

**SHORT TERM VOCATIONAL
CERTIFICATE COURSE**

**EARLY CHILDHOOD EDUCATION
MODULE - 2**

Prepared by

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&

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STATE INSTITUTE OF VOCATIONAL EDUCATION

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HYDERABAD, TELANGANA**

EARLY CHILDHOOD EDUCATION

Name of the course	: EARLY CHILDHOOD EDUCATION (PPTT)
Sector	: Home Science
Course Code	: ECHE
Entry Qualification	: SSC
Prerequisites	: Basic literacy and numeracy skills, passion for Working with children, strong communication abilities, patience, and empathy
Terminal competence	: Mastery of child development knowledge, Curriculum planning, classroom management, parent teacher cooperation, teaching learning material, assessment, professionalism and positive impact on children.

DURATION:

12 Months - (80Hours: English + Course content:400Hours)

Introduction of the course: Early Childhood Education introduces foundational principles and practices for the care, nurturing, and education of young children aged birth to around eight years old. It emphasizes creating safe, inclusive and stimulating environment where children can have holistic development and essential skills and attitudes.

Objectives:

- To know the concepts of growth and development in children.
- To promote Holistic development in children
- To understand behavior problems and disorders in children
- To plan ECE Centre infrastructure, physical environment, criteria for selecting equipment etc.
- To design and implement the curriculum plans.
- To learn various methods for assessing children
- To promote health and nutrition in preschool children
- To learn about the first aid procedures

Skills:

- Knowledge on child holistic development
- Curriculum Planning
- Classroom Management
- Parent teacher cooperation
- Empathy and Patience
- Team work and Collaboration
- Leadership and Advocacy

SYLLABUS
Module I
Concepts of Child Development

Unit I

Growth and Development of child

Introduction - Meaning of growth and development -Principles of growth and development -Factors influencing growth and development -Meaning of Maturation and Learning

Unit II

Areas of Developments During Early Childhood

Introduction -Physical Development -Motor Development -Emotional Development -Social Development -Cognitive and Intellectual Development - Speech and Language Development-Stimulation

Unit III

Pre School children

Introduction-Importance of early years-Characteristics of preschool children-Developmental needs of preschool children-need and significance of preschool education-Aims and objectives of preschool education-Habit formation and Discipline

Unit IV

Behavior problems and disorders in early childhood

Introduction-Meaning of Behavior problems- Causes of Behavior problems- Different types of behavior problems -a) Temper tantrums b) Thumb Sucking c) Nail Biting d) Aggression e) Social Withdrawal f) Pica g) Autism spectrum h) Attention deficit hyperactivity disorders (ADHD)-Positive parenting tips

UNITV

Physical set up of preschool

Introduction- Methods of preschool education-Selection of site for preschool -Building requirements for preschool -ECE requirements -Selection of Equipment -a) Types of equipment for different areas of developments -b) Records maintained in preschool -c) Factors to be considered for selecting equipment and Teaching learning material -d) Care of equipment

UNIT VI

MANAGEMENT AND PLANNING OF PRESCHOOL ACTIVITIES

Introduction -Qualities of preschool teacher-Responsibilities of preschool teacher-Basic principles followed while planning preschool programme-Types of programme planning-Importance of preschool activities- Meaning and importance of school readiness, role of teacher in school readiness-Techniques of evaluation / Assessment of preschool children-organizing parent teacher meeting

Module II

Early Childhood Health and Nutrition

Unit I

Nutrition for preschool children

Introduction -Importance of nutrition -Macro and Micro nutrients -Definition of Balanced diet and nutritional deficiency diseases-Food groups -Recommended Dietary allowance

Unit II

Health of Preschool child

Introduction -Definition of Health-Role of preschool in promoting child's health – Common communicable diseases-a) Pneumonia b) Malaria c) Typhoid d) Tuberculosis e) Chicken pox f) Mumps g) Conjunctivitis h) Scabies- Common ailments in preschool children a) Cold and Cough b) Diarrhea c) Constipation d) Earache e) Flu influenza / Fever f) Vomiting g) Colic- Precautions in treating sick child

Unit III

First Aid

Introduction -Definition of First Aid-Importance of First Aid- Contents of first aid box- First aid procedures -a) Cuts and scratches b) Choking c) Bringing out ingested foreign body from nose, ears and eyes d) Nose bleeding e) Electric shock f) Fainting g) Convulsions (Fits) h) Drowning accidents i) Fall from heights j) Insect stings k) Snake bite l) Poisons -Providing child safe preschool environment

SCHEME OF INSTRUCTION/MODULE:

1. Communicative English :80 hours
2. Course :400 hours

Duration of Course	Theory		On the Job Training		Total	
	Hours	weightage	Hours	weightage	Hours	weightage
2 Module (12 months)	120	30%	280	70%	400	100%

SYLLABUS (MODULE-I THEORY)

1. Growth and Development of child :6 Hrs
2. Areas of Developments :16Hrs
3. Preschool children :8 Hrs
4. Behavior problems and disorders in early childhood :8 Hrs
5. Physical set up of preschool :8 Hrs
6. Management and planning of preschool activities:14Hrs

ON THE JOB TRAINING/PRACTICAL

1. Growth and Development of child :15 Hrs
2. Areas of Developments :35 Hrs
3. Preschool children :20 Hrs
4. Behavior problems and disorders in early childhood :20 Hrs
5. Physical set up of preschool :20 Hrs
6. Management and planning of preschool activities:30Hrs

SYLLABUS (MODULE-II THEORY)

1. Nutrition for preschool children :20Hrs
2. Health of Preschool child :20Hrs
3. First Aid :20Hrs

ON THE JOB TRAINING

- OJT in Various Schools :140 Hrs

LIST OF EQUIPMENT

1. Weighing machine-height and weight
(Stadiometer, digital or analogue weighing scale)
2. Puppets
3. Art and craft materials
(paints, brushes, charts, palette, markers, coloured beads and threads, needles, clay, other natural things)
4. Bulletin board
5. Flash cards and Dominoes
6. Picture cards and picture books
7. Story books
8. Big and small balls
9. Growth charts
10. Computer
11. Printer
12. Scissors/cutters
13. Theme related materials
14. Puzzles
15. Pegboards
16. Traffic signs
17. Thematic appreciation test manual
18. Developmental tasks for kindergarten readiness (activity books)
19. Matching reading data to interventions (a simple tool for elementary educators)
20. Costumes of various roles

Qualifications of Teaching Faculty:

1. B.Sc Home Science (specialized in early childhood education) from any recognized university or equaling degree or diploma in ECCE

Reference books/Internet links

- Preschool teacher training course, Telugu Akademi.
- Early Childhood Education, NCERT.
- Early Childhood development kit guidance, UNICEF.
- Early Childhood care and education by J.C Aggarwal and S. Gupta

Division of Marks:

Theory: 100 Max. Marks

- | | |
|-------------------------------|------------------|
| 1. Communicative English | :20marks |
| 2. Short Questions | :6 x 5m =30marks |
| 3. Long Questions | :4x10 = 40marks |
| 4. Multiple Choice Questions: | 10x1=10 marks |

Practical: 100 Max. Marks

- | | |
|-------------------------------|----------|
| 1. External | :40marks |
| 2. Record/Mini Project & Viva | :10marks |
| 3. Internship/OJT | :50marks |

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REGD.NO.:

TIME: 3 HRS
MAX MARKS: 100

EARLY CHILDHOOD EDUCATION
MODULE I
CONCEPTS OF CHILD DEVELOPMENT
MODEL QUESTION PAPER (THEORY)

SECTION-A
COMMUNICATIVE ENGLISH

20 MARKS

SECTION-B

Note: a) Answer All Questions.

b) Each Question Carries 5 Marks.

6X5M=30 MARKS

1. What is the meaning of growth and development?
2. What are the types of motor development and its examples?
3. Write any five aims and objectives of preschool education.
4. Write about the causes of behavior problems.
5. Write the criteria for selecting the equipment for preschool.
6. List out any five qualities of preschool teacher.

SECTION-C

Note: a) Answer any **FOUR** questions.

b) Each question carries **10 Marks**.

4X10M=40 MARKS

1. Write briefly about the principles of growth and development.
2. Explain the factors which influence speech development.
3. Write about the characteristics of preschool children.
4. Write short notes on
 - a) Autism Spectrum Disorder
 - b) PICA
5. Write briefly about the building requirements of a preschool.
6. Explain the techniques of evaluation/assessment of preschool children.

SECTION-D

10X1=10Marks

1. Unfolding of traits potentially presenting the individual resulting from his heredity endowments.

a) Growth (b) Development (c) Maturation (d) Learning

2. Example for positive type of emotion

(a) Jealousy (b) Joy (c) Anger (d) Sadness

3. Capabilities involving the large body movements like running, hopping and throwing

a) Fine motor development b) Gross motor development c) Social development d) Cognitive development

4. Routines of behavior that are repeated regularly and tend to occur subconsciously

(a) Discipline (b) Behavior problem (c) Habit formation (d) Social development

5. Which behavior problem provide sucking satisfaction

a) Thumb sucking b) Nail biting c) PICA d) Social withdrawal

6. Abbreviate ADHD

a) Attention Dull Hyperactivity Disturbance

b) Attention Deficit Hyperactivity Disorder

c) Autism Disorder Hyperactivity Disability

d) Autism Development Hyperactivity Disorder

7. What is the indoor space requirement of a preschool child?

a) 10x20sq ft b) 80x100sq ft c) 60x80sq ft d) 30x40sq ft

8. What is the minimum age range for the UKG child

a) 2½ to 3½ years b) 4½ to 5½ years c) 3½ to 4½ years d) 5½ to 6½ years

9. Who plan daily, weekly and monthly programme and implement the programme?

a) Preschool teacher b) Parent c) Child d) Preschool Ayah

10. It means drawing up a programme for a full year

a). Daily lesson plan b). Weekly lesson plan c). Short term planning

d). Long term planning

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EARLY CHILDHOOD EDUCATION

Module I

Concepts of Child Development

MODEL QUESTION PAPER (PRACTICAL)

Note: a) Answer All questions.

b) Each question carries **10Marks.**

4X10=40MARKS

1. How do you assess physical growth of a child?
2. Write any ten cognitive developmental activities for the preschool children and prepare any one activity.
3. Write an observational report on any one method of preschool education.
4. Write a case study report on any behavior problem you have observed in preschool children.

Record/Mini Project & Viva

10Marks

Internship/OJT

50Marks

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REGD.NO.:

TIME: 3 HRS

MAX MARKS: 100

EARLY CHILDHOOD EDUCATION

Module II

Early Childhood Health and Nutrition
MODEL QUESTION PAPER (THEORY)

SECTION-A
COMMUNICATIVE ENGLISH 20 MARKS

SECTION-B

Note: a) Answer All questions.

b) Each question carries **5 Marks.**

6X5M=30 MARKS

1. Define balanced diet and nutritional deficiency diseases?
2. What are macro and micro nutrients?
3. Define health and ailment.
4. Write short notes on conjunctivitis.
5. Define first aid and write any three points on the importance of first aid.
6. Write the first aid procedure for bringing out ingested foreign body.

SECTION-C

Note: a) Answer any **FOUR** questions.

b) Each question carries **10 Marks.**

4X10M=40 MARKS

1. Write the importance of nutrition
2. Write the recommended dietary allowance for a preschool child.
3. Write the role of preschool in promoting child's health.
4. Write short notes on
 - a) Malaria
 - b) Constipation
5. Write first aid procedure for cuts and scratches and nose bleeding
6. How do you provide safe preschool environment.

SECTION-D

10X1=10Marks

1. Naturally occurring chemicals substances present in the food.

- a) Body tissues (b) malnutrition(c) Rickets (d) Nutrients

2----- are the energy yielding foods.

- a) Leafy vegetables (b) Vitamins (c) Carbohydrates d) Minerals

3. It is also known as sunshine vitamin

- a) Vitamin A b) Vitamin D c) Vitamin K d) Vitamin B

4. Vitamin A deficiency leads to -----

- a) Night blindness b) Anemia c) Marasmus d) Scurvy

5. The disease is caused by the bite of female anopheles mosquito

- (a) Malaria b) Typhoid (c) Pneumonia (d) Scabies

6. Which vaccine is given to prevent Tuberculosis

- a) MMR b) DPT c) Typhoid Vaccine d) BCG

7. This is caused by a tiny flea and this stays in burrows of the skin where blood is not able to reach.

- a) Conjunctivitis b) Tuberculosis c) Scabies d) Chickenpox

8.-----promotes recovery

- a) Cotton b) Syringes c) Burnol ointment d) First aid

9. It is an involuntary contraction of many of the body muscles caused by disturbance in the function of the brain.

- a) Choking b) Convulsions c) Poisons d) Electric shock

10. Preschool ground must be free from-----

- a) Drainages b) Broken glass pieces c) Nails d) All the above

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**EARLY CHILDHOOD EDUCATION
MODULE II
EARLY CHILDHOOD HEALTH AND NUTRITION
MODEL QUESTION PAPER (PRACTICAL)**

Note: a) Answer All questions.

b) Each question carries **10 Marks**

4X10=40MARKS

1. Plan a menu on balanced diet.
2. Write a report on child suffering from tuberculosis.
3. Write an observational report on child suffering from Diarrhea.
4. List out the contents of first aid kit and write first aid procedure for chocking.

Record/Mini Project & Viva

10Marks

Internship/OJT

50Marks

MODULE II

EARLY CHILDHOOD HEALTH AND NUTRITION

Unit I

Nutrition for preschool children

- 1.1 Introduction
- 1.2 Need and importance of Nutrition
- 1.3 Macro and micro nutrients
- 1.4 Definition of balanced diet and nutritional deficiency diseases
- 1.5 Planning balanced meal for preschool children
- 1.6 Recommended dietary allowance(RDA) for pre school children

Learning Objectives:

- Understand the importance of nutrition
- Know about macro and micro nutrients
- Know the meaning of balance diet and nutritional deficiency diseases
- Know the nutritional requirements of preschool children

1.1 Introduction

Food is the basic need of an individual. It is essential for a child's diet to be good in both quality as well as quantity. The child needs appropriate nutrition not only for maintaining good health and vitality but also for achieving good growth and development.

1.2 Need and Importance of nutrition.

Nutrition is the scientific study of food and how it is used by the body. Nutrition at various stages throughout life span determines their physique, structure of the bones and teeth, the ability to with stand infection, the attainment of full physique and the length of life. Preschool age is very vulnerable age and it is a foundation period for good nutritional status which achieves good health.

Preschool children require nutrition

- For growth and development
- For energy in day to day work and activity
- For repair of body tissues
- For protecting the body from diseases

Food satisfies the basic psychological need that is love and affection. When the mother gives food which is liked by the child. It also meets the social function as it is served at social events to share happiness and joy.

Inadequate diet can affect the health of the child in two ways. Directly as deficiency diseases like Kwashiorkor, Rickets etc or indirectly by reducing the resistance of the individual there by increasing the chances for infection, poor intelligence etc.

Nutrients are the naturally occurring chemical substances present in the food which are carbohydrates, fats, proteins, vitamins, minerals and water. Nutrients are classified into two categories.

1. **Macro nutrients:** Carbohydrates, fats, proteins are known as macro nutrients as our body requires them in large quantities.

2. Micro nutrients: Vitamins and minerals are known as micro nutrients as our body requires them in small quantities

1.3 Macro and Micro nutrients

1. Macro nutrients:

(a) Carbohydrates: Carbohydrates are energy yielding foods. A child needs energy to perform various physical activities. When carbohydrates are in excess they are stored in the body as subcutaneous fat.

Functions

- Carbohydrates provide energy to the body.
- One gram of carbohydrates yields 4K Calories of energy.
- Carbohydrates regulate fat metabolism
- Carbohydrates in food contain dietary fibers that help in the digestion of food and removal of wastes from the body.

Sources

Grains like Rice, Wheat, Bajra, Ragi, Oats, Jowar. Legumes like Beans, lentils, chick peas. Fruits like apples, bananas, oranges, berries, custard apple etc. Tubers like Potatoes, sweet potatoes, yam, colocasia and sugar, honey and jaggery, sago are the main sources.

(b) Fats: Fats are the important sources of essential fatty acids. Fats and oils provide energy to the body.

Functions

- Fats provide double the quantity of energy as compared to carbohydrates.
- One gram of fat supplies 9 k. calories of energy
- Fats help in the maintenance of body temperature.
- Fats protect the vital organs of the body from injury as it acts padding to the inner parts of the body like Kidney, Heart etc.

Sources

Fats are obtained from Mustard seeds, Cotton seeds, Sesame seeds, Till, Soya bean, sunflower, and nuts like coconut, almond, peanut etc. They are also found in animal products such as butter, ghee, cream, cheese and meat etc.

(c) Proteins: Proteins are the chief substances of the body cells. Pre- school children require more protein as they help in body building. If sufficient calories are not consumed, proteins are diverted for the supply of energy rather than for body-building.

Functions

- One gram of protein provides 4k. calories of energy
- Proteins are essential for growth and maintenance and repair of tissues
- Proteins are helpful to produce antibodies to prevent children from diseases.
- They are also helpful for the production of enzymes and hormones for regulating the body functions.

Sources

Plant sources: Pulses (Dals) and legumes, soya products, nuts and oil seed such as ground nuts, gingely seeds etc.

Animal sources: Milk and milk product, eggs, meat, poultry, fish etc.

2. Micro nutrients

(A) Vitamins: Vitamins are essential in small amounts for proper maintenance of good health. Vitamins are classified into two groups

a) Fat soluble vitamins: Vitamin A, D, E and K

b) Water soluble vitamins: Vitamin C and B complex vitamins.

a) Fat soluble vitamins

i) Vitamin A: It is fat soluble vitamin that is stored in the liver. It plays a crucial role in various physiological functions in the human body and is needed to prevent night-blindness in children.

Function

- Vitamin A is essential for maintaining healthy eyes and vision.
- Vitamin A is important for the proper functioning of the immune system.
- Vitamin A is involved in the regulation of cell growth, formation and maintenance of various tissues, including skin and epithelial tissues.
- Vitamin A is crucial for reproductive processes
- Vitamin A is essential for maintaining healthy skin.
- Helps in supporting the development and maintenance of bones.

It's important to note that while vitamin A is essential for good health, excessive intake can be harmful. Both deficiency and excess of vitamin A can lead to health problems. It's recommended to obtain vitamin A through a balanced diet.

Sources

such as liver, fish oil, dairy products, eggs, green leafy vegetables, and yellow color vegetables and fruits like pumpkin, carrot, ripe mango, papaya etc..

Vitamin D

It is also known as sunshine vitamin. Exposure to sunlight for several days will produce vitamin D. Rickets is caused by the deficiency of vitamin D.

Functions

- It promotes in the absorption of calcium and phosphorous from small intestine.
- It is responsible for proper growth of bones and teeth.
- Vitamin D plays a role in supporting the immune system.

Sources

Sunlight, liver oils, egg yolk, milk, butter, ghee.

Vitamin E

It is also called as tocopherol, means an alcohol required for child bearing.

Functions

- It helps protect cells from damage caused by free radicals.
- Vitamin E is crucial for maintaining the integrity and stability of cell membranes
- It helps in protecting the skin from oxidative stress
- Vitamin E is involved in the formation of red blood cells

Sources

Wheat germ and cotton germ oil are the richest sources. Vegetable oils and fats are good sources.

2. Water soluble vitamins

a) Vitamin C

- It is also known as ascorbic acid. Scurvy is caused by a deficiency of vitamin C.

Functions

- Vitamin C is essential for proper functioning of tissues
- It prevents bleeding from the blood vessels
- It increases resistance against infections
- It is also essential for the absorption of iron
- It helps in quick healing of wounds and for the formation of connective tissues.

Sources

Amla, guava, sprouts, green leafy vegetables, citrus fruits like orange, lemon, and all fresh fruits and vegetables etc are the rich sources.

b) B- COMPLEX Vitamins

Thiamine (B1) , Riboflavin (B2), Niacin (B3), Pyridoxine (B6), Folic acid (B9), Cyanocobalamin (B12) Functions

- To function the body cells properly
- To convert the food into energy
- Create new blood cells
- Maintain healthy skin cells, brain cells and other body tissues

Sources

Peas, some fresh fruits (such as bananas and oranges), nuts, wholegrain breads, some fortified

Breakfast cereals, liver.

B) Minerals

Minerals are chemical nutrients like calcium, iodine, phosphorous, sodium, potassium, iron etc. Minerals give protection against diseases which are essential to regulate the body process.

- Calcium plays an essential role in the clotting of blood, builds and maintains strong bones, teeth and regulation of the heart.
- Iodine is essential for the formation of thyroxine which is produced by thyroid gland; Etc. Goitre is caused by the deficiency of iodine.
- Phosphorus is needed for the growth, maintenance, and repair of all tissues and cells.
- Sodium is an essential nutrient necessary for maintenance of plasma volume, acid-base balance and normal cell function.
- Potassium is a mineral that is essential for all the body's functions. It helps nerves, muscles heart to function well.
- Iron is essential in making hemoglobin, a protein in red blood cells. . Anaemia is caused by the deficiency of iron.

Sources

Cereals, Bread, Eggs, Meat, Fish, Milk, Dairy, Nuts, Fruit (especially dried fruit) and Green leafy Vegetables etc.

1.4 Definition of Balanced diet and nutritional deficiency diseases

a) Definition of Balanced Diet

A balanced diet contains an adequate amount of all the nutrients required by the body to grow, remain healthy and be disease-free.

In addition, a healthy balanced diet provides the necessary energy requirement, protects against vitamin, mineral, and other nutritional deficiencies, and builds up immunity. A balanced diet includes carbohydrates, proteins, fats, fiber, vitamins, minerals and water.

b) Definition of Nutritional Deficiency Diseases

Nutritional deficiency diseases are caused due to insufficient quantity of one or more nutrients in the body. This deficiency leads to weakness and vulnerability to infection in a person.

The different deficiencies are as follow:-

Name of the disease	Caused due to lack of
Protein energy malnutrition(PEM)	Protein and carbohydrates
Marasmus	Carbohydrates
Kwashiorkor	Protein
Night Blindness	Vitamin A
Scurvy	Vitamin C
Rickets	Vitamin D
Anemia	Iron
Goiter	Iodine

1.5 Planning balanced meal for preschool children

The diet of a preschool child should emphasize three aspects–

- Variety in textures, tastes, smells and colours, to broaden a child's nutritional intake and eating experience.
- Balance of complex carbohydrates, lean proteins and essential fats.
- Moderation while indulging in sweets, ice creams, fast foods rich in fats and refined flours

The five food groups suggested by ICMR permit us to plan balanced meals according to our recommended dietary allowances. While planning daily diets foods must be chosen from all the food groups. In order to make planning more convenient, ICMR has suggested diets for different age groups.

Table 1. Suggested food groups for a balanced diet to meet the daily nutrient requirements

Food Group	1-3 years age (body wt: 12.9)	4-6 years age (body wt: 18.3)
Cereals and millets(gm)	100	160
Pulses & beans (gm)	50	60

Milk(ml)	350	350
Roots and tubers (gm)	50	50
Green leafy vegetables (gm)	50	50
Vegetables(gm)	100	100
Fruits(gm)	60-75	75
Nuts (gm)	10	15
Fats and oils (gm)	20	20

Source: Indian food composition Tables 2017, Nutritive values of Indian Foods, Nutrient Requirements for Indians 2020

- No added sugar for children < 2 years old.

1.6 a) Recommended Dietary allowance

Nutrients	1-3 years age (11.7 kgs)	4-6 years age (18.3 kgs)
Energy (k.cal)	1240	1690
Protein (g)	22	30
Fat (g)	25	25
Calcium (mg)	400	400
Iron (mg)	12	18
Vitamin:Retinol(ug)	400	400
or Beta-carotene (ug)	1600	1600
Thiamine(mg)	0.6	0.9
Riboflavin (mg)	0.7	0.1
Niacin (mg)	8	11
Vitamin C (mg)	40	40
Pyridoxine (mg)	0.9	0.9
Folic acid (ug)	30	40
Vitamin B12(ug)	0.2-1	0.2-1

❖ **Body Mass Index(BMI)** –It is tool used to estimate the amount of body fat by using height and weight measurements.

❖ **Basal Metabolic Rate (BMR)**- It is the energy released when the subject is at complete mental and physical rest.

b) Guidelines for healthy eating for preschoolers

Like many other habits the child should also develop good food habits early in life. In order to teach them that “healthy eating is part of healthy life style” one can follow the suggestions given below–

1. Mealtime can be a family time. Eating together as a family in a pleasant and enjoyable atmosphere helps children. Children learn by imitating the eating behaviour of other members of the family.

2. Variety is one of the important aspects and hence offering a choice of foods in child size portions is important. The child should be taught to finish everything on the plate. At the same time give them enough time to finish.
3. There should be regularity in mealtime and snack time so the child gets properly hungry.
4. Put new items on the menu along with the child's preferred foods.
5. A balance between hard, soft and colourful foods should be maintained to stimulate interest.
6. Menus must include dishes which are easy to handle and eat, like in the form of finger foods such as small sandwiches, chapatti rolls, small size samosas/idlis, whole fruit or hard boiled eggs.
7. Serve meals at one place and not when the child is walking around. You may want to select suitable seating arrangements for the physical comfort of the child.
8. Above all, have the child rest before meals. A tired child may not be interested in eating.
9. It is suggested that never ever bribe or punish the child to eat and finish certain foods. It is injurious to building healthy food habits.

Summery

Nutrition is the scientific study of food and how it is used by the body. Nutrition at various stages throughout life span determines their physique, structure of the bones and teeth, the ability to with stand infection, the attainment of full physique and the length of life. **1. Macro nutrients:** Carbohydrates, fats, proteins and water are known as macro nutrients as our body requires them in large quantities. **2. Micro nutrients:** Vitamins and minerals are known as micro nutrients as our body requires them in small quantities. A balanced diet contains an adequate amount of all the nutrients required by the body to grow, remain healthy and be disease-free. Nutritional deficiency diseases are caused due to insufficient quantity of one or more nutrients in the body. Food is an essential requirement throughout life that is from the time of fertilization till death of human beings. There are differences in nutritional needs for every stage of human life. A well balanced diet and combination of foods is an essential requirement for well being. The average gain in weight during the preschool age is 2 to 2.5 kg each year.

Short Answer type questions

1. What are macro and micro nutrients?
2. Write briefly about Vitamin D.
3. Define Balance diet and nutritional deficiency diseases?
4. Write a short note on B-Complex vitamins.
5. What are BMI and BMR?
6. Write the importance of nutrition for preschool children.

Long Answer type questions

7. Explain the functions of carbohydrates and proteins.
8. Write a detailed note on Vitamin A.
9. Write briefly about minerals.

10. Discuss the recommended dietary allowance for a preschool children aged 4-6years.

Unit II

Health of Preschool child

2.1 Introduction

2.2 Definition of Health

2.3 Role of preschool in promoting child's health

2.4 Common communicable diseases

- a) Pneumonia
- b) Malaria
- c) Typhoid
- d) Tuberculosis
- e) Chicken pox
- f) Mumps
- g) Conjunctivitis
- h) Scabies

2.5 Common ailments in preschool children

- 1) Cold and Cough
- 2) Diarrhea
- 3) Constipation
- 4) Earache
- 5) Flu influenza / Fever
- 6) Vomiting
- 7) Colic

2.6 Precautions in treating sick child

Learning objectives

After studying this unit the student will be able to

- Know the role of pre-school in promoting child's health
- Understand the meaning of communicable disease
- Know the common communicable diseases in children
- Learn early identification and causes of the communicable diseases.
- Know the prevention & curative aspects of the communicable diseases.
- Know the common ailments seen in children
- Understand the symptoms and causes of the common ailments
- Learn the precautions for treating a sick child
- Understand problems in teething

2.1 Introduction

Children are easily susceptible to infections and contagious diseases like Pneumonia, tuberculosis, malaria, typhoid, chicken pox, mumps etc. Parents and school teachers must know early identification, prevention and curative aspects of these diseases. "A healthy mind in a healthy body" is a well known saying. Traditionally, health has been considered as absence of disease, Teachers can play an important role as they can carry daily inspection of children. A thorough medical examination should be done for every child once in a month where parents and teachers should be encouraged to participate.

Ailment can be defined as an often persistent bodily disorder or a disease. Although most children encounter common ailments and few with major diseases, illness in the child can be frightening for parents.

2.2 Definition of Health

According to World Health Organisation (WHO) “Health is the state of complete physical, emotional, and social well-being, not merely the absence of diseases or infirmity.

2.3 Role of Preschool in Promoting Child's Health

In a well planned preschool, children are taken to the toilet at regular intervals and trained for washing hands before and after meals.

- Children learn through informal talk, songs, stories, the need for developing proper healthy habits of regular elimination, brushing teeth, taking bath, combing hair etc.
- Provision for rest and sleep
- Active play balances quiet play in the preschool programme
- A certificate of health before admitting the child into the class after a long absence is essential
- Daily health inspection of each child soon after coming is necessary to prevent cold and other infections in the group.
- The provision of sick room in the school helps the child to be healthy.
- Children can learn about their growth and that of others when being measured and weighed during medical examination which is done periodically.
- Physical examination such as vision and hearing tests should also be made. Nutrition education in school is very effective in improving the children's eating habits to make the children understand the importance of nutrients.
- By following the above points preschool promotes child's health both, physically and mentally.

2.4 Common Communicable Diseases in Children

Communicable disease is the one which is transmitted from an infected person to another. Children are readily susceptible to many infectious diseases such as pneumonia, malaria, typhoid, diphtheria, measles, mumps, chicken pox, whooping cough, tuberculosis, conjunctivitis, scabies etc. Almost all the diseases are contagious. When symptoms are observed, the child should not be sent to school as he can easily infect the other children. It is also important to inform a doctor if an infant or child has been exposed to a communicable disease.

(a) Pneumonia

It is an acute inflammation of the alveolar spaces of the lung. It may be caused by bacteria or viruses. It may also be a complication of measles or whooping cough. This is most common during winter and early summer. A child may get it when spend more time indoors in close contact with others.

Pneumonia usually comes after a child has a cold for several days, but it may start with out any previous warming.

Signs and symptoms of Pneumonia

Like many infections, pneumonia usually produces

1. Fever which intern may cause sweating, chills, flushed skin and general discomfort.
2. The child also may lose her appetite and seem less energetic than normal.
3. If she is a baby or toddler, she may seem pale and limp and cry more than usual

4. Pneumonia can cause breathing difficulties.
5. Some other specific symptoms are cough
6. Fast, labored breathing
7. Widening of the nostrils
8. Wheezing
9. Bluish tint to the lips or nails caused by decreased oxygen in the blood stream
10. Inward drawing of lower ribs while breathing
11. Complain of pain in the chest
12. An X-ray examination will confirm the diagnosis of pneumonia.

Prevention and treatment

- Pneumonia can be treated with antibiotics.
- They should be taken for the full prescribed course and at the specific dosage recommended.
- The disease can be dangerous in a malnourished child or in very young children, especially if it is due to an organism called staphylococcus.
- Viral pneumonia disappears gradually.
- The child should be kept in bed, given plenty of fluids and a highly nourishing diet.

(b) Malaria

Malaria is an acute febrile illness caused by Plasmodium parasites, which are spread to people through the bites of infected female Anopheles mosquitoes. It is preventable and curable.

Signs and symptoms

1. Fever normally occurs on alternate days but can also occur every day
2. Shivering, headache and body ache, vomiting
3. After shivering, the person sweats and the fever comes down
4. Sometimes there may be flu-like symptoms also
5. A special kind of parasite called plasmodium falciparum causes malignant malaria, which may result in convulsions, unconsciousness and even death.

Prevention

- Eradication of mosquitoes and their breeding places is very important.
- Mosquitoes breed in stagnant water, including the water in desert cooler tanks. Hence, it is advisable to allow the tank to be dried.
- Cover the nearby pits and depressions.
- Prevention from mosquito bites is most important to avoid the disease.
- We should observe the following precautions.
- The clothes worn should be such that the arms and legs are covered.
- Windows and doors must be provided with mosquito proof screen/ net.
- A mosquito net should be used while sleeping

c) Typhoid

This infectious disease usually affects older children and adults unusual below the age of 3 years. This is a common fever particularly in summer.

Causes

- Due to unhygienic sanitary conditions

- By drinking unclean water or eating unclean food outside home.
- Improper handling of food
- Patients suffering from typhoid are carriers of the disease

Signs and symptoms

1. The child has moderate to high fever.
2. The fever lasts for about three weeks and the temperature is more or less continuously high.
3. Some children seem very ill and lose their appetite.
4. Pain in the abdomen and loose stools.
5. The tongue becomes coated and dry.
6. The patient gets exhausted easily

Prevention and treatment

- Typhoid vaccine can protect the child.
- Personal hygiene and proper disposal of patient's excreta and isolation of the patient will help in preventing other member from getting this disease.
- Food should be protected from flies and dust
- Raw foods should not be eaten
- Proper diet and drugs can cure the disease completely otherwise the chance for relapse is there.

(d) TB (Tuberculosis)

This is a bacterial infectious disease caused by M-tuberculosis and spread via air borne, droplet when infected person cough, sneeze or laugh.

Tuberculosis in childhood is a common disease and this is because of Improper and incomplete treatment of tuberculosis in adults.

Symptoms

1. The child may not have proper appetite.
2. Growth and development may be below normal.
3. Occasionally, in a small number of children, the infection progress, causing swollen glands, weight loss, night sweats, fever, fatigue, irritability.
4. A persistent cough leads to weakness, heavy and fast breathing.
5. Montoux test plays an important role in establishing a diagnosis of tuberculosis in children.

Prevention and treatment

- B.CG vaccine is helpful in prevention. It should be given at the earliest. Patient must be isolated.
- Boiled milk alone should be consumed.
- The baby sitter or ayah should not suffer from T.B.
- Good diet is essential for quick recovery.

(e) Chicken Pox

Chicken pox is one of the most common childhood illnesses. It is a mild disease and there is no preventive vaccine for this. This is caused by varicella virus. This is through the droplet infection by coughing and also by the spread of scabs. One infection usually gives lifelong immunity.

Symptoms

1. After the child is exposed to virus it can take ten to twenty one days for the rash to appear.
2. Illness begins with fever.
3. Within a day or two a few spots appear on the chest or back spread to the face and to the arms and legs, which soon look like small blisters.
4. There is a lot of itching and the child may scratch some of the blisters and they may become infected.
5. Normally the blisters will crust over and then heal.

Prevention and treatment

- There is no preventive vaccine for this.
- Discourage the child from scratching as it causes additional infection.
- Trimming the finger nails
- Bathing the child 2-3 times a day with a small quantity of bicarbonate of soda (baking soda) added to the water.
- Keep the skin clean and use same lotion (such as calamine lotion) to sooth the itching.
- Antihistamine syrup to relieve itching can be given under medical advice.

f) Mumps

The disease is caused by virus, commonly occurs between five and fifteen years of age. The mumps virus is transmitted when an infected individual coughs droplets containing the virus enter into the air. A nearby child inhales these particles and the virus passes through his respiratory system into his blood stream, finally setting in his salivary glands. The incubation period i.e. the period between acquiring the infection and the first symptoms is normally 3 weeks.

Symptoms

1. Swelling of parotid glands located near the angle of the jaw
2. Fever for three to five days
3. Complain of pain when touching the swollen area
4. Pain on opening the mouth or chewing
5. Nausea, occasional vomiting, headache, body pain, a general feeling of weakness and loss of appetite.
6. Swelling and pain in the joint
7. Swelling of the testis in boys and ovaries in girls.

Prevention and treatment

- Mumps is preventable by giving MMR vaccine.
- Treatment consists of bed rest during fever, mouth-washes to keep the mouth clean, and paracetamol for fever and pain
- For pain relief, local heat using a warm compress or hot water bottle applied to the affected glands can be soothing.
- Feed the child soft, non citrus foods that are easy to chew and swallow.
- If the child develops complications such as painful testis, severe abdominal pain contact the pediatrician immediately.

(g) Conjunctivitis

It is a mild infection of the membrane covering the eye. It is very common and called conjunctivitis or pink eye. The cause may be a virus or bacteria.

Symptoms

1. Itching of the eyes, redness of the eyes, and emit watery discharge which later becomes like pus.

Prevention and Treatment

- Keep the child away from a dusty environment.
- Keep his towel, face cloth or hand kerchief separately.
- Wash his hands often, so that he does not rub

(h) Scabies

This is caused by a tiny flea and this stays in burrows of skin where blood is not able to reach. This is one of the common skin infections in children where the affected child goes on scratching and the skin becomes infected.

Symptoms

1. There is severe itching and pimples at inter spaces between fingers, toes and at armpits.

Prevention and treatment

- Child will have to take hot water bath daily taking special care to scrub the inter spaces.
- Extra nails will have to be trimmed.
- Child should be allowed to sleep separately and his clothes washed separately.
- The child will have to apply the sulphur or benzyl benzoate lotion from neck to toe and antibiotics are helpful in preventing secondary infection.
- This infection is usually got by contact with school friends who are harboring this disease.

2.5 Common Ailments in children

a) Meaning of ailment

Ailment can be defined as an often persistent bodily disorder or a disease. Some of the ailments which are observed in children commonly are discussed as follows Constipation, Diarrhoea Ear ache, Cold and cough, Fever, Vomiting, Colic etc.

b) Common ailments

1. Cold and cough

Common cold

The early features are produced by primary infection of the nose and naso-pharynx by a number of viruses especially the rhinoviruses. Subsequent bacterial infection by Streptomonas, Pneumonia, H. influenza or Staphylococci is usual.

Symptoms

1. The onset is usually sudden with a tickling sensation in a nose accompanied by sneezing.
2. The throat often feels dry and sore
3. The head feels stuffed
4. The eyes smart and there is a profuse watery nasal discharge
5. These symptoms last for one or two days after which with secondary infection, the secretion becomes thick and purulent, and impedes nasal breathing.
6. There may be a slight fever at the beginning.

Prevention

- Much can be done to prevent the spread of cold to others by voluntary (isolation of children for two or three days during the early, highly infectious stage.

- In persons who are liable to frequent colds, the nose and throat should be examined for enlarged adenoids, polypi, infected sinuses and deflected septum, and any such abnormality corrected.

Treatment

- No curative treatment for the common cold is known.
- The congestion and excessive secretion of the nasal mucous membrane may be reduced by the periodic use of 1 percent ephedrine in normal saline either sprayed or dropped into the nose.
- Steam medicated with benzoic inhalation (B.P.C) or menthol and solution benzoin inhalation (B.P.C) 1 tea spoon ful to pint of boiling water, is beneficial.

Cough

This condition is an acute inflammation of the trachea and bronchi caused by pyogenic organisms such as strept. Pneumonia, H.influenza and less frequently staph.pyogenes.

Other factors predisposing to the development of infection include cold, damp, foggy and dusty atmospheres, smoke and chronic mouth breathing which allows unfiltered and unwarmed air to enter the bronchi.

Symptoms

- The first symptom is an irritating unproductive cough accompanied by upper retro sternal discomfort or pain and later dyspnoea with wheezing respiration may be present.
- The sputum is at first scanty, mucoid, viscid and difficult to bring up, and may be occasionally streaked with blood.
- A day or two later it becomes more copious.
- Acute bronchitis may be an early and prominent manifestation of some underlying disease, such as measles or whooping cough.

Treatment

- The patient should be confined to bed
- If the attack is mild a cough syrup may be used
- If sever antibiotics and anti histaminic may be used.

2) Diarrhea

Diarrhea is the passing of watery stools more than three times a day.

Diarrhea is categorized as acute diarrhea, which lasts 5-10 days, and chronic diarrhea which lasts more than 2 weeks. It is a severe epidemic which led to immediate isolation of the child in many cases.

Causes

- The virus responsible for its outbreak is Esheresia coli the possibility of virus being responsible in some epidemics is suggested by the occurrence of influenza like infection affecting mothers or attendants.
- A virus
- Food poisoning/infected food
- Bacteria
- Contaminated water
- In correct feeding
- Over feeding Infections)

Symptoms

- The disease seldom starts before the 4th or 5th day of life
- The child commonly refuses his feeds and loses weight abruptly.
- The child leaves watery, explosive stools.
- In most cases the greenish stools contain very little fecal matter but the amount of fluid passed is considerable.
- Vomiting occurs in several cases.
- Cramping pains in abdomen.
- Watery stools last hours or several days.
- High temperature and headache
- The infant rapidly becomes dehydrated and toxic.
- The abdomen become distended and the temperature is usually irregularly raised

Treatment

- If the child is able to retain fluids by mouth, saline and glucose should be substituted by milk feeds
- Gradually when improvement occurs specific treatment must depend on the causative organism.
- Avoid infections from adults and other babies
- Boil and keep bottles, teats, spoons, cups etc clean
- Dress the baby in warm light cloths avoid wet napkins and exposure to cold
- Reduce the amount of sugar given to the baby
- The mother should be advised to offer fluids that are easily available at home in as much quantity as the child can take orally without vomiting. For example coconut water, butter milk, rice kangi with salt, weak tea etc.
- Keep the abdominal region warm and uncovered

(3) Constipation

A child should be considered to be constipated only if he is having problem in defecation i.e. defecation is delayed for days or stools are unusually hard, dry and difficult to expel.

Causes

- Constipation in children may caused by a change in a diet.
- Constipation makes the child to become restless, appears gloomy, dull and seldom suffers from severe abdominal pain; head ache and also loses his appetite.
- Child expressing discomfort during defecation
- Dietary factors-children taking highly refined or low fibre foods.
- Taking inadequate fluids and in correct feeding practices.
- Physical inactivity, inadequate exercise due to prolonged bed rest.
- Drinking too little water
- Psychological depressions
- Improper toilet training

Treatment

- Food with high fibre content should be given to the children for example bran, raw fruits and vegetables.
- Plenty of fluids should be taken daily.
- Suitable exercises should be given to the children.
- Massage to abdomen so that it will help to make the bowel movement free.
- Give positive reinforcements and praises to the child when he goes to regular visits to the lavatory and whenever there has been a successful removal of waste matter.

(4) Ear ache

Earache, also known as Otagia, is normally due to an infection of the outer ear (in front of the ear drum) or an infection of the middle ear (behind the eardrum). Serious earaches can occur in the middle ear when a tube leading from the middle ear to the throat gets blocked. A blockage occurs when the tube that normally drains away fluid from the ear and keeps the internal ear clean gets inflamed and irritates the ear canal, leading to pain and the accumulation of pus and other fluids inside the ear. Earache is common in children aged between six to twelve months, but can also occur in older children and adults.

Symptoms

- Pain in the ear is most common disease observed in a young baby or a school going children.
- This is generally due to a boil or impacted wax in the ear
- There may be referred pain from posterior third of tongue tonsil or caries molar tooth.
- The ear ache may further lead to a foul smelling watery discharge.
- If this ear ache is not properly dealt with it may lead to deafness in children.
- Also ear ache may be due to the presence of a foreign body in the auditory canal which is infected.

Treatment

- Ears should be properly cleaned with only cotton wicks
- Sharp objects should not be introduced in the ear.
- Bed rest and plenty of fluids should be administered
- Analgesics are to be given to remove pain
- Proper checking should be done by doctors at regular intervals
- Ears should be cleaned with hydrogen peroxide frequently

(5) Fever

The normal body temperature of a human being at rest is 37.0 °C (98.6 °F). Fever is a common medical sign characterized by an elevation of body temperature above the normal range of 36.5-37.5 °C (98-100 °F) i.e. variation of more than 1 °C (1.5°F) due to an increase in the temperature regulatory set- point.

Treatment

- The patient should be put to rest in bed and protected from cold in a well ventilated room
- Fluid intake sufficient to give a urinary output of atleast 1,800 ml daily should be ensured
- Patient should be given high caloric food
- The patient should be allowed to sleep.
- If cough or pain is responsible for sleeplessness, suitable symptomatic measures must be taken.

6) Vomiting

Vomiting means the expulsion of the contents of the upper gastrointestinal tract. Vomiting may be due to undigested food particles in the stomach, some infections in the stomach, food poisoning or ulcers of the stomach and duodenum etc. Vomiting may also be caused by the use of drugs occasionally.

Causes

- Gas, infections and chills may cause sour smelling vomiting after a meal.
- Some times food allergy may be the cause for vomiting
- When the child is not feeling well
- Sometimes an obstruction in the digestive tract may make the child to vomit.

Treatment

- Drugs which stop vomiting are called antiemetic such as perinorm, Avomin etc are to be used.
- Rest to the patient and intravenous administration of fluids
- Gastric lavage, use of antibiotics if vomiting is due to infections

7) Colic

Colic is a form of pain which starts and stops abruptly. The colic may be due to sudden spasmodic contractions of the smooth muscles of the viscera of the abdomen like intestinal colic, renal colic, biliary colic etc

Causes

- Over feeding
- Irregular or too frequent feeding
- Constipation or diarrhea in child
- Insufficient exercise and activity of limbs and body

Symptoms

- such as vomiting and diarrhea.
- Fatty foods can provoke biliary pain, but this association is relatively non-specific.

Treatment

- Bed rest and plenty of fluids by mouth.
- Analgesic drugs and antispasmodic drugs may be given by intramuscular injections and also antibiotics may be given.
- If colic is due to the presence of stones by surgery is indicated.

- If the child is being fed too often or being fed too much reduce the length of the time he is nourished and increase the time between the feeds.

2.6 Precautions for treating a sick child

The following precautions should be taken in treating a sick child

- Bed rest, warmth, cleanliness of the body, plenty of fluids by mouth or by intravenous injection are to be given
- Analgesic drugs for pain and antispasmodic drugs are to be administered if there is any pain in the abdomen
- Administration of antibiotics if any infection is present
- Anti diarrhoeal drugs for diarrhea or dysentery may be administered
- If there is any food poisoning gastric lavage
- Deworming must be done
- If sickness is due to infections like measles, chicken pox, gastroenteritis, isolation of the patient must be done
- If the sickness becomes severe hospitalization of the patient must be done
- Provide separate towels and equipment for use and see that they are clean
- Follow the doctors or nurses instructions.
- Failure to carry out even the smallest detail may prove serious
- Encourage him to eat the food which has been ordered. This can easily be done by giving small amounts and by making the food look attractive
- If the child cannot go to sleep, read him suitable story.
- Children feel bored, insecure and irritable when sick.
- Therefore parents should have patience and spend time with the child by reading to him, helping in doing small activities like colouring, painting based on the age of the child.
- Sick children should be provided with love, company and sense of security.
- Proper ventilation should be provided by keeping windows slightly open but direct strong draughts of air on the child should be avoided
- The care givers should make the child to feel comfortable.

Summery

In the past it was a primary concern of parents but now as more children are being enrolled in preschools, the concern has been increased. Hence, both parents and school teachers must know early identification, prevention and curative aspects of these diseases. The child should not be sent to school if the child is having any symptoms of ill health, as he can easily infect the other children. It is also important to inform a doctor, if an infant or a child has been exposed to a communicable disease.

Ailment can be defined as an often persistent bodily disorder or a disease. Some of the ailments which are observed in children commonly are discussed as follows Constipation, Diarrohea Ear ache, Cold and cough, Fever, Vomiting, Colic etc.

Short Answer Type Questions

1. List the signs and symptoms of pneumonia.
2. How do you eradicate malaria?

3. Write briefly about conjunctivitis.
4. Write short note on scabies.
5. List the causes of diarrhea.
6. Write about the treatment for constipation

Long Answer Type Questions

7. Discuss the role of preschool in promoting child's health.
8. Explain the causes, symptoms, prevention and treatment of typhoid
9. Briefly write about a) tuberculosis b) chicken pox
10. Explain the precautions to be taken for treating a sick child.

UNIT III

First Aid

- 3.1 Introduction
- 3.2 Definition of First aid
- 3.3 Importance of First aid
- 3.4 Contents of first aid box
- 3.5 First aid procedures
 - a) Cuts and scratches
 - b) Choking
 - c) Bringing out ingested foreign body from nose, ears and eyes
 - d) Nose bleeding
 - e) Electric shock
 - f) Fainting
 - g) Convulsions (Fits)
 - h) Drowning accidents
 - i) Fall from heights
 - j) Insect stings
 - k) Snake bite
 - l) Poisons
- 3.6 Providing child safe preschool environment

Learning objectives

After studying this unit the student will be able to

- Know the definition of first aid
- Understand the importance of first aid
- Know the contents of first aid box
- Learn about the first aid procedures
- Know the importance of safe preschool environment.

3.1 Introduction

First Aid is the first assistance or aid or treatment given to a patient in an emergency situation before formal and appropriate medical help is available. Any trained person or paramedical staff at any point of time can render First Aid services.

3.2 Definition of First aid

First aid is defined as the immediate action we take when the child is injured or suddenly fell ill before going to the doctor or first aid is the initial assistance or treatment given to a causality for any injury or sudden illness before the arrival of a doctor.

3.3 Importance of first aid

The objective of first aid is to provide temporary assistance to prevent or minimize complications even before medical help can be given. In some instances the immediate assistance may save a child from death or permanent disabilities. First aid promotes recovery. First aid knowledge enables the individual to determine the nature and extent of an injury.

The three priorities of first aid, in order of importance, are to:

- Preserve life
- Prevent the illness or injury from becoming worse
- Promote recovery

3.4 Contents of First Aid Box

First aid kit includes the following

1. Cotton
2. Swab sticks
3. Scissors, dressing forceps
4. Dettol soap
5. Gauze pads
6. Sterile Bandages (Triangular and roller)
7. Syringes and needles
8. TT injection, aspirin tablet
9. Hydrogen peroxide, mentholated spirit or alcohol etc
10. Burnol ointment
11. Roll of adhesive tape
12. Mild solution of iodine
13. Pain killers
14. Packet of band aids
15. Aspirin
16. Sterile pad
17. Adhesive bandage
18. Absorbent cotton
19. Hydrogen peroxide
20. Elastic support bandage
21. Tweezers

3.5 First Aid Procedures

a) Cuts or scratches: Due to road accidents or injuries during play require immediate cleaning of the wound with soap and water. Clean the wound from the edge and then wipe away from the wound. After drying the wound apply tincture. If the child had primary course of triple vaccine, a booster may be given otherwise primary course should be given with three injections of triple vaccine if the child is less than 6 year

b) Choking: If unfortunately any foreign body has gone into respiratory tract, the child may have severe cough expelling the foreign body out on the child may go into acute obstruction choking and death. This requires immediate action. If it is a small child he can be held with his feet up and the back is given vigorous taps to dislodge the foreign body. If a little older child, he is held across your lap with head down and tapped on the back.

c) Method to bring out ingested foreign body.

- i) From Nose:** If the child puts anything into his nostril, ask the child to forcibly breath out that nostril while closing the opposite nostril and mouth. If it does not come out consult the doctor.
- ii) From ear:** If some insect like mosquito or ant has gone into the ear, grand mother's treatment of putting warm oil into the ear with the head turned to one side is best, the insect will be dead and float and it can be easily removed.
- iii) From Eyes:** The eye is a very sensible organ. Hence, it needs utmost care. If any foreign body enters the eye, don't let the child rub the eye as the conjunctive gets hurt. The eye must be washed with clean water where the foreign body may be washed out. If the foreign body is visible a swab of cotton can be used to remove it. If it does not come out get medical help.
- d) Nose Bleed:** If there is bleeding from nose due to injury pinch the nose for few minutes, apply cold compress and tilt the head backwards.
- e) Electric shock:** When there is an accidental shock due to electricity please don't touch the child but disconnect the mains or separate the child from the source of shock with a wooden stick. If there is an arrest of respiration, start artificial respiration.
- f) Fainting:** The immediate cause of fainting is an insufficient supply of oxygen to the brain. The persons who faint become reddish or bluish or white. The child clothing must be loosen at neck, chest and waist and allow a free flow of air. Check the pulse. If the casualty wakes up, give a hot drink with sugar. If the casualty does not recover till five minutes, get medical help immediately
- g) Convulsions:** A convulsion or fit is a simultaneous involuntary contraction of many of the body muscles caused by disturbance in the function of the brain. It is not fatal but try to keep patient from hurting, himself. Prevent him from biting his tongue by holding a wooden spoon or stick between his teeth.
- h) Drowning accidents:** Due to drowning or shock, the child's breathing can stop and this requires emergency mouth to mouth breathing. Put the child on its stomach and raise the feet with help of a box or with your own knees and drain the ingested water first. Now put the baby on a table or cot on his back and tilt the head back with chin up. If the child is little older pinch the nose, otherwise seal both his mouth and nose with your mouth and blow a puff of air slowly. Give a break and then repeat. Do this 15 to 20 times per minute. But never give artificial respiration to a child who is already breathing.
- i) Fall from Height:** When the child falls he may injure himself. For bruise, cold compress is good. For small cuts tincture iodine is the best. Bigger wounds may require stitching and bandaging. If fracture is suspected, immobilize the whole part and do not give anything to eat except sips of water till the doctor comes.
- (j) Insect stings:** Remove the sting, if it is still there, with tweezers. Apply a cold compress for 20 minutes to relieve pain and minimize swelling.
- (k) Snake bites:** Lay the casualty down. Tell her to keep calm and still. Wash the wound thoroughly with soap and water, if available secure and support the injured part.

keep the wounded part below the level of the heart, so that the venom is contained locally.

1) Poisons: The poisons must be diluted by giving water in large quantities into the stomach should be emptied by stimulating vomiting reflex-example warm salt water. After vomiting it is helpful to give milk.

3.6 Providing Child Safe Preschool Environment

- The surroundings of the preschool must be safe for children.
It should include that
- The play ground must be free from drainage and manholes. If any, they must be covered properly.
- Ground must be free from pebbles, broken glass pieces and nails
- Ground must be filled with sand for sand play and some part of the ground must be hard for playing with tricycles.
- The class room of the preschool must be in ground floor. The floor should not be slippery.
- Plug points should not be within the reach of the children
- Do not allow the child to play with small things which can be easily swallowed
- Medicines should be kept in almirahs and locked.
- Children must be supervised by the teacher and they should not be left alone.
- Furniture must be steady
- Furniture and play equipment should not have sharp edges.
- Children should not be allowed to play with blade, scissors and with sharp things.
- Cleaning agents like acid, bleaching powder, detergents should not be
- Kept within the reach of the children.
- Poisonous plants should not be allowed to grow in the ground.
- Safety measures must be taught to the children.

Summary

The people who handles and care for children should remember that children cannot keep themselves safe. So adults should keep everything which is harmful to the children out of reach of them. The home and as well as the school should permit the child to move freely without causing any danger.

Both parents and teachers must know the simple remedial measures of common emergencies like shocks, wounds, injuries, burns, convulsions etc. Every home and school must have a first aid box and should act as quickly as possible to cure the emergency and save life.

Short Answer Type Questions

1. Define first aid and list the essential contents of first aid box.
2. Write first aid procedure for an electric shock.
3. Mention the rules to be followed while doing first aid.
4. How do you give first aid for cuts and scratches?
5. What are the steps to give first aid for drowning?

6. Write a short note on first aid for a child falling from a height.

Long Answer Type Questions

7. Write in detailed note on the following : (a) Convulsions (b) Fainting

8. Explain how to create a child safe preschool environment.

9. Discuss the first aid procedure for choking and insect stings.

10. Write the first aid procedure to bring out ingested foreign objects from nose, ears and eyes.

