, community and nation will depend upon the awareness of its members of the available resources and wise, skillful utilization of the resources to maximise. The benefits derived for achieving this home science has to be utilized in community development programmes.

When Community Development Projects were started in India in 1952, they did not include women workers. But in 1955 the Ist centre was opened to train women workes who would go into the villages and work with the rural families to improve their living to fulfil the projects of community development. Here comes the role of home science.

The basic objective of community development was to assist each village in planning and carrying out an integrated multi phased family and village plan directed towards:-

1. Increasing agricultural production
2. Improving housing and family living conditions
3. Improving existing village crafts and industries and organising new ones.
4. Providing essential health services and improving health practices.
5. Providing educational facilities for children and an adult education programme.
6. Providing recreational facilities and programme for women, children, youth, men and the total family.

How to fulfil the objectives dealing with the improvement of family living, was a challenging question. Home science trained women were few. Institutions engaged in training home science students were only few area of study and work with the resultant cultural change slowly began to develop.

Gram Sevikas trained in home science began to apply the theory and skills

learned to practical situations in their own village, homes and in the homes of village, home makers with whom they worked. The Gram sevika, a paid women worker who can help village women to improve their family living. This began the silent revolution of bringing about change through a new kind of education.

14.2 Role of Home-Science in Women's Empowerment:-

Empowerment is a multi-dimensional process which should enable individuals or a group of individuals to realise their full identity and powers in all spheres of life. It consists of greater access to knowledge resources, greater autonomy in decision making to enable them to have greater ability to plan their lives or have greater control over the circumstances that influence their lives and free them from shackles imposed on them by customs belief practice.

Discrimination of women from womb to tomb is well known. As women are oppressed in all spheres of life, they need to be empowered in all walks of life. There cannot be a piece meal approach to women's empowerment. Hence all aspects of society have to be restructured-Government may offer welfare schemes for women. They may float anti-poverty programmes. They may launch projects for their upliftment. They may enact legislation to safe guard women's rights. The Govt. policies can only facilitate the process, reduce the hurdles, create an atmosphere conducive to transformation. But it is women who have to empower themselves. Unless they themselves become conscious of their oppression show initiative and seize the opportunities, it would not be possible to change their status.

The National Education policy (NEP) speaks of education as a tool for the empowerment of women a tool for the enhancement of the status for women. It has pointed out that education by itself is not a panacea for all ills. It is the values that we teach that can make education a powerful tool of empowerment. We have duty not only to develop and blossom become successful working women, but also carry out our social responsibilities. A society as ours, is so full of inequalities, where feudal system still prevails. Out reach programmes of educational institutions such as Home-Science are the ideal vehicle.

Home Science Colleges are a complex set of institutions which were once

looked upon as some type of finishing schools. Now with Green Revolution and Agriculture complexes social scientists such as those in child psychology, child nutrition, child development are predominant. Some colleges have out reach departments dealing with subjects such as novel energy, sources, science and technology for women, elimination of drudgery, increase of productivity. Home Science colleges are therefore a very strong resource group to aid the governments in achieving the objectives of empowering women enhancing their status.

The future of the nation depends upon the health and nutrition of women. It must be understood that women's development is essential for the country's development. Giving them priority is giving India, the priority. The U.N. Decade for women 1975-85 has generated considerable awareness regarding women's issues. Realisation that the contribution of women as partners in the development process can be immense, has led to the creation of a special department of women, and Child Development in the Ministry of Human Resource Development in the central government. The Seventh Five Year Plan document has given much importance for women's development. National Policies strategies are also giving priority for women's development. This awaking has percolated to the university systems and institutions of higher education in that, "Women's studies has emerged as an academic discipline is part of Humanities, Home Sciences and Social Sciences. These will help to further the causes such as human rights, population education and adult education.

Among the different institutions in higher education related to various facets of Women's issues, Home Science colleges have a significant role to play in development. Helping women in the families has been the traditional thrust of Home-Science courses. Equipped with knowledge of better family living, Home Scientists will be able to focus on different socio-economic issues of women. Home Science is the only field, mainly concerned with the home maker and her family.

By suitably modifying the curricula of the courses in Home-Science incorporating the developmental programmes as a subject matter, Home Science institutions can bring about an awareness of the programmes among the students who are going to play a key role in the shaping of the future.

By imparting knowledge and practical experience on food preservation, bakery and confectionery, tailoring, organising and running nursery schools, creches, cattle rearing, self employment, income generation become possible.

Home scientists can motivate women to take up home based self-employment programmes utilize the rejected raw materials such as agricultural waste for productive purposes. They can help them to establish linkages with the marketing infrastructure.

Home Science colleges can offer training in a number of vocational subjects through the formal, informal systems of education. In the area of health, Home Science has immense possibilities. Home scientists could educate the masses to utilise fully the health infrastructure and help to reduce maternal infant mortality, nutrition education should become an integral part of all health programmes.

Home Scientists could do a great deal to enlighten the various non-formal and functional literary efforts. They can assist in the preparation of primer and reading material for the neoliterates.

In the area of energy, home science can make many contributions by way of designing appropriate smokeless chula, Biogas plants and solar cookers. They can also assist in the popularization of these energy saving devices and motivate the rural households to benefit from the various subsidy schemes in this direction. They can help to establish rural energy centres in the local areas and demonstrate the effectiveness of indigenous renewable source of energy.

Population is another field requiring urgent and immediate attention. All the efforts that we make towards progress become meaningless in the face of alarming, population growth. Home scientists should bring about an awareness among the public, specially women regarding the small family norm and ways and means of adopting the same.

14.3 Self check Assessment

- Q1. Discusses how Home science plays an important role in Empowerment of women.
- Q2. How has Home science contributed in women's Empowerment.

**ROLE OF HOME-SCIENCE IN THE SERVICE
OF COMMUNITY AND IN RURAL DEVELOPMENT**

STRUCTURE :

- 15.0 Objectives
- 15.1 Introduction
 - 15.1.1 Educational Programme in Home-Science
- 15.2 Home Science in National Development
 - A. Applied Nutrition Programme (ANP)
 - B. Integrated Child Development Services (ICDS)
 - C. Midday Meal (MDM)
 - D. Income Generating and Development Programmes
 - E. The National Technology Mission
- 15.3 Self Check Assessment

15.0 OBJECTIVES :

After going through this chapter Learner will be able to know about

1. Various educational programme in Home Science.
2. Role of Home Science in National Development.
3. Status of Home Science.

15.1 Introduction:-

Status refers to existing condition, Analysis of existing condition of Home Science as an academic discipline can be done from the point of view of:-

- Educational Programme
- Contribution to National Development Programme
- Vocational Contribution and
- Research

15.1.1 Educational Programme in Home Science:-

These can be categorized as formal and non-formal programmes of education in Home Science. As seen earlier Home Science has been an integral part of formal educational programmes. In that, it is being offered under Socially Useful Productive Work Experience (SUPWE) at Secondary School level. It is one of the major educational streams under vocational education programme at Higher Secondary School level.

It is offered as a composite subject as well as in the form of specialization in the five areas namely Clothing and Textile, Child Development and Family relation, Foods and Nutrition Home Management and Home Science Education and Extension at Undergraduate as well as postgraduate levels in the colleges as well as University departments of Home Science. It is offered not only in Traditional Universities but also in Rural Universities, Deemed University as well as in Women's Universities.

One can get post SSC certificate or a diploma in Home Science so also post graduate diploma in special areas of Home Science. Besides Bachelors and Masters degrees, one can get Master and Doctor of Philosophy degrees in all areas of Home Science today. It is also offered at the Teacher's Training Colleges.

Home Science in Non-formal Educational Programmes:-

Under these programmes Home Science plays a significant role through Adult Education including functional and legal literacy. Through adult education classes Home Science offers courses in food preservation and processing, cookery, bakery, new recipes, low cost nutritive recipes as well as nutrition education. It offers

courses in interior decoration, flower arrangement, clothing construction and handicrafts including dyeing printing, weaving, knitting-crocheting, embroidery and fancy work which leads to income generation, self employment and supplementing of family income when and where ever needed.

Home Science under continuing education programme helps old Home Science Graduates to update their knowledge in order to seek employment or achieve personal growth.

Under Extension Education Home Science has played an integral role. It was included as an integral part of Extension Education Programme in 1954 and continued till over a decade. Even today under the State Department of Agriculture as well as Agricultural Universities, It is thriving under various training programmes and has important status in several training centres. Since extension not only refers to training of personnel at centres but goes further into promotion of appropriate Science and Technology through its 'Lab to Land' programme. Home Science becomes a significant field of study to transfer S and T to women at field level through short term (ranging from one day to one week programmes for women).

15.2 Home Science in National Development:-

Home Science has contribute to National Development through various Developmental and Welfare schemes floated by Government through the five year plans from time to time. These various programmes began with Community Development Programme launched in 1952 where tow village level workers perblock of 100 villages were trained in 47 Home Science wings and employed in various developmental blocks for development and welfare of children. This programme was continued for over a decade and Gramsevikas (the female village level workers) worked as change agents in the field of home making education.

With more "Specific Area Development Approach" various specific programmes related to various specialization area of Home Science wre launched. Main amongst them were the Nutrition and Health Oriented programmes for women, children and vulnerable groups.

A (i) Applied Nutrition Programme (ANP)

This programme was launched in 1959 to improve diets of vulnerable groups of the society through education, self-help, increased production and improved communication. This programme was supported by UNICEF which provided equipment and supplies which were not available in the country and were required for implementation of project. It also gave assistance in terms of stipend for trainees.

The Food and Agriculture Organization (FAO) and World Health organization (WHO) provided Technical assistance. The plan of operation included increased production

- (i) protective foods by intensive cultivation of legumes, improvement in agricultural practices, production of seasonal fruits through community, School and kitchen gardens increased milk production with supply of good fodder, grazing grounds and feed, increased poultry production as well as pisciculture improvement for promoting inland fisheries for those consuming it.
- (ii) Use of some of the protective foods productd for feeding vulnerable groups like pregnant and lactaging mothers and pre-school as well as school going children and.
- (iii) Providing for Nutrition Education through, Training and Demonstration at various levels such as village, block and district level.

Home Science colleges provided venue for training of personnels already in service. They also trained their graduates to occupy special position to enrich the programmes promotion. They conducted field level and laboratory experiments to assess the needs of the people and provide enriched food items.

Besides this programme various other Nutrition and Health related programmes were launched in which Home Science Institutes and Home Scientists played significant roles as trainers, executers and experts. These programmes were:

- (a) Expanded Aid to Nutrition Programme (ENP) which was launced with the help of UNICEF and FAO in specific areas like Orissa. This

programme aimed at promoting rich food both from vegetarian protein and non-vegetarian sources through trained workers and mahila samiti among pregnant and nursing women and children below five years of age. Like in ANP in this programme too Home Science Colleges offering excellent courses in nutrition, rural home economics and child development were involved. Home Science Association was requested to keep files of suitably qualified people and act as professional guidance bureau.

- programme and graduates
- (b) Vit-A Prophylaxis programme was started in 1969 to prevent, reduce and finally eradicate blindness and other eye ailments. This was accepted by 90 percent beneficiaries of the community offered excellent opportunity to nutritionists and extension graduates for participation.
 - (c) Anemia prophylaxis programme too was started in 1969 to prevent, reduce and eradicate nutritional anemia.
 - (d) Special/Supplementary Nutrition programme too was launched in 1969 it catered to the needs of the most vulnerable and disadvantaged groups in the country namely the infant, the toddler, the preschoolers, the pregnant and lactating women in tribal, slum and impoverished rural areas.
 - (e) **Food for work programme (FFW):** This was started in 1974 now called as National Rural Employment Programme (NREP), distributes food grains as part of wage of labourers (usually the landless labourers and marginal farmers) working in NREP projects. The aim of this programme is to bring about some measure of nutritional improvement in the worker families by making available to them part of their wages in the form of staples. Though the programme is not specifically for women, women labourers are covered under this programme. This programme operates only during 2-1/2 to 4 months of non-agricultural season hence employability of Home Scientists is negligible. However in the Social Input Programme (SIP) for Area Development for which Faculty of Home Science at M.S University Baroda was involved as one of the nine organizations by UNICEF and Government of India, this programme

too was taken into consideration and included as part of it.

B. Integrated Child Development Scheme (ICDS):

This Scheme was started in 1974 with the objective to prevent, reduce and eradicate morbidity and malnutrition among the vulnerable mother and child population. It further aimed at laying the foundation for more balanced Psychological, Emotional and Social development of child.

The implementing agencies involved are Department of Social Welfare of Ministry of Human Resource Development in coordination with Ministry of Food and Agriculture, Ministry of Housing (for providing of drinking water supply) and various voluntary agencies working in the sphere of Women and Child Welfare.

The ICDS is the only national programme which has an inbuilt nutrition, health education component in it. Thus three departments of Home Science namely the Child Development, Foods and Nutrition as well as Home Science Education and Extension are involved in this programme.

The ICDS is the only national programme which has an inbuilt nutrition, health education component in it. Thus three departments of Home Science namely the Child Development, Foods and Nutrition as well as Home Science Education and Extension are involved in this programme.

Graduates from all the three departments can work as Child Development Project Officers as well as Supervisors. Child Development Department is involved in training Balsevikas and Anganwadi Workers.

All the three departments are also involved in the development of Educational Kits as well as monitoring and evaluation of the scheme.

C. The Mid Day-Meal Programme (MDM)

This programme was started in 1980 with the objective to supplement the diet of children who very often came to school with an empty stomach. It further aimed at encouraging regular class attendance, minimising dropout rates and improving academic performance.

Recently a new objective of studying and improving anthropometric measurements and nutritional status of school children was added. It is here that

Home Scientist participated in evolving easy method for recording this status and also training teachers is doing so.

D Income generating and Development programmes

(i) Integrated Rural Development Programme (IRDP)

In the sixth five year plan IRDP was introduced with an aim at alleviating the poverty and raising the economic level of the families living below poverty line. The programme provided venues for income generating, access to credits as well as other inputs for assisting the economically weaker section for attaining economic viability on sustained basis.

(ii) Development of Women and Children in Rural Areas (DWACRA)

This programme was started in 1984 and is running under IRDP. The main aim of this programme is to improve the status of underprivileged women. It hopes to raise the level of gainfully employed women from 15% to 25% by 1990.

It proposes to promote training of women in income generating activities, a concurrent market for their products, easy loan accessibility to women and creating support system through creches and day-care centres, special working areas where a number of women can work, availability of lowcost technologies to reduce household drudgery and providing education to women to utilise the services of IRDP maximally.

Initially this programme was restricted to fiftyone backward districts only. Over a period it was spread over the entire country.

There is lot of potential for all areas of specialization in Home Science to contribute to this programme as the main clientele for both is woman and her child and the main aim is to raise the standard of living by utilising improved Technologies and Scientific Innovations.

(iii) Training of Rural youth for Self Employment (TRYSEM)

The national TRYSEM programme was launched in August 1979. The main aim of this programme is to equip rural youth with necessary Skills and Techniques to enable them to take vocations or self employment. TRYSEM too is an integral part of IRDP. It covers both sexes in productive age group of 18-35 years. It provides for

training for self employment in both traditional and non-traditional vocational skills starting from household food processing and preservation to large scale food technology and food processing involving canning, bottling and the like. It does not restrict itself to food related activities but also expands in the field of clothing, textiles, cottage and village Industries. Thus this programme provides a lot of scope for Home Scientists in both training in various skills as well as project formation, execution, monitoring, supervision and evaluation.

E The National Technology Mission :

The National Technology Mission were launched in February 1986. The three initial and main ones were related to Housing, Drinking Water and Literacy. The additional ones included Energy and Oilseed Management. Through promotion of most of these Home Scientists can participate in those directly related ones like housing, energy and drinking water management.

Under Housing Programme a number of housing schemes are launched.

(a) Rural House site-cum construction Assistance :

This project is an integral part of the Minimum Need Programme (MNP) of the Government of India launched in 1980. During sixth plan, this scheme was in operation under MNP under which 13.07 million homes were provided to landless families. These families are provided with housing sites, assistance for construction and the financial assistance of Rs. 9000/-

(b) Indira Awas Yojana :

Under this project Government of India provides a house worth Rs. 15000/- per family unit of rural homeless. This type of home consists of one room with kitchen corner equipped with smokeless chulah as well as latrine and bathroom.

Besides these scheme the Council for Scientific and Industrial Research provides information on cost reduction, quality improvement, higher productivity, energy conservation and environmental preservation in the manufacturing and use of building materials. It makes available low cost appropriate technology to people who are interested in promoting the scheme.

The Central Building Research Institute (CBRI) Roorkee also helps in promoting low cost housing and alternative building materials.

Since women are the basic consumers of houses, home makers and home scientists trained as expert home makers have significant role to play in the promotion of this mission. Though very little participation of Home Scientists is seen in this field, orienting them to various housing programme promises worthy contribution by Home Scientists in this field.

(ii) Energy :

Energy or more precisely fuel management is a concern of every home maker whether from rural area, urban weaker section or urban affluents. Home Scientists are contributing significantly to the programme of promotion of Non-conventional and Alternate Energy Sources as well as designing and standardizing improved cook stoves through basic as well as applied research, promotion of these equipments and developing methods for their promotion.

Home Scientists through Technical Back-Up Unit sponsored by Department of Non-Conventional Energy Sources of the Ministry of Energy, Government of India are also involved in training of individual master craftsmen as well as youth for self employment in this area. Home Scientists involved in this are mostly from Home Management and Home Science Education and Extension departments.

This field too is relatively new and a lot can be done to make worthy contribution. However it is encouraging to note that contribution of Home Scientists to this field is acknowledged and looked forward to.

(iii) Drinking Water :

In 1948-49 a committee called Environmental Hygiene Committee was set-up to assess the country wide problem for providing clean and safe drinking water and to make suitable recommendations for a comprehensive plan for the same. Rural Water Supply and Sanitation Programme was included as a part of Health plan in First Five Year Plan. Though the investment in this was stepped up 19 times till the end of sixth Five Year Plan there were 1.62 lakhs problem villages 40% of rural population remained uncovered till the beginning of seventh five year plan. It was therefore felt that it is necessary to develop low cost options for providing safe drinking water in rural areas as an alternative to the capital intensive regional piped water scheme.

With this objective the Technology Mission launched the programme as 'Drinking water in every village and water management programme' the main theme consisted of:

- A- Scientific source finding and Development
- B- Water Harvesting and conservation of water
- C- New rigs and Equipment for water prospecting
- D- New dimension by Application of Science and Technology Inputs in an Integrated manner for generating cost effective long term solution to pre-dominant problems associated with rural water supply.

Thrust to computerise Management Information System (MIS) for collection of data base, analysis, monitoring and evaluation.

Department of Rural Development is the National Body at central level for Water Mission. Besides it more than 30 Government departments and agencies are working for it.

Home Scientists can participate in developing Science and Technology inputs related to water management at household and family level, work for reduction of drudgery in fetching water, promote appropriate means for better purification, use sanitation and disposal of water, water borne diseases as well as train women and girls for various posts for better water management programme. Since women are primary users of water they are the principal beneficiaries of this programme and need to be equipped for participation in this programme.

(iv) Literacy :

It is an indispensable component of human resource development. Hence promotion of literacy has been identified as one of the five national missions. As a mission it was started in 1988. Besides literacy it aimed at providing Post Literacy and Continuing Education to ensure retention of literacy skills. The other components are functional literacy, legal literacy, population education, education for empowerment, better nutrition and health. This programme aims at helping

school drop outs as well as pass outs of Primary School and Non-Formal Education Programmes.

Women are integral part of this programme and are given prominence under its various schemes. Production of audio-visual materials, selection and organization of Content and Training of Trainers are some of the important components which can be handled by Home Scientists.

(iii) Vocational Development :

Home Science has vocational potentials which is many faceted. In that the vocations in which Home Scientists can enter range from the most traditional ones like those of teachers to the most modern ones generating self employment as fast food centres and buttiqes.

Besides the seven classified vocations of Teacher, Researchers, Extensin and Social Welfare Worker and those in Communication, Institutional Management, Business and Industrial Houses as well as Self Employment, a lot more venues need to be exploited. At present however there is a need for identifying areas of vocational potential development through education and training among Home Scientists.

More serious thought needs to be given by the Home Scientists, the individuals and association working for betterment of this field to achieve better vocational status in world of work-in both the organized and unorganized sectors. A lot needs to be done to get this field 'recognized' in the various competitive examinations held at national level for which the recruitment is done at Central and State level.

The private sector which has a lot of employability needs to be exploited. It needs to be informed about vocational potentials of Home Scientists and a dialogue needs to be started.

There is a need for Home Scientists to start working with State Bureaus for Vocational Development and Guidance. The national bodies as well as private agencies promoting Vocatinal Guidance and Counselling too need to be tapped. The Home Science

Association of India and its state chapters as well as Alumni Associations need to promote vocational information. This is basic for furnishing information about the vocational involvement of alumni to the National and International funding agency.

(v) Research :

Research is a backbone for progress of any field. Without research the field becomes stagnant. Home Science is one discipline which is actively involved in preliminary. Data Base, Field Level participatory as well as Developmental and Evaluative researches at individual and professional levels with students and Educational Institutions or independently. They are financed not only by Government agencies but also by National and international Endowments and Bodies as a part of a big national or international network project.

The Home Science Researchers are invited to present papers at various levels, Regional, State, National Level, as well as International Conference, Seminars and Workshops. They also hold them within the field or even across the fields at interdisciplinary platforms.

Beyond teaching this is one field which is aptly concerned by Home Scientists which becomes an achievement to be proud of. However it needs to be spread all over the country. More and more Home Scientists need to get involved in it, which calls for training in formulation of research project its execution, monitoring and supervision as well as evaluation and reviewing.

As a result of the active participation of Home Scientists in Research with national bodies they are slowly but surely heading for their contribution to the national planning commission which is responsible for framing policies for national development.

What is needed to be done is to strengthen the Home Science Association of India which was founded in 1952 and has over thousand life members and activate it through active participation of its members not only from academic institution but from other fields too for achieving better status.

15.3 Self Check Assessment

- Q1. What are the various Educational programmes in Home-Science.
- Q2. Discuss the importance of Home Science in National Development.
- Q3. Write Short Notes on
- Trysem
- ANP
- MDM
- Q4. When were Income Generating and Development Schemes launched ? What are the various schemes launched under this programme.

Home Science and Family Studies
Average Size, Marriage patterns Distinct Social Roles

STRUCTURE

16.0	Objectives
16.1	Introduction to family
16.2	Defining Family
16.3	General characteristics of the family.
16.4	Strategic Importance of family in the socialization.
16.5	Meaning of Family environment.
16.6	Average Size, of Family
16.6.1	Introduction
16.6.2	Forms of family
16.6.3	On basis of Kinship Ties
16.6.4	On the basis of Size
16.6.5	On the basis of Authority
16.6.6	On the basis of Residence
16.6.7	On the basis of Descent
16.6.8	On the basis of Marriage
16.7	Marriage Patterns
16.8	Distinct Social Roles
16.9	Conclusion
16.10	Self Assessment Exercise
16.6.11	Suggested Readings

16.0 OBJECTIVE

When the learner completes this unit, he will be able to :

1. Understand the institution of family
2. Will know various forms of family
3. Various roles, authorities and relationships within the family,
4. Thus at the end of the unit, you shall be well versed with the different aspects of family.

16.1 INTRODUCTION TO FAMILY

Family as a social Unit is present in all cultures. Although the organization of the family can vary greatly, there are certain general principles concerning its composition, descent patterns, residence patterns, authority patterns. The family is by and large the most important group in the society. Historically, it has been transformed from a more or a less self contained unit into a definite and limited organization of minimum size, consisting primarily of the original contracting parties.

Family is the first and the most important social environment to which a child is exposed. It is an outstanding primary group, because it is in the family the child develops its basic attitude. Further, amongst the groups that influence the lives of the individuals in the society no one affects them so intimately and continuously as does the family. From the time of conception up to the moment of death the family has a constant impact. Family is the first group in which we find ourselves. It provides for the most enduring relationship in one form or the other.

The family as a social institution has always been the core element for the development of the individual as well as for the society and the state. All societies large and small, primitive and civilized, ancient and modern have some form of family or the other. No one knows, or can know, how or when the family began. It is

safe to surmise that family in some form will always be with us. With regards to the future as the mind can imagine, the family will continue to be a central and indeed a nuclear component of society. The changes in the family values, therefore, are given much attention all over the world.

16.2 MEANING AND DEFINITIONS :

The word “has been taken over from Latin word “Familus” which means a servant. Originally family consisted of a man and a women with a child or children and servants. The meaning of family can be explained better by the following definitions. In common English parlance the word ‘family’ is used in several different senses :

- i) “Household”, is the body of person who live in one house or under one head including parents, children, servants etc.
- ii) The group consisting of parents and their children, whether living together or not.
- iii) In wider sense, all those who are nearly related by ‘blood and affinity.
- iv) Those descended or claiming descent from a common ancestor house, kindred, or lineage.

M. F Nimk off : Says that “family is a more or less durable association of husband and wife, with or without child or of a man or a woman alone, with children”.

Eliot and Merrill : Family is “The biological social unit composed of husband, wife and children.”

Maciver : Family is a group defined by sex relationships sufficiently precise and enduring to provide for the procreation and upbringing of children”.

Burgess and Locke. “Family is a group of persons united by ties of marriage, blood, or adoption constituting a single household inter communicating with each other in their respective social roles of husband and wife, father and mother, son and daughter, brother and sister, creating a common culture.”

16.3 GENERAL CHARACTERISTICS OF FAMILY

i) A Mating Relationship : A family comes into existence when a man and a women establish mating relation between them.

ii) Selection of Mates : Wife or husband are selected by parents or by the elders of the family, or the choice may be left to the wishes of the individuals concerned. Various rules govern the selection.

iii) A system of Nomenclature : Every family is known or recognized by a distinctive name.

iv) A way of tracing the descent : Every family has its own mode of tracing the descent. Descent refers to the social recognition of biological relationship between individuals. Descent may be traced through male line (Matrilineal descent) or through both the lines (bi-lateral Descent).

16.4 STRATEGIC IMPORTANCE OF THE FAMILY SYSTEM IN SOCIALIZATION

The family system influences the education system in many ways. It plays a very important role in the socialization of the new generation.

i) The family gets the child first. At this stage it is blank and plastic and can be moulded by the family as it wishes.

ii) The family is a factor that is more persistent in the life of the child right from its birth and its association with the child is much longer than that of its playmates, friends, and teachers.

iii) The family is a primary group. Its members have a strong group “We feeling”. It accepts the members as whole persons and they are irrespective of their good and bad qualities . The relations between the members are informanl, personal, face to-face, spontaneous, intimate, sympathetic and emotional.

iv) The child is completely dependent on the family for the satisfaction of all its material, security and affectiional needs. No other institution is like this.

v) The family provides both kinds of relationships the authoritarian as well as equalitarian which the child needs at this stage. The former are provided by the parents and the latter by the other siblings. This makes family a better institution for socialization .

vi) The father or the mother in the family provides the initial identification of the child. The community in which the family lives also identifies the child as the son or the daughter of particular person and reinforces its family identity.

These special characteristics of family increase its ability to socialize the new generation and make the family environment very important in socialization.

16.5 MEANING OF FAMILY ENVIRONMENT

It is necessary to specify what is meant by “family environment”. Several things can be included in it as follows.

- i) Child rearing practices in the family,
- ii) Jointness and nuclearity of the family,
- iii) Family size
- iv) Number of siblings in the family,
- v) Parents-children relationships
- vi) Intellectual quality of the home,
- vii) Parent’s attitude to education.
- viii) Parent’s interest in children education.
- ix) Parent’s ability to help and guide the child in doing home work,
- x) Family’s economic status, etc. it is necessary to examine some of these aspects of family environment which influence the educational system.

16.6 AVERAGE SIZE OF FAMILY

16.6.1 INTRODUCTION

Amongst all the organizations whether large or small, family is the greatest of all. It is the main feature in our social system. It is the first social environment for the child. From the composition and the principle of its integration underlying the family, it is obvious that it is a functional unit. It grows out of biological needs, particularly those of the expectant mother and the infant child, who cannot support and live by themselves.

16.6.2 Forms of Family

It is difficult to remunerate the various forms of family because of wider application of this institution. However, the forms of family can be identified on the basis of certain criteria like the size decent, residence, marriage and others, which are universally known.

Let us understand the various forms of family on the basis of specific criteria :

16.6.3 On the Basis of Kinship Ties : The family has been classified as Consanguineous family and conjugal family.

(i) **Consanguineous family** : If a nucleus of blood relatives is surrounded by a fringe of spouses, the resultant grouping is called a consanguineous family. It consists of members related by birth and thus, it is more stable. Maturation of children or breakup of the marriage bond does not destroy the consanguineous family. Owing to marriage between close relatives being universally ruled out, the consanguineous family can meet any demand of its members except for the sexual gratification ; and it is this fact that necessitates the fringes of spouses. Thus, emphasis here is more on blood relationship and not marriage basis.

(ii) **Conjugal Family** : The type of family in which there is a nucleus of spouses and their offspring surrounded by a fringe of relatives is called a conjugal

family. The emphasis here is on the conjugal bond and therefore, this type of family is not stable and it disintegrates with the death of the parents.

16.6.4 On the basis of Size : The size of the family can take various forms, such as:

- i) **Nuclear family :** It can be defined as “a small group composed of husband and wife and immature children which constitutes a unit apart from the rest of the community”. Talcott Parsons calls the nuclear family as an isolated family. It is isolated because it does not form an integral part of a wider system of kinship relationships. Parsons argues that there is a functional relationship between the isolate nuclear family and the economic system in the preindustrial society. In particular, the isolated nuclear family is shaped to meet the requirements of the economic system.
- ii) **Extended Family :** If the primary nucleus is extended by the addition of others closely related kin then it is called an extended family. Extended families are of various types. Firstly, there are those which grow mainly round the nucleus and secondly, there are those which are extended still further, by extending the principle of kinship, like in the Hindu joint family. An extended family may include a woman, her husband their children and her married daughters with her husband.
- iii) **Joint Family :** The joint family is a mode of combining smaller families into larger family units through the extension of three or more generations including at least grandparents, parents and children. It is the family which consists of members related by blood.

Acc. to Iravati Karve, the joint family may be defined as a group of people who generally live under one roof, who eat food cooked at one hearth, who hold property in common and who participate in common family worship and are closely related to each other as some particular type of kindred.

16. 6.5 On the basis of Authority : The family can be of two types according to authority.

i) Patriarchal family : The patriarchal family is father centered. Here, the father or the eldest man is the head of the family and he exercises authority. He is the owner and the administrator of the family property.

It typically is evident in ancient Hebrew, Greeks Romans, and the Aryans of India. The Roman patriarch had “the patria potestas”. (The power of the father) which gave the head of the family an unlimited authority over all the other members.

ii) Matriarchal family : This is mother centered family. Here the woman is the head of the family and she exercises authority. She is the owner of the property and the manager of the household. These families are prevalent among the Trobriand Islander, and Khasi of Assam others.

16.6.6 On the basis of Residence : Families are also identified on the basis of residence and they are of two types

i) Matrilocal family : It is a family in which the married couple resides with the wife’s family or kin group. In such families, the husbands either visit their wives periodically or live permanently with the matrilocal family. The khasis of Assam have this kind of family.

ii) Patrilocal family : This is a kind of family where is woman after marriage comes and lives with her husband. In this kind of family, the descent is also traced through the male line. Most of the tribal families like kharia, ho, bhil, and Gond are patrilocal.

16.6.7 On the basis of Descent : It again includes two categories

i) Patrilineal Family: In this type of family, the authority rests with the eldest male of the family. In this, the property inheritance and reckoning of descent takes place along the male line.

ii) Matrilocal Family : In this family, the authority lies with the female head and the property inheritance and reckoning takes place along the female line. The Khasis of Assam are e.g..

16.6.8 On the basis of Marriage : This type of family is based on the numbers of spouses the man or woman has.

i) Monogamous family : This type of family is the general pattern of family where the husband and wife live together. In this type of family one husband has one wife.

ii) Polygynous family: In this family, a man has more than one wife. Thus, sometimes reflect the inferiority of women in the society. A man who has many wives has great prestige. This family pattern is common among the bhils of central India.

iii) Polyandrous family : In this type of family, a woman has several husbands. This is due to shortage of women. Generally, in a family with three or four brothers, the brothers live together and share their wives. This is common among the Todas of Nilgiris, the khasa of Jhansi Bawar.

16.7 MARRIAGE PATTERNS

Marriage is one of the universal social institutions. It is closely connected with the institution of family. In fact marriage and family are complementary to each other. Marriage is that institution of society that can have very different implications in different cultures. Its purpose and forms may differ but it is present everywhere as an institution.

ENDOGAMY - Marriage between people of the same social group or category, Norms of endogamy are found in every society and endorse marriage between people of the same age, tribe, race, religion or social class.

EXOGRAMY- The second pattern is also found in every society marriage between people of different social groups or categories. The rule of exogamy insists that the She called blood relatives shall neither have marital connections nor sexual contact among selves.

In every industrial society, both law and cultural norms promotes

MONOGAMY- Marriage that joins one female and one male. This is the

most wide spread form of marriage found among the primitives as well as the civilized people. It has become universal practice at present.

POLOGAMY -(from Greek meaning “many unions”), defined as marriage that unites three or more people. In polygamous marriage two or more nuclear families are combined to form an extended family. Polygamous takes two or more forms:-

a) Polygyny marriage that join one male with more than one female at a given time. It was prevalent in most ancient civilizations. Example, nagas, gond and Baigas of India.

b) **Polyandry** : is the marriage that joins one female with more than one male. This pattern is extremely rare but does exist in a few societies including Buddhist in Tibet. polyandry may also emerge in societies that engage in female infanticide, which reduces the female population so that men must share women. Another reason attributed can be to keep the property intact. In India, Khasa, the Todas, the Nairs of Kerala were Polyandrous previously.

16.8 DISTINCT SOCIAL ROLES

Eric Wolf has written, family is the bearer of virtue and of public reputation is linked with that of his family and with his own relations to his family.

Certain characteristics of family roles are common to families throughout the land. Role is a key concept It highlights the social expectations attached to the particular statuses or social positions and analysis the workings of such expectations. These expectations, which are socially based, constitute the role. When people occupy social positions their behavior is determined mainly by what is expected of their position their behavior is determined mainly by what is expected of their positions rather than by their own individual characteristic. Roles are bundles of socially defined attributes and expectations associated with positions within and outside family.

As in other human societies the major roles are those of husband and wife who are father and mother, of son and daughter who are sibling to each other. Every family varies from another. Every family varies from another family in every aspect. Never the less society assigns certain basic roles to perform.

Woman as a -Wife/mother/daughter/Administrator.

It is a common knowledge that the birth of a daughter in the family is usually not a moment of joy. The preference is to needs of a son . The responsibility for rearing a daughter, for molding her into a proper social person, rests with her mother. The training is mainly aimed at turning her into a good Daughter-in-law obedient, skilful, and demure. The girls chances of a fine marriage are much improved if she gives evidence of these qualities; family's prestige is enhanced if she demonstrates these virtues after she is married, and her own happiness hinges on making the best of her roles as daughter-in-law and as a wife.

The break between being a daughter and sister in one family and becoming a wife and daughter in-law in another is sharp and as many women remember difficult one. A women after her marriage ceremony marks a new beginning in a woman's life. She is actually shifted from the familier surroundings of childhood into a territory of strangers. The transition is not an easy one but she is prepared since long for this change in life. Wife is man's helpmate, partner and comrade.

After marriage woman comes under the authority of the husband's family. She has to make her own space i.e. to win over the confidence of the others in the family. She devotes herself that is her wishes her desire all are succumbed for the betterment of or welfare of the family members.

She uses her skills in organizing the life of the husband and others in the family. A wife's major responsibility lies in providing a child ane preferably a son. Barrenness is a curse and a fear, despite the scientific advances. A wife cannot escape he constant reminders from the mother-in-law, sister-in-law of this ominous possibility. Her position in the family is strenthened, and her status moves upward in the family hierarchy.

Mother's carry the central role of performing women's traditional household tasks-like cooking meals/shopping for food and clothing/paying the bills/washing of dishes etc. In today's world and under the circumstances where major changes are occurring in the institution of the family, women are also contributing in the economic upliftment of the family. She sets standards, relieves tensions, maintain peace and

outer in the household. She is comrade in the life that deepens and enriches the personalities of both. She stands by her husband in the entire crisis; she shares with him all the joys and sorrows, successes and attainments.

A woman also has to focus on her role in a managerial position within the house. It is her responsibility to organize and execute various social functions. She has to take care of the entertainment and relaxation needs of the family members. Associated to this role is her duty to cater the health needs of the family, so that she gives special attention to all in terms of food, sleep and recreation.

16.9 CONCLUSION : Family the basic instituion, has the value for the individual and for the society, that cannot be gained in any other way. The unique power of the home stems form the fact that it receives and houses the human being first before any other institution can have chance to make an impression upon him. It continues to remain the chief environment fot the individual throughout his life.

The family, although has many varied forms, it is present in all cultures. Despite the social changes that have buffeted the American family, families report being happy as partners and as parents. Marriage and the family may now be more socially controversial , but they are likely to remain the foundation of our society for some time to come.

16.10 SELF CHECK ASSESSMENT :

- 1) Define family ? Discuss in detail the characteristics of famiy.
- 2) What do you understand by family environment ? Does it have an impact on the family relationships ?
- 3) What is the role of family in the development on an individual ?
- 4) Discuss the relevance of different marriage styles in the institution of family.
- 5) Describes family and the importance and nature of relationships amongst members of family.
- 6) Write in detail, what different roles a woman has to perform within the family.

16.11 SUGGESTED READINGS

- Harlambos M and Heald; 1991 Sociology: Themes and Perspectives, Oxford University Press, Madras
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INTERNAL DISTINCTION IS AUTHORITY BASED ON AGE AND SEX ROLES

STRUCTURE

- 17.0 Objectives
- 17.1 Introduction
- 17.2 Changes in Age and Sex roles
- 17.3 Conclusion
- 17.4 Self-Assessment Exercise
- 17.5 Suggested Readings

17.0 OBJECTIVES:

- To familiarize the student with family authority
- roles and statuses in the family
- Hierarchical norms within the family.

17.1 INTRODUCTION

Since the society can be understood as the network of statuses, it is quite natural that in every society we find a large number of groups which have many statuses. Every individual occupies many such statuses. His statuses will differ with the type of group. Each group can be understood as the network of statuses. Each group and individual has number of statuses.

In modern complex society, each individual during the course of a single day may find himself in large number of statuses. Similarly, in case of a family, an individual may carry different statuses in a day. For example, a young girl may be daughter to parents, grand-daughters to her grandparents, sister to elder

brother/sister, guide to younger sibling, friend to any of these relations chaha/chachi/bua/masi to sibling child etc. And she may be the representative of the family to outside world. It means the individual occupies the statuses, such as, daughter/grand-daughter/parent/sibling/friend/representative and many such statuses in the course of his life. Of course, in smaller and simpler families and societies and individual can have only a few statuses.

Statuses differ with their degree of importance, some statuses are more important than others in deciding the position of an individual in society. Different societies have different criteria for deciding the importance of statuses. In our Indian society age, sex kinship statuses are important than others. We are born into a society in which the statuses are already there. They are the part of the structure of our society.

Hierarchical Authority within a family rests on the biological facts. Parents have to exert authority to socialize their children and human offspring must remain dependent on their parents for years. Human males, if only because they are larger and stronger than female, possess a certain, if limited, authority in their families age and sex are the main ordering principles in family hierarchy. "The men have more decisive authority in the traditional Indian family as compared with women", M.S. Gore notes "and elders have greater authority as compared with young as person's"(1965,p-216). He adds that difference of a year or two in age is sufficient to establish firmly who the superior is. As between the authority of an elder women and a younger women and a younger man, Sex is the more important determinant. Men have the formal property rights, and so the formal authority of a younger man not necessarily his actual influence is higher than that of his older sister, though he is expected to respect and cherish her.

A husband is expected to be his wife's superior and to receive symbolic and actual difference from her. There is no great expect at that couple should share thoughts and tastes. It is so say that roles of man and woman are markedly different. A woman moves about within her household and perhaps in those fields and households where she may work, not often beyond the limits. A man has much wider ambit in space and among people.

Every individual in society occupies many different statuses. As an occupant of these one has to fulfill his obligations and duties towards others in the counter position. Hence in the interest of the individual and society it is essential that these statuses get integrated or organized properly.

A woman is a different as a wife, but not as a mother. Children owe permanent deference to both parents. Parental authority is increasing as an ideal and is sustained in fact, though the actual duration and degree of this authority are affected by economic circumstances and individuals traditions. Within a household a son and daughter must not disobey a parents will, especially not the father. If grown up sons do not wish to follow parental mandate, they usually find ways to circumvent rather than to contradict it. Fathers are the chief authority in the house on all official and financial matters. Then, Grandparents are the authority in all important household matters. The ideal of deference to parents is rarely questioned, and in practice it endows the elders with authority that is not lightly ignored by their children.

Among brothers, authority rests with the elders some of the same respectful compliance that a son gives to his father, a younger brother should give informal terms at least, to his elder brother, When an eldest brother succeeds as head or the joint family, his younger brother and their wives and children, are supposed to give him the kind of allegiance and obedience that the father commanded. Within the realm of women's activities a woman's authority usually depends on the position of her husband in the household. The wife of the senior man is the permanent authority.

Hierarchical norms are usually powerful influences on family conduct, though people do not always behave in this way; personal inclination and particular circumstances may induce them to act against these expectations.

With family authority goes responsibility. The superior is also obliged to look after the welfare of his charges so that they will not suffer, either by their own mis-judgment or because of untoward circumstances. It is also said that the dominant note in the formal pattern of relations in the household is that of restraint. And restraint between those of opposite sex.

18.5 ABDUCTION AND KIDNAPPING :

Kidnapping is taking away or enticing of a minor (female if less than 18 years and male of less than 16 years of age) without the consent of the lawful guardian. Abduction is forcibly, fraudulently or deceitfully taking away of a woman with intent of seducing her to illicit sex or compelling her to marry a person against her will. In kidnapping, the victims consent is immaterial but in abduction, the victims voluntary consent condones the crime.

Characteristics:

- 1) unmarried girls more prone to be victims.
- 2) Abductors and victims are acquainted with usually.
- 3) Two motive of abduction are sex and marriage.
- 4) The absence of parental, control and disaffectionate relations of parental control in the family are crucial factors in contents between abductor and victims and girls running away with some acquaint person.

18.6 DOWRY DEATHS

Either by way of suicide by a harassed wife or murder by the greedy husband and in-laws has indeed become a casue of great concern for parents, legislators, police, courts and society as a whole. Not a week passes when one does not read about a girl being harrassed, tortured, killed or driven to suicide because of dowry, and yet how many of the accused are punished ? Few killers in bride-burning cases are arrested fewer are prosecuted, and fewest finally sentenced.

It is virtually unheard of for a husband or his family to be sued for insisting on taking a dowry. If anything the demands for dowry have escalated over the year overthe year along with deaths. Before an actual murder, several forms of harassment/humiliation are used against the young brides which show the chaotic pattern of social behaviour members of the victim's family. The most impoartant sociological factor in the casuation of dowry death is the offender's environmental

the absence of the grand parental influence from it.

Sex roles to be appropriate for each sex culturally defined and structurally institutionalized, in every society. They are determined by ideology, custom and laws. They are basic, “in more ways than in simply determining whether a woman should work or not. They also play a large part in shaping what form or employment a woman should enter and how far she may go in that field of employment”. “Thus, while sex-roles may be the basic roles, it would appear that they are more basic for women than for men. One consequence of this is that the dilemma of multiple roles may appear in much sharper form for women than for men; to put it another way, there is greater congruence between a man’s role and his occupational role than between that of a woman and her occupational role, if she has one.”

The impact of change on the sex-role is more than apparent. In the process of socialization the children the boy and the girl begins with their sex roles training. It begins with parent’s attitude, the form and the colour of the dress they get to wear, the type of of toys they play with. More especially, girls learn it by taking the mother as the model, as the two are intimate and close. Boys suffer on this count as the father remains out for longer hours.

The influence of change on the sex-roles is clear from the freedom young men and women have in choosing their spouses, the economic independence of the women, the nuclear character of the family, the equality the woman exercises with her husband in decision making and the control they have over property.

17.3 CONCLUSION

Family therefore establishes the nature of the relations between the sexes and among the generations. They teach the fundamental lessons of who “we” are and who “they” are; how we may link with others; whom we may marry whom we may not marry. Thus, family socializes the individual and assists him in the choice and selection of relationships within the members of the family.

17.4 SELF CHECK ASSESSMENT

- 1) Enlist the factors that are responsible for authority patterns in the family.
- 2) Age and Sex are important factors in assigning authority within the family. Justify?

17.5 SUGGESTED READINGS

- Harlambos, M and Heald; 1991 Sociology: Themes and Perspectives, Oxford University Press, Madras.
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**GENDER DIFFERENCES WITH REFERENCE TO ATTROCITIES AND
ACCESS TO RESOURCES (FEMALE HEADED HOUSEHOLDS)**

STRUCTURE

- 18.0 Objectives
- 18.1 Introduction
- 18.2 Women Harassment
- 18.3 Nature and Characteristics of violence against women
- 18.4 Rape
- 18.5 Abduction and Kidnapping
- 18.6 Dowry Deaths
- 18.7 Wife battering
- 18.8 Violence against widows
- 18.9 Conclusion
- 18.10 Self Check Assessment
- 18.11 Suggested Readings

18.0 OBJECTIVES

To ensure that the student is able to:

- know meaning of gender differences
- define various terminologies related
- have an in depth understanding of violence against women

18.1 INTRODUCTION

The term, a female headed household, conjures up before our eyes a picture of a lonely women a lonely widow or a deserted one struggling to survive and to bring up small children by her own efforts. We see her as poor and resources less, persecuted by her own relatives and neighbours and sexually harassed by the men as she has to deal with. The number of households where women are trying to make a living without any support is possibly being grossly underestimated.

A household denotes all those who eat from a common kitchen: a family too is assumed to be the same. Ahead of such a household or a family is the person who commonly bears the chief responsibility for its maintenance and takes decisions on behalf of it.

To admit that a woman the bulk of the responsibilities for decisions made by it would be doubly offensive and is a taboo by common consent. If there is an adult male relative in the family, no matter what he does and how little he contributes to the family resources, he would be designated as its head and, at least for public consumption, this position would be supported even by women who actually does the work. Meghalaya is the only exception where 30% of women headed households do have husband and wife living together.

18.2 WOMEN'S HARASSMENT:

The problem of violence against women is not new. Women in Indian society have been victim of humiliation, torture, and exploitation for as long as we have written records of social organization and family life. Today, women are being gradually recognized as important, powerful meaningful contributors to the life of men; but till a few decades back, their condition was pitiable. Ideologies, institutional practices and the existing norms in the society have contributed much to their harassment some of these behavioral practices thrive even today. In spite of the legislative measure adopted in favour of women in our society after independence, countless women still continue to be victims of violence. They are beaten, kidnapped, raped, burnt and murdered.

It is important to clarify here the concept of violence against women. The term 'violence' has been described by Gelles (1979)-as "an act of striking a person with the

intent of causing harm or injury but not actually causing it.” Strauss (1980) has described a violent act “an act where there is the high potential of causing injury.” The operational definition of violence may be given “as force whether overt or covert” used to wrest from an individual (a woman) something that she does not want to give of her own free will and which causes her either physical injury or emotional trauma or both.” Thus, a rape kidnapping, murder, wife battering, sexual abuse, eve teasing are all examples of violence against women.

18.3 Nature and Characteristics of violence Against Women

VIOLENCE against women may be categorized as:

- i) Criminal violence rape, abduction, murder.....
- ii) Domestic violence dowry deaths,wife’s battering, sexual abuse. Maltreatment of widows and for elderly women.....
- iii) Social violence forcing the wife/daughter in law to go for female foeticide, eve-teasing, refusing to give a share to women in the property, forcing a young widow to commit sati, harassing the daughter in law to bring more dowry...

18.4 RAPE -Though the problem of rape is considered serious in all countries, in India it is statistically not serious as it is in western society.

It is not only the poor girls who become the victims of but even the employees belonging to the middle class are sexually humiliated by their employers.

The victims face social stigma and disgrace and suffer serious guilt pangs and personality disorders if they register to protest. Ahuja (2004) in his study reveals a major characteristic of this crime reported against women:

- a) Rape does not always occur between total strangers; in about half of the cases the rape victim is known to her assistant.
- b) 3/4th of rapes (70%) occurs in the “victims” or “victimizers” homes and about one-fourth in non residential buildings.

18.5 ABDUCTION AND KIDNAPPING :

Kidnapping is taking away or enticing of a minor (female if less than 18 years and male of less than 16 years of age) without the consent of the lawful guardian. Abduction is forcibly, fraudulently or deceitfully taking away of a woman with intent of seducing her to illicit sex or compelling her to marry a person against her will. In kidnapping, the victims consent is immaterial but in abduction, the victims voluntary consent condones the crime.

Characteristics:

- 1) unmarried girls more prone to be victims.
- 2) Abductors and victims are acquainted with usually.
- 3) Two motive of abduction are sex and marriage.
- 4) The absence of parental, control and disaffectionate relations of parental control in the family are crucial factors in contents between abductor and victims and girls running away with some acquaint person.

18.6 DOWRY DEATHS

Either by way of suicide by a harassed wife or murder by the greedy husband and in-laws has indeed become a casue of great concern for parents, legislators, police, courts and society as a whole. Not a week passes when one does not read about a girl being harrassed, tortured, killed or driven to suicide because of dowry, and yet how many of the accused are punished ? Few killers in bride-burning cases are arrested fewer are prosecuted, and fewest finally sentenced.

It is virtually unheard of for a husband or his family to be sued for insisting on taking a dowry. If anything the demands for dowry have escalated over the year overthe year along with deaths. Before an actual murder, several forms of harassment/humiliation are used against the young brides which show the chaotic pattern of social behaviour members of the victim's family. The most impoartant sociological factor in the casuation of dowry death is the offender's environmental

stress or social tensions caused by factors endogenous and exogenous to his family, and the important psychological factor is the killers authoritarian personality, dominant nature, and his personality maladjustment. The composition of a family plays a crucial role in bride burning cases.

18.7 WIFE BATTERING

Violence towards a women in the context of marriage becomes more significant when a husband who is supposed to love and protect his wife beats her. For a women, being battered by a man whom she trusted most becomes a shattering experience. The violence can range from slaps and kicks to broken bones, tortures and attempted murder and even murder itself. Sometimes, the violence may be related to drunkenness but not always. Bread or reared in Indian culture, a wife rarely thinks in terms of reporting a case or battering to policies. She suffers humiliations in silence and takes it as her destiny. Even if she revolts, she cannot do it because of the fear that her own parents would refuse to keep her in her house permanently after the marital break.

18.8 VIOLENCE AGAINST WIDOWS:

All widows do not face similar problems. A widow may be one who has no issues and who has been widowed one or two years after her marriage; or she may be one who becomes a widow after a period of 5 years or 10 years and has one to small children to support, or she may one who is above 50 years of age. Though all these three categories of widows have to face the problems of social, economic and emotional adjustment, the first and the third categories of widows have no liabilities, while the second type of widows have to perform the role of father for her children. The first two categories of widows have also to face the problem of biological adjustment. These two types are not as welcome in their husband's family as the third type. In fact, while the family members try to get rid of first two types of widows, the third type of widow become a key person in the sons family as she is made responsible for caring for her sons and cooking food in the absence of her working daughter in law. The self marriage and self esteem and her sense of identity. The low status accorded to them by their in-laws and others in the family roles lowers their self-esteem. The stigma of widowhood itself negatively affects a woman and she falls in her own-esteem.

Violence against women includes physical battering, emotional neglect /torture, verbal abuse, sexual abuse, deprivation of legitimate share in property, and abuse of their children.

The important characteristics of violence against widows are -

Young widows are more humiliated, harassed, exploited or victimized than middle aged widows.

Secondly, women know little about their husbands business, accounts certificates, insurance policies, bonds and become easy victims of fraudulent schemes fostered by unscrupulous members of their inherited property or life-insurance benefits;

The authoritarian personality of the mother-in-law and maladjustment are also important factors in the victimization of the widow.

18.9 CONCLUSION:

Gender affects family dynamics. Husbands continue to dominate the vast majority of families. It is suggested that marriage provides more benefits to men than to women. The problem of violence (atrocities) against women is not new. Women in Indian society have been victims of ill treatment, humiliation torture and exploitation for as long as written records of social organization and family life are available. The attitude of indifference and negligence can be attributed to factors like lack of awareness of seriousness of the problem, general acceptance of man's superiority over women because of which violent acts against women were not viewed as violent and deviant and the denial of violence of women themselves owing to their religious values and socio-cultural attitudes.

18.10 SELFASSESSMENT EXERCISE:

- Q1) Write short notes on:
a) Women Harasment b) Dowry Deaths c)Wife Battering
- Q2) Discuss in detail Violence against Women in the present changing society.
- Q3) What do you understand by Gender Difference? Discuss.

18.11 SUGGESTED READING:

- Ahuja, R.2005; Violence against women; Rawat Publications, N.Delhi.
- Harlambos, Mand Heald; 1991 Sociology: Themes and Perspectives, Oxford University Press, Madras
- Chakaraborthy, K; 2002, Family in India, Rawat Publications, Jaipur.
- Ahmed,S, 2007; Indian Social System, Anmol Publications, Delhi.
- Schaefer and Lam; Sociology, 6th ed, Tata Mc Graw hill, New Delhi.

Relevance of computers to Home Science-Basics of Computer: A. Model of computer, Characteristics of computer, problem solving using computers.

STRUCTURE

- 19.0 Objectives
- 19.1 Introduction
- 19.2 A model of Computer
- 19.3 Characteristics of Computer
- 19.4 Advantage and Limitations of Computers
- 19.5 Problem Solving using Computers
- 19.6 Self Check Assessment

19.0 OBJECTIVES

The Chapter Will help:

- To develop an understanding of the computer and its parts
- To understand the role and uses of computers
- To understand the working of computers
- To learn more about essentials of computers system

19.1 Introduction:-

A Computer is an electronic device that manipulates information, or data. It has the ability to store, retrieve and process data. We all know that we can use computer to type documents, send email, play games, and browse the web. We can use it to edit or create the spread sheets, presentations etc.

But two major factors which stimulate development in any field are the following:

Demand of users and potential users

Available technology

Prior to the Industrial Revolution computers were only used for scientific research. Their potential was first recognized during the world war by the US Army. They were used to keep track of the movement of arms and ammunition. Following the Industrial Revolution, people felt that computers could also be used for commercial purpose. For example, in the banks to maintain efficient Banking System, in Industrial and Business houses to maintain their inventory for Accounts management, Sales and Budgeting, Production and Planning.

At the same time dramatic development in the Electrical, Electronic and Communication Engineering together with software expertise has enabled many of these demands to be met. One such engineering technology, is the Information Technology, popularly known as IT, which brought computers to our homes and offices. This demand led to a revolution in the industry of Information Technology (IT), keeping in mind the need of the modern era which believed in the speedy storage and retrieval of information. at any point of time. This resulted in an effective and efficient working environment. Thus. the modern age, is rightly called the 'Computer Age', making computers indispensable.

Current growth in the Information Technology is leading to the concept of Paperless Offices. A Computer is an Electronic device, for processing data.

The data is fed as an input to the computer, stored, and further processed as per the instructions provided, so as to generate an output.

A Computer may be defined as a machine that can solve problems by accepting data, performing certain operations and presenting the results of those operation under the direction of detailed step-by step instructions.

A Computer stores, retrieves, sends, receives, analyses, and synthesizes the date to produce information. Information is any collection of words, numbers, and symbols, organized so that it is meaningful to the person using it.

19.2 A Model of Computers:

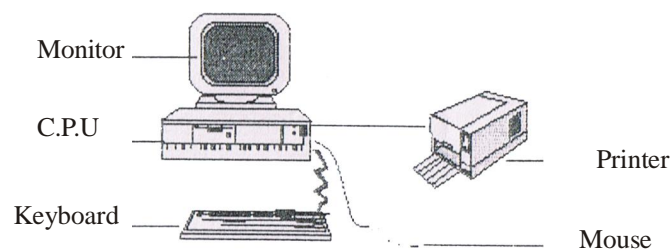


FIG. 3 Computer

The term computer is used to describe a device made up of a combination of electronic and electro-mechanical components. By itself, a computer has no intelligence and is referred to as hardware. A computer, or computer system, does not come to life until it is connected to the other parts of its system. A computer system is a combination of five elements.

1. Hardware
2. Software
3. People
4. Procedure
5. Data/Information.

When one computer system is setup to communicate with another computer system, connectively become a sixth element. In other words, the manner in which

the various individual systems are connected, for example, by phonelines, microwave transmission, or satellite, is an element of the total computer system.

1. Hardware:- The Physical equipments and components that we see, touch and feel in the computer system are called hardware. Although specific system differ, certain basic components or building blocks exist in all computers systems. These components are the central processing unit, Memory, the input device and output device.

(i) Central processing unit (CPU): The CPU is sometimes referred to as the “brain” of the system, is the power of the computer that contains the electronic circuitry that actually process the data. The CPU also controls the flow of data through the system, directing the data to enter the system, placing data in memory and retrieving them when needed, and directing the output of information. It is further composed of ALU (Arithmetic logic unit), a memory unit and a control unit.

(ii) Memory: A computer system also has storage areas, after referred to as memory. The memory can receive, hold, and deliver data when instructed to do so. Data that are being processed are held in primary memory (also called main memory or primary storage). while data not currently in use is stored in secondary memory (also called long-term memory or secondary storage).

(iii) Input Devices: Data are entered into the computer system by means of an input device. The keyboard is one of the most common input devices. Other common ones include readers of punched cards, paper tape and magnetic tape, optical scanners and the mouse. The input device translates data into a code that can be read by the computer systems electronic circuitry.

(iv) Output Devices: The output device translates processed data from a machine coded form to a form that can be read and used by people. The most common types of output devices are the monitor, the printer and the graphics plotter.

2. Software: Software can be classified into two broad categories, system software and application software. System software performs people related tasks such as human resources and marketing. Software in the term used to describe the instructions that tell the hardware how to perform a task.

3. People: People constitute the most important component of the computer system. People operate the computer hardware, they create the computer software instructions and respond to the procedures that those instructions present.

4. Data: Data is raw, unevaluated facts and figures, concepts or instructions. This raw material is processed into useful information. In other words, information is the product of data processing. This processing includes refining, summarizing, categorizing and otherwise Manipulating the data into a useful form for decision making.

19.3 Characteristics of Computer:-

The main characteristics of a computer are as under:

1. Speed: Current computers system can amass, manipulate and provide data in fractions of a second Computers can perform in minutes tasks that would take a person years to complete. Today computers can perform 100 million computations in one second. They can capable of handling the most complex tasks in minutes. The speed of Computer is measured in Nano second (or 10^{-9} of a second).

2. Accuracy: Computers process data accurately as well as quickly. Accuracy is a prime consideration in installing computers. Any calculating device is useless if its results are unreliable. The probability of computer error is quite small and often traceable to faulty data. Computers perform each and every computation with 100% accuracy.

3. Reliability: Computer systems are particularly adept at repetitive tasks. They are widely accepted because of their exceptional reliability. Unlike most humans, they are capable of operating under the most adverse

conditions for extended periods of time without showing any signs of fatigue. Computers consistently provide the same accurate results under all operating conditions of course, computers do break down and require servicing to ensure that they are operating at peak performance levels.

4. Storage Capability: It can store huge amounts of data within themselves in a limited area. Computer system has total and instant recall of data and an almost unlimited capacity to store these data. A typical mainframe computer system will have many billions of characters, and perhaps thousands of graphic images, stored and available for instant recall. The installation of a computer has meant economic survival for many companies. Employing a computer can trim unnecessary overtime, eliminate the waste of supplies, reduce dependency upon unreliable employees or outside agencies, develop tighter management control, improve internal security, and increase operational effectiveness.

5. Provides a capability that would otherwise be Impossible:

Because computers can operate on data at such phenomenal speeds, they can produce results that would simply not be feasible otherwise. For example, computers can be used to provide management with up-to-the-minute figures on all aspects of its business. With this information, managers can make more meaningful decisions.

6. Intangible benefits: There are many companies that utilize computers for intangible benefits such as flexibility, ability to accommodate growth, and the psychological factor that may give them a competitive edge is attracting consumers to buy their products or services.

7. Reduced cost: With the ever-increasing advances being made in the state of the art, the cost of computer equipment has dropped drastically over the years. Hardware costs have been decreasing at an estimated casual rate of 25%. Thus, it is not only feasible to require a computer system, but it is cost-effective as well.

8. **Diligence** : Can perform a task repetitively for N number of times, without degradation in processing speed.
9. **Versatility** : Computer can be used in many fields of operations such as education, engineering medicine and defense.

19.4 Advantages of Computers

- Perform repetitive tasks.
- More accurate while dealing with large numbers.
- Work at constant efficiency.
- Are used in almost every field.
- Process millions of instructions in a fraction of a second.
- Effective and efficient data storage and retrieval.

After having looked at the characteristics of a computer, the advantages of using it become very obvious. These are:

- The speed at which the computer carries out its operations.
- It's versatility, i.e. can be used in different fields.
- Enables an individual or an organization to store and retrieve information as and when required.

Limitations of Computers

- Dependent upon human beings
- Have no imagination and intuition of their own
- Tasks have to be described in detail
- Cannot detect flaw or error in logic

The Computer, being an electronic device, has certain limitations, which can be summarized as follows:

- Unlike the human brain, a computer cannot think on its own, but has to be given very explicit, step by step, instructions to make it perform a task.

It lacks creativity and imagination. It does not have intuition and cannot draw conclusion without going through all the intermediate steps.

Computers do not learn from experience.

19.5 Problem Solving Using Computers:

Over the past five decades, the computer revolution has grown to change the way people work and to effect many aspects of their everyday lives. Gaining computer literacy has become top priority of students. Organisation of all sizes are putting the computer to work. It is one of the most powerful forces today and is being put to use everywhere. The various sectors of our society where computers can be used to solve problems are:

1. Business and Industry. In business, computers are being used for many data processing tasks such as word processing, filing, assembling numbers and facts associated with general office functions like accounting, payroll processing and personal record keeping.

With advances in computer technology, the industrial sector has progressed remarkably in terms of.

- (i) New efficient methods of production.
- (ii) Optimal usage of available resources
- (iii) Greater efficiency
- (iv) Better quality of products
- (v) Reduction in cost of production, and
- (vi) Improved safety and reliability.

2. Health Care: Computers are also being used for planning and control purposes by health care professional computer equipment is used to monitor pulse

rate, blood pressure and other vital signs. This leads to correct and fast diagnostics. Medical researches are using computers as a tool in their search for cures of deadly diseases like cancer and AIDS.

3. Education: Education system is making use of computers on a large scale, computers bring to the educational process such attributes as untrung patience and round the clock availability. Their use leads to improve sudden performance in thinking logically, formulating problem solving procedures, and understanding relationships.

4. Humanities: In recent years, computer usage has increased in people having interest in history, literature, music, graphics, arts and other branches of humanities they use it to:

- (i) Case manuscript preparation
- (ii) Translate texts from one language to another
- (iii) Conduct studies that would otherwise be impossible
- (iv) Apply artistic talents to a new medium, and
- (v) Discover significant stylistic patterns in text

5. Science and Technology: Thousand of scientific applications are processed daily, on the computers. one of the most important daily activity is weather forecasting.

6. Recreation and Entertainment: Our entertainment and pleasure time pursuits have also been affected by computerization. For example, electronic pianos contain digital computers. Musical instruments can also be linked to personal computer, thereby creating a variety of sounds.

7. Government:- Various departments of our Government use computers for their planning, control and law enforcement activities. To name a few-Traffic,

Tourism, Information and broadcasting, education, Railways, Navigation and many others.

Thus the above account shows that in present times there is hardly an area which is not related directly or indirectly with computers. Majority of our everyday problems are minimized by use of computers. Human life has indeed benefited to a greater extent by this revolution.

19.6 Self Check Assessment

- Q1. Describe in details the relevance of computers in Home Science.
- Q2. Draw the model of a computer and discuss its characteristics and limitations.
- Q3. How Computers are beneficial in problem solving in Home Science.

**Input/Output Units. Description of Computer Input/Output Units, Other
Input methods Output Units**

STRUCTURE

- 20.0 Objectives
- 20.1 Input Units
- 20.2 Output Devices
- 20.3 Self Check Assessment

20.0 Objectives

After going through this chapter the learner :
will have a through understanding of computer input and output devices.

20.1 Input Units:- The term input is used to describe the process of capturing or collecting raw data, at the begining of a computer-based raw data, information system, into a form that is usable by the computer for processing. There are different input hardware such as those which rely on the keyboard and the other which are non keyboard input devices.

1. **Keyboard Entry:** A computer keyboard is a rather sophisticated electromechanical component designed to create speical standardized electronic codes when a key is pressed. The codes are transmitted along the cable that connects the keyboard to the computer system unit or terminal, where the incoming code is analyzed and converted into the appropriate computers usable code.
2. **Direct Entry:** Some of the most exciting kinds of input systems are those that use direct-entry, or non keyboard input devices. These include.

- (i) **Card Readers:** A card reader is used to read the holes in punched cards and transfer the appropriate electrical signals as input to the computer.
- (ii) **Scanning Devices:** A number of optical character recognition (OCR) input devices are developed to read hardcopy data from source documents into computer usable form. Today these devices use light-sensitive equipment to scan bar codes, optical masks, typewritten characters, handwriting and magnetic ink.
- (iii) **Voice Input Device :** Voice input or voice recognition device convert spoken words into electrical signals by comparing the electrical pattern produced by the speaker's voice with a set of pre-recorded patterns.
- (iv) **Pointing Devices:** The light pen, the mouse, the touch screen, and the digitizer tablet, all allow the user to identify and select the necessary command or option by, in effect, moving the cursor to a certain location on the screen and sending a signal to the computer.
- (v) **Touch-Tone Devices:** Touch-Tone devices called card dialers are those where when appropriate keys are touched, the device sends data over the phone lines to a central computer, which then checks the data against its files and reports the required information back to the store.

These input devices are hence, useful in converting data into a form usable by the computer.

20.2 OUTPUT DEVICES: To be effective, information must be produced in a usable form. To achieve this goal, you may need to use more than one output device and output medium. There are two basic categories of computer-produced output: (1) Output for immediate use by people, and (2) output that is stored in computer-usable form for later use by the computer. Output can be in either hardcopy or softcopy form.

1. **Hardcopy output Devices:** Among the wide variety of hardcopy output devices, printers and plotters are used the most. A printer is capable of printing character, symbols and sometimes graphics on paper. A plotter is used most often for creating graphics because it can produce specialized and free-form drawings on paper. To suit the needs of many different users, different types of printers and plotters are available with slightly different characteristics and capabilities - cost, speed and quality.

2. **Softcopy output Devices:** Soft copy, generally refers to the output displayed on a computer screen. The two main types of video screens are the cathode ray tube (CRT) and the flat panel.
 - (i) **Cathode Ray Tube:** This is probably the most popular softcopy output device, and is used with terminals connected to large computer systems and as a monitor for microcomputer system.

 - (ii) **Flat Screen Technologies :** This disadvantages of the CRT-Large size, high power consumption, and fragility-have led to the development of flat screen technologies. Flat screen technology is particularly useful for laptop computers, which can be used in the office and then taken home or on trips.

Technological advancements are continuously leading to better output devices. These advance devices provide much more better images.

Security and Safety of Data, Secondary Storage devices, computer momory-computer languages.

20.3 Self Check Assessment

- Q1 What are the various Computer Input Units ?
Describe any two in detail.

- Q2 Discuss the output devices of the computer in detail.

**Security and safety of Data; Secondary storage devices. Computer
Memory-computer languages.**

STRUCTURE

- 21.0 Objectives
- 21.1 Security and Safety of Data
- 21.2 Secondary storage Devices
- 21.3 Computer Memory
- 21.4 Computer Languages
- 21.5 Self Check Assessment

21.0 Objectives

After going through the lesson the learner will be able to.
Know thoroughly about security and safety of data.
Know about the storage devise and Computer memory
Know about the Computer Languages.

21.1 SECURITY AND SAFETY OF DATA :

Microcomputer introduce new dimensions to an organization's data and equipment security problems. A micro that has access to the mainframe's fiels can quickly and easily transfer data to a floppy disk. The disk then can be removed easily from the premises and put to a use that was neither intended nor enclosed by the organisation. In effect, highly portable copies of data files are conveniently available. Additional data security concerns are that floppy disc are small and fragile and therefore are easily lost or damaged.

In some circumstances the data security can be enhanced. Particularly sensitive data files can be developed and processed exclusively on a microcomputer by the one person who must know the file contents. The files can then be placed on a floppy disk, main memory erased, and the floppy disk locked in a safe when not in use. No data processing personnel are involved, the data is never on a large system with multiple users and therefore is absolutely unavailable for unauthorized retrieval, and reports can be printed at the microcomputer work-station, eliminating the possibility that they will be read or copied by output personnel that more copies will be printed than were authorized, and that there will be erroneous distribution to the wrong location. Not only are virtually all data security problems eliminated in this way, but also the manager who is responsible for the files has total control and need have no lingering concerns that a security breach might go undetected.

Moreover, the computers may be given a secret password which only the owner/operator knows. Similarly the specific files which need to be safeguard may also be given a password. Use of this method will ensure that no unauthorized individual has access to them. Also, the files can be saved in hidden modes, available in the computers.

21.2 SECONDARY STORAGE DEVICES:

Storage hardware provides the capability to store data and program instructions, either temporarily or permanently, for quick retrieval and use during computer processing. There are two types of storage: Primary and Secondary.

Primary storage refers to the main memory of a computer, where both data and instructions are held for immediate access and use by the computer's central processing unit during processing.

Secondary Storage is any storage designed to retain data and instructions in a more permanent form.

Data in secondary storage remains there until overwritten with new data or deleted and is accessed when needed. The various secondary storage devices include:

1. **Diskettes:** Diskettes also known as floppy disk contain special mechanical components for storing and retrieving data.

2. **Hard Disks:** Hard disks are made out of a rigid substance that is capable of storing a greater amount of data than the soft material used for diskettes. The capacity of hard disk ranges from 10 MB to 1,000 MB (1GB) or higher.
3. **Disk cartridges:** Removable disk cartridges are an alternative to hard disk units as a form of secondary storage. The capacity of these cartridges ranges from 5 to 30 MB.
4. **Cartridges Tape Units:** Cartridges Tape units or tape streamers can be used as back-up for high capacity hard disks. These have a capacity ranging from 10MB to 120 MB.

These were the various secondary storage devices put to use by various organisations.

21.3 COMPUTER MEMORY:

The storage areas of a computer system are often referred to as memory. The memory can receive, hold, and deliver data when instructed to do so. Data that are being processed are held in primary memory (also called working memory or primary storage), which is capable of sending and receiving the data at very high speeds. Secondary memory (also called long-term memory or secondary storage, stores data not currently being used and operates more slowly, but it is capable of storing large volumes of data. This form of storage stores the data permanently in the given media and examples are floppy diskettes, magnetic disks, magnetic tapes, magnetic drums, etc.

21.4 COMPUTER LANGUAGES:

Various computer languages are designed to facilitate the formulations of the computing problems and to communicate the formulations to the computer. Programming Languages are divided into two major categories: Low level and High level. Low Level Languages comprise machine languages and assembly level languages. High Level languages are divided into four classes. Scientific, business, specialized and interactive languages. However, there are many hundreds of programming languages and it would be impractical to discuss all of them. The accompanying chart attempts to summarize some of the most common (popular) languages and show where and by whom they are used.

Introduction to Operating System- M.S. Windows, exploring desktop, accessories, control panel, managing documents and folders.

LOW LEVEL		HIGH LEVEL			
Language Groups	Machine/assembly Languages	Scientific Languages	Business Languages	Specialised Languages	Interactive Languages
Languages	Dependent upon design of machine	ALGOL, FORTRAN, PASCAL	COBOL	ADA, APT, LISP, PROLOG, RPG	APL, Basic, JOSS
Institution where used	Computer centres, Software Houses, Industry, Universities	Universities and research centres	Business Commercial Organisations	Colleges, Schools, University	Commercial organisations
Used by	System Programmers, Hardware and Software programmers	Engineers, Scientists, Chemists, geologists	Data Processing and commercial programmers	Programmers in specialised applications	Programmers

**Introduction to operating system-MS, Windows, exploring desktop,
Accessories, control panel, managing documents and folders.**

STRUCTURE

- 22.0 Objectives
- 22.1 M.S. Windows
- 22.2 Exploring Desktop
- 22.3 Accessories
- 22.4 Control Panel
- 22.5 Managing Documents and Folder
- 22.6 Self Check Assessment

22.0 Objectives

After going through this lesson the learner will be able to :-

Know M.S. Windows thoroughly

Know management of its Accessories and control panel etc.

22.1 M.S. Windows:

The windows and windows for workgroups operating system provided a graphical environment, networking and performance enhancements to the MS-DOS operating system. Microsoft windows is a treely easy graphical interface that

makes it dramatically simpler to use your PC while at the same time more efficient and customizable. The windows can run your current programs in a more stable environment and, in many cases, even faster. It provides an opportunity to cut overall computing costs while increasing the efficiency of users and those who support them. This helps you reduce the support burden of PC's, increase control of the desktop and improve end-user productivity. The windows 98 bring many interesting and exciting changes. Small and subtle changes incorporated has led to better stability, improved online help and better display drivers. Some of the changes are: active desktop, internet explorer 4, task scheduler, imaging.

Windows 98 includes several new utilities you'll find quite useful. These utilities can help you maintain your computer and ensure that it is running as efficiently as possible.

1. **System Information Utility:** It provides a wealth of interesting information about your PC. Much of this information can be quite valuable for troubleshooting purposes.
2. **System File checker:** It checks important Windows 98 system files to make certain they haven't been damaged or improperly overwritten. Its use ensures that problems are corrected before you run the update.
3. **Windows Tune up Wizard:** This wizard is intended to help you get the most out of your system by making your favorite programs run faster, making certain your hard disk doesn't contain errors and making certain that disk space isn't being wasted on unnecessary files.

The Windows 98 improve the work output on a computer systems. With these in use time as well as efforts can be saved easily.

22.2 EXPLORING DESKTOP:

Operating systems such as the windows provide access to an active desktop. This active desktop makes your desktop come alive with active content. Those files that are used regularly and frequently can be directly be placed on the desktop. This saves time for opening the files. These files are saved in .exe mode i.e.; in executable mode. The files are presented in form of icons. Different icons represent different files and a simple double click on the icons will open the file. The use of desktop

saves the effort to first clicking on the start button, then point to program, then to folder and finally the file. Instead, files can be easily be opened when placed on the desktop.

22.3 ACCESSORIES:

One of the interesting folder contained in windows is that of accessories. For opening this folders, first click the start button, and then point to programs. In the programs, the accessories folder is present. This folder has items such as games, calculator, cardfiles, character map, notepad, wordpad, script, scripter, multimedia, internet tools, etc.

22.4 CONTROL PANEL:

Control panel is located above the worksheet. It contains three lines of information about the current cell, the mode or current state of Lotus 1-2-3, and commands.

First line of Control panel contains information about the current cell, including the cell address, cell contents, column width, format and protection status. It also contains the mode indicator. The cell address and contents always appear on the control panel; the other settings appear only when you establish them. The format setting determines the way in which an entry appears in the cell. The protection status cells you if you can currently change the cell contents.

Second line of Control Panel displays the current entry when you are creating or editing the entry. It displays the main menu, a list of commands that appear when you press slash (/) in ready made. It also displays a prompt, as request for information to complete a command you have selected.

Third Line of control displays either a submenu or a one-line of the command currently high lighted on the menu.

22.5 Managing Document and Folders:-

Information in the computer is organised into files. A file is any collection of bytes. Some files contain programmes, other contain data. A disk usually contains both programme and data files. Each file is given a name. There are some typical file names:

- BASIC.COM Files ending in .COM are programme files
- FORMA.COM (This file contains the programme for formatting disks)
- SALES.NOV. (This data file contain sales figures for November)
- C.LAB (This data files contains laboratory data)

Information about each file is contained in a directory on the disk. This information included the file name, the number of bytes in the file, and the date and time the file was last altered. Some operating systems allow descriptive file attributes in the directory of example, a file may be declared read only ; it can be read but cannot be altered. A file may be declared read/write, it can be both read and altered. Some operating systems allow hidden files to be created. These do not show up in the directory and can never be erased. Hidden files are often used for very important files associated with the operating system. Since the computer needs such files to operate, they should never be erased from the disk. Hiding them prevents this from happening.

The operating system provides the utility programme that manage the files. Some utility programmes create the files and rename files. Other utility programme display the contents of the directory or of a particular file on the video display. Still others transfer the contents of a file to an output device, such as printers.

22.6 Self Check Assessment

- Q1. Discuss how the M.S. Window works and describe its components.
- Q2. Discuss how documents and folders can be managed in M.S. Windows.

2. **Hard Disks:** Hard disks are made out of a rigid substance that is capable of storing a greater amount of data than the soft material used for diskettes. The capacity of hard disk ranges from 10 MB to 1,000 MB (1GB) or higher.
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Introduction to Operating System- M.S. Windows, exploring desktop, accessories, control panel, managing documents and folders.

In some circumstances the data security can be enhanced. Particularly sensitive data files can be developed and processed exclusively on a microcomputer by the one person who must know the file contents. The files can then be placed on a floppy disk, main memory erased, and the floppy disk locked in a safe when not in use. No data processing personnel are involved, the data is never on a large system with multiple users and therefore is absolutely unavailable for unauthorized retrieval, and reports can be printed at the microcomputer work-station, eliminating the possibility that they will be read or copied by output personnel that more copies will be printed than were authorized, and that there will be erroneous distribution to the wrong location. Not only are virtually all data security problems eliminated in this way, but also the manager who is responsible for the files has total control and need have no lingering concerns that a security breach might go undetected.

Moreover, the computers may be given a secret password which only the owner/operator knows. Similarly the specific files which need to be safeguard may also be given a password. Use of this method will ensure that no unauthorized individual has access to them. Also, the files can be saved in hidden modes, available in the computers.

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Tourism, Information and broadcasting, education, Railways, Navigation and many others.

Thus the above account shows that in present times there is hardly an area which is not related directly or indirectly with computers. Majority of our everyday problems are minimized by use of computers. Human life has indeed benefited to a greater extent by this revolution.

19.6 Self Check Assessment

- Q1. Describe in details the relevance of computers in Home Science.
- Q2. Draw the model of a computer and discuss its characteristics and limitations.
- Q3. How Computers are beneficial in problem solving in Home Science.

**Input/Output Units. Description of Computer Input/Output Units, Other
Input methods Output Units**

STRUCTURE

- 20.0 Objectives
- 20.1 Input Units
- 20.2 Output Devices
- 20.3 Self Check Assessment

20.0 Objectives

After going through this chapter the learner :
will have a through understanding of computer input and output devices.

20.1 Input Units:- The term input is used to describe the process of capturing or collecting raw data, at the begining of a computer-based raw data, information system, into a form that is usable by the computer for processing. There are different input hardware such as those which rely on the keyboard and the other which are non keyboard input devices.

1. **Keyboard Entry:** A computer keyboard is a rather sophisticated electromechanical component designed to create speical standardized electronic codes when a key is pressed. The codes are transmitted along the cable that connects the keyboard to the computer system unit or terminal, where the incoming code is analyzed and converted into the appropriate computers usable code.
2. **Direct Entry:** Some of the most exciting kinds of input systems are those that use direct-entry, or non keyboard input devices. These include.

It lacks creativity and imagination. It does not have intuition and cannot draw conclusion without going through all the intermediate steps.

Computers do not learn from experience.

19.5 Problem Solving Using Computers:

Over the past five decades, the computer revolution has grown to change the way people work and to effect many aspects of their everyday lives. Gaining computer literacy has become top priority of students. Organisation of all sizes are putting the computer to work. It is one of the most powerful forces today's and is being put to use every where. The various sectors of our society where computers can be used to solve problems are:

1. Business and Industry. In business, computers are being used for many data processing tasks such as word processing, filing, assembling numbers and facts associated with general office functions like accounting, payroll processing and personal record keeping.

With advances in computer technology, the industrial sector has progressed remarkably in terms of.

- (i) New efficient methods of production.
- (ii) Optimal usage of available resources
- (iii) Greater efficiency
- (iv) Better quality of products
- (v) Reduction in cost of production, and
- (vi) Improved safety and reliability.

2. Health Care: Computers are also being used for planning and control purposes by health care professional computer equipment is used to monitor pulse

8. **Diligence** : Can perform a task repetitively for N number of times, without degradation in processing speed.

9. **Versatility** : Computer can be used in many fields of operations such as education, engineering medicine and defense.

19.4 Advantages of Computers

Perform repetitive tasks.
More accurate while dealing with large numbers.
Work at constant efficiency.
Are used in almost every field.
Process millions of instructions in a fraction of a second.
Effective and efficient data storage and retrieval.

After having looked at the characteristics of a computer, the advantages of using it become very obvious. These are:

The speed at which the computer carries out its operations.
It's versatility, i.e. can be used in different fields.
Enables an individual or an organization to store and retrieve information as and when required.

Limitations of Computers

Dependent upon human beings
Have no imagination and intuition of their own
Tasks have to be described in detail
Cannot detect flaw or error in logic

The Computer, being an electronic device, has certain limitations, which can be summarized as follows:

Unlike the human brain, a computer cannot think on its own, but has to be given very explicit, step by step, instructions to make it perform a task.

**Security and safety of Data; Secondary storage devices. Computer
Memory-computer languages.**

STRUCTURE

- 21.0 Objectives
- 21.1 Security and Safety of Data
- 21.2 Secondary storage Devices
- 21.3 Computer Memory
- 21.4 Computer Languages
- 21.5 Self Check Assessment

21.0 Objectives

After going through the lesson the learner will be able to.
Know thoroughly about security and safety of data.
Know about the storage devise and Computer memory
Know about the Computer Languages.

21.1 SECURITY AND SAFETY OF DATA:

Microcomputer introduce new dimensions to an organization's data and equipment security problems. A micro that has access to the mainframe's fiels can quickly and easily transfer data to a floppy disk. The disk then can be removed easily from the premises and put to a use that was neither intended nor enclosed by the organisation. In effect, highly portable copies of data files are conveniently available. Additional data security concerns are that floppy disc are small and fragile and therefore are easily lost or damaged.

- 6.14 Diplomas in Home Science.
 - 6.14.1 U.G. Course in Early Childhood Education
 - 6.14.2 P.G. Diploma in Preschool Education
 - 6.14.3 P.G. Diploma in Dietetics
 - 6.14.4 P.G. Diploma in Institutional Management
 - 6.14.5 U.G. and P.G. Diplomas in Interior Decoration
 - 6.14.6 P.G. Diploma in Extension Education
- 6.15 Self Check Assessment

6.0 OBJECTIVES

After going through this chapter learner will be able to know about

1. Educational Scope of Home Science.
2. Educational Scope of Home-Science at various levels
3. Job oriented courses in different branches of Home-Science

6.1 Introduction to Scope of Home Science:-

The scope of Home Science is as wide as the scope of living itself as it deals with the very art of living. Today Home Science Education is not limited to training good housewives or ideal mothers only. It is more to train youngsters for improved

Qualities of a Good Home Science Student

STRUCTURE

- 9.0 Objectives
- 9.1 Introduction
- 9.2 General Characteristics / Requisites for students of home science
- 9.3 Self check Assessment

9.0 Objectives:

The study of the lesson gives a detailed knowledge of the qualities a Home science student possesses.

9.1 Introduction

Today home science is described as a multipurpose programme of study which takes care of individuals which takes care of individuals need and interests and develops needed abilities and capacities for successful homemaking in dynamic society. Training in home science is not meant to substitute that additional training received at home. In fact in the changing social scenario, Home science has emerged as academic discipline. It has come into being as a social need. Home Science Education is supplementary training for better familial and social ties and thus a fulfilling life for individuals.

The students of home science exhibit all characteristics and these characteristics can emerge at different times as the individual develops cognitively, socio-emotionally and physically.