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PAPER-V(B)

Exam Notes

HEALTH, PHYSICAL & YOGA EDUCATION

B.Ed.-2nd Year



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SYLLABUS

**MAHARISHI DAYANAND UNIVERSITY, ROHTAK &
CH. RANBIR SINGH UNIVERSITY JIND**

HEALTH, PHYSICAL & YOGA EDUCATION
[Paper-5 (Group-B)]

Time: 1:30 Hours

Max. Marks: 50
(Theory: 40, Internal: 10)

NOTE FOR PAPER SETTER

- (i) Paper setter will set 5 questions in all, out of which students will be required to attempt 3 questions.
- (ii) Q. No. 1 will be compulsory and will carry 8 marks. There will be 2 short-answer type questions of 4 marks each to be selected from the entire syllabus.
- (iii) Two long answer type questions will be set from each of the two units, out of which the students will be required to attempt one question from each unit. Long-answer type questions will carry 16 marks each.
- (iv) All questions will carry equal marks.

OBJECTIVES

After completion of the course, student teachers will be able to
● explain the concept, aims and objectives of Health and Physical Education

- explain good posture
- describe various communicable diseases
- explain the aims, scope and functions of Yoga Education
- describe Ashtang Yoga of Patanjali
- explain the Yogic diet and its importance

COURSE CONTENT

UNIT-I

1. Health Education

- ◆ Concept
- ◆ Aims and Objectives of Health Education
- ◆ Factors influencing health
- ◆ Role of the Teacher in School Health Programme

2. Physical Education

- ◆ Concept
- ◆ Misconception
- ◆ Aims and Objectives
- ◆ Relation with General Education

3. Posture

- ◆ Concept and Values of good posture
- ◆ Causes of poor posture
- ◆ Common postural deformities and their management

UNIT-II

4. Communicable Diseases

- ◆ Meaning and Characteristics
- ◆ Mode, control and prevention
- ◆ First Aid- Meaning and scope
- ◆ Qualities and duties of a First- Aider

5. Yoga Education

- ◆ Meaning and importance of yoga
- ◆ Aims, scope and functions of yoga education
- ◆ Components of Patanjali's Ashtang Yoga

6. Yogic Diet

- ◆ Concept and types of diet / food
- ◆ Its application in modern context

Tasks & Assignments: Any one of the following (5 marks)

- ◆ Any two postural deformities and their management
- ◆ Any five Asanas and their effects on Human Body.
- ◆ Any other project/assignment given by the institution

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Or

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CIMETRIX UNIT-I

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EXAM NOTES

HEALTH, PHYSICAL & YOGA EDUCATION

[Paper- 5 (B)]

1. Health Education

● *Concept*

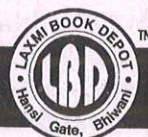
- *Aims and Objectives of Health Education*
- *Factors influencing health*
- *Role of the Teacher in School Health Programme*

2. Physical Education

- *Concept*
- *Misconception*
- *Aims and Objectives*
- *Relation with General Education*

3. Posture

- *Concept and Values of good posture*
- *Causes of poor posture*
- *Common postural deformities and their management*



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Health Education

1.1 CONCEPT OF HEALTH

1. What do you understand by Health? What are the influencing factors of health?

Or

What do you mean by the concept of health? Explain various aspects or dimensions of health.

Or

Define health and write down the various factors affecting health.

Ans.

Concept of Health

Health is man's natural condition, his birth right. Health is a common theme in most cultures. All communities have their own concepts of health, as part of their culture. The strength of a nation lies upon the health of its people and future of the health of the people relies, to a large extent, on what is done to promote, improve and preserve health, as it is a fundamental human right.

Emerson has supported it by saying Health is man's first wealth, who, has health must cherish it with care, least he should lose it. To this end, he must have adequate knowledge of how to live healthy. Every individual is concerned with health from cradle to the grave. The life span can be lengthened if we acquire a little knowledge of how we can maintain it. So it is important to know the meaning of health.

The word health is related to the old English term 'hal', which means condition of being, safe and sound or soundness and wholeness. This word is of 'hale'. The implicit assumptions about health are that health is the absence of disease some people consider 'hand-some and sound body (good physique) as health while others define it that quality of life that enables a person to live most and serve best. A physician defines it as normal functioning of body organs and systems. Sometime back health was considered as absence of disease. But such consideration of health was incomplete because a person free from any disease may not be able to perform certain task assigned to him. Moreover, a person may

create problems for others on account of his behavior. Thus we cannot call them healthy. Persons who exhibit unsocial behaviors are not tolerated by society and cannot become worthy members of it. For such reasons a person who is quite hale and hearty but misbehaves with others cannot be called healthy. There are three main aspects of an individual's health as (i) Body (ii) Mind and (iii) Soul.

Since Man is individual member of society he can be considered as healthy when his body, mind and soul are healthy in all aspects and he has all the social qualities needed to live in a healthy society. These factors together contribute to optimum health. On the basis of such qualities, health has been defined by various educationalists to clear the concept of health. According to **Encyclopedia of Health**, "It is that state in which the individual is able to mobilize at his resources, intellectual, emotional and physical for optimum daily living".

In the words of **J.F. Williams**, "Health is the quality of life that enables an individual to live most and serve best". **Bacon** has said, "Healthy body is a guest house for the soul and den for the weak and diseased".

According to **Voltmer and Esslinger**, "Health is considered as that condition, mental and physical, in which the individual is functionally well adjusted internally as concerns body parts and externally as concerns his environment".

The **World Health Organisation** has defined health in a more broad and positive manner. It is a twenty-word statement in its constitution which identifies three dimensions of health. "Health is a state of complete physical mental and social well being and not merely the absence of disease or infirmity". (WHO-1947)

This definition has been frequently criticized but also praised and on occasions used as a tool for innovative change. It presents a triad dimensions :-

- (a) Physical
- (b) Mental
- (c) Social well-being

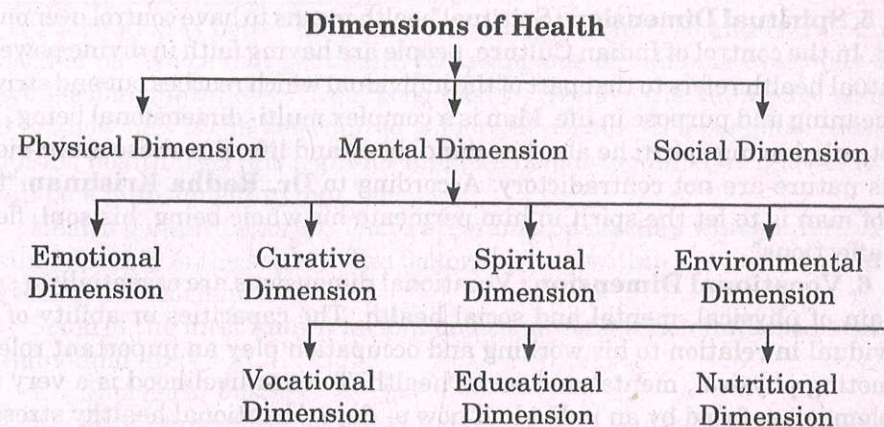
In addition, other aspects which have not been included, such as spiritual, well-being and holistic health, merit attention.

The WHO definition has been discussed in details to have better understanding. For physical and mental well-being, there is a reasonably firm acceptance of the reality of mental health; one who lacks the quality of mental health, such as a person with severe depression, is all regardless of how healthy he or she may be physically. The acceptance of mental or emotional problems is much more certain when something 'Physical' is involved either as a symptom or as a causative factor.

It may be argued that social mal-adjustment or deprivation becomes a problem as it is reflected, reduced mental health. Thus social interaction becomes a means for achieving health or in other words to be socially, one must make a positive contribution to one's family and community. So one's social health status is measured not in terms of personal feelings of well-being, but in terms of one's effects on the well-being of others. Thus health is considered that condition mental and physical, in which the individual is functionally well adjusted, internally as concerns all body parts and externally as concerns his environment. To live healthful is everybody's right. But to enjoy this right one has no right to trespass the rights of others. So, one must obey the health laws, observe health principle and follow healthy practices.

Various Aspects or Dimensions of Health

Authorities in the field of health recognized three closely interwoven dimensions of health: (1) Physical dimensions (2) Mental dimensions and (3) Social dimensions. However recently it has been felt that a few more dimensions of health can be added viz, emotional, spiritual, vocational, educational, nutritional, curative and preventive.



1. Physical Dimension : Physical dimension purely refers to the perfect functioning of the body externally as well as internally.

- (i) Externally means having good physique, good appearance, good texture and complexion, attractive features, well-structured and strong body organs and limbs.
- (ii) Internally means, all systems of the human body i.e. digestive, circulatory, respiratory, nervous and sensory organs are functioning optimally. The pulse rate, blood pressure being in normal limits according to the age and sex. Hence physical dimension i.e. physical health, means proper functioning of the systems.

2. Mental Dimension : Mental health is the balanced development of an individual's personality and emotional attitudes which enable him to live harmoniously with his fellow beings.

Mental health can be summed up in the words as "Mental health is a relatively enduring state wherein the person who is well adjusted has a zest for living, and is attaining self-actualization or self-realization. It is a positive state and not a mere absence of mental disorder".

3. Social Dimension : Social health is the ability to get along with others and one self, to be independent but at the same time to realize how dependent one is on others. **Donald** has defined social well being as "the quantity and quality of an individual's interpersonal ties and the extent of involvement with the community."

Social health is concerned with helping an individual in making personal adjustment, group adjustment and adjust as member of the society. Sound social interaction at the early stage life builds up correct attitude which goes a long way in helping the child adjust in the society. Social health of an individual depends upon his social security. If he does not feel secure, he is not socially healthy. There are some elements which are the basis of social health as – health services, internal relation, pension, LIC, PF related facilities etc.

4. Emotional Dimension : Emotions are the feeling which plays a great role in our life and leads to the modification of attitude, conducive to personal adjustment and well-being. Emotional health means emotional fitness and emotional control. A person can be called emotionally healthy if his emotions are always positive, and has full control over his emotions. On the other hand, a person who has no control over his emotions or is over powered with negative emotions can be called emotionally imbalance or emotionally ill.

5. Spiritual Dimension : Spiritual health means to have control over one's mind. In the control of Indian Culture, people are having faith in divine powers. Spiritual health refers to that part of the individual which reaches out and strives for meaning and purpose in life. Man is a complex multi-dimensional being. He is not only having spirit, he also has mind, body and life. But these multi-sides of his nature are not contradictory. According to **Dr. Radha Krishnan** "the end of man is to let the spirit in him permeate his whole being, his soul, flesh and affections".

6. Vocational Dimension : Vocational dimensions are essentially a sub-domain of physical, mental and social health. The capacities or ability of an individual in relation to his working and occupation play an important role in promoting physical, mental and social health. To earn livelihood is a very big problem being faced by an individual now a-days. Vocational healthy stresses upon the problem of livelihood and ensure the fulfillment of the economic needs of a person. Man's success in all fields depends upon his capacity to earn his livelihood and to meet his wants. Vocational satisfaction provides him social efficiency, social status, social prestige and mental relaxation.

7. Educational Dimension : Studies point out that education assists in maintaining health irrespective of the availability of health facilities. Education is the consciously controlled process whereby changes in behavior are produced in a person, and through the person in the group. Education brings certain changes in one's behavior and attitude enabling him to understand his responsibility towards the society and nation. Health education creates awareness regarding health rules, promotes health, build up healthy environment and shows the path towards the healthful living.

8. Nutritional Dimension : There is a growing realization that adequate nutrition is a necessary step in improving the quality of life. Good nutrition is a basic component of health. It is of prime importance in helping in the maintenance of health throughout life. The problem of malnutrition and under nutrition as obstacles to social and economic development have brought nutritional health to the forefront of national and international concern.

9. Environmental Dimension : Understanding the environment is becoming more and more important as people have been placing ever larger demands on the environment and in the process bringing about ever more severe changes in it. The internal environment of man himself and external environment which surround him reflect the health status of the individual, the society and the nation. It is the quality of living that is expressed in clean home, clean neighbourhood and clean community. Environmental sanitation can be defined as "the control of all those factors in man's physical environment which exercise or may exercise a negative effect on his physical development, health and survival."

10. Curative and Preventive Dimension : - Modern preventive medicine can be defined as the art and science of health promotion, disease prevention, disability, limitation and rehabilitation. Hence this dimension deals with the study and application of curative medicine and aims at the removal of disease and promotion of health. It is applied to all healthy people.

Factors Influencing Health

'Prevention is better than cure' has become a proverb and is well known to each of us. We cannot get health by taking one or two pills every day or by obeying some limitations. To get good health, we have the knowledge about it, and to know how it can be acquired is more important. If a person is conscious about his health then it is a gift for him or a favour to him, if he ignores it then it will be a punishment to him.

Health is multifactorial. There are numerous factors which influence the health of people in the society. The factors lie both within the individual and in the society in which he lives.

Some of the most known factors and conditions which influence health of an individual are:-

1. Biological Factors.
2. Environmental Factors
3. Personal Factors

1. Biological Factors : These factors are not changeable or we cannot change the biological factors because they are based on heredity and affect our body. An individual's health or structure is most affected by the combination of genetic and environmental factors. Heredity plays a vital role in the constitution of the body, but when the body is exposed to the environment, it tends to affect it one way or the other.

The traits which are being transferred from the parents to their wards are known as genes and they can't be altered after conception. The common diseases which are transferred from parents to their wards may be mental retardness, diabetes, HIV, error of metabolism or defect in chromosomal order like weak eye sight, high BP etc. The genetic constitution of man plays an important role in deciding the health of a person.

There are biological agents which are known as living agents of disease, e.g. viruses, fungi, bacteria etc., which are responsible for transmission of diseases in the body.

2. Environmental Factors : Environment consists of those things to which man is exposed after conception. It is an established fact that environment is an eyewitness to physical, mental and social well-being of all living organs in the world. There are two types of environment which affect the human body i.e. internal environment and external environment. The internal environment is related to the internal well-being of the organs. The internal environment consists of those things to which man is exposed after conception in the womb of the mother. The external environment of a man includes family, peers groups, professional friends and the society in which he lives. There are some of the common external environmental factors as physical, social-cultural, socio-economic conditions, strained relation with colleagues and friends, excessive load of studies which affect the health of an individual.

3. Personal Factors : There are some common individual factors which affect the health of a person. Such as physical exercise, balanced diet, good habits, food related habits, proper sleep and rest, resistance power or immunisation, bodily posture, personal cleanliness and healthful living environment etc.

There are some main personal conditions which are responsible for individual's health.

4. Way of Living : A healthy life style always develops a human in proper way and cultivates good habits in him. The way of living is always disturbed or developed through personal habits (smoking, drinking etc.) cultural influence or the behavioural pattern of an individual. In sufficient night sleep, irregular daily routine, excessive use of alcohols, tobacco, caffeine, intoxicant bad living conditions, insufficient lei sure time, improper nutrition, fast living are some of the factors which influence one's health.

5. Socio-Economic Condition : In some countries, social and economical conditions are the major factors which determine and influence human health. Education system, nutrition, employment, political system, housing etc. of a country are some of those conditions which determine the levels of the socio-economic status of that people of the country. The economics status of a person is one of the most important conditions because by making available most of the sophisticated health equipments one can develop one's life style and the living standard.

6. Health Services : Health services are essential for social and economical development. A society employing good health practices produces healthy citizens. A good care of the citizens of a country will always produce a healthy society that is why it is always said that "healthy citizens live in a healthy society". Personal services, group services, community health services and family welfare are some of the Welfare Programmes run by the Governmental agencies for treatment of diseases, prevention of illness and promotion of health. The purpose of health services is to improve the health status of the population.

7. Education : Studies indicate that education helps in maintaining health irrespective of the availability of health facilities. According to a survey of Central of Health Intelligence under the Govt. of India, Kerala has an estimated infant's mortality rate of 12 as compared to 71 for all India in 1997.

A major factor for the low infant mortality in Kerala is its highest female literacy rate of 86.93% compared to 39.42% for all India.



2. Throw light on the Importance of Health.

Or

What do you understand by Health? Explain its importance in details.

Ans. A healthy individual is like a pillar of society. By being healthy, he is not only contributes to remain healthy, good looking happy and laborious but at the same time can play role of good parent, teacher, engineer, and above all a good citizen. The health of an individual and society are interlinked. A healthy individual by keeping himself free from disease helps in stopping the spread

of disease in one's community and neighbourhood or society as a whole. On the other hand a society indulging in good healthy practices produces healthy citizens. It is said that "Healthy citizens live in a healthy society". Therefore each individual should strive to protect his own health and health of his community. In this way, we can hope to raise the health standard of our nation.

According to an English term, health is a condition of being safe and sound. The dictionary meaning of health is "The state of being hale and sound in body, mind or soul, especially from physical disease or pain". It is also defined as the state in which the mental and physical activities of the body are adjusted satisfactorily to the environment. To be in health means much more than freedom from disease and discomfort.

According to **Traver** "Health is that state of man in which body and mind work actively".

Webster Dictionary defines "It is that state of individual to mobilize his resource of intellectual, emotional and physical for optimum living."

J.F. William has defined health in very common words, "It is the quality of life that enables the individual to live most and to serve best".

Importance of Health

Health has an important place in the life of an individual. Health is wealth. A healthy person is an asset to himself, to his family and to his community and nation. A healthy individual can perform his social responsibilities efficiently. Thus a proverb shows the importance of health in society, "If wealth is lost, nothing is lost, if character is lost something is lost, but if health is lost then everything is lost".

A healthy individual is like a pillar of society. Merely a bookish knowledge cannot favour you (beneficial) if you are not healthy and all knowledge and science has failed here. It is very well said that healthy body is a great happiness.

Whatever be your work field, your thought, life style, ailing body will always be a taboo in the way of your success and development. An ailing person is a burden on all. He is a danger for the coming generation. Health is the pivot upon which a man's whole personality and it's well-being depend. An ailing and aching body saps the enthusiasm for pursuit. Unwholesome feelings and sensation retard the pace of functional activity, economic development and spiritual uplift. Therefore, if life is a flower then health is like honey in it. Emphasizing on the importance of health **Bacon** has said, "Healthy body is a guest house for the soul and den for the weak and diseased".

According to **Abis Carrel** "To live is not sufficient, we need also the joy of living and the joy of life requires health. Above all, we need that health which embraces body, mind and soul".

The importance of health is not only for humanity but it has equally the importance for the whole society because only the society or nation of healthy citizens progresses.

Explaining the importance of community health **J.M. Jussawalla** said,

"If science and education are the brain and central nervous system of the human civilization, then health is its heart."

The health of a person is considered as an asset in the Bank. If you have not an asset in the shape of good health in your bodily bank, then how you can take a loan from that bank in case of emergency or in case of disease. Health is, thus the basis of life. It is not only important but also essential to make one's life happy. As long as a person is not healthy, he cannot be happy. He cannot serve his society. He will be a burden to himself and to the nation. Health is a way: there is no way to health. Let all habits of living be health promoting.

Expressing his thought relating to health **Hall** has written, "Purchasing one ounce of health with a ton of manure is far valuable because it is the most ancient and valuable kind of wealth."

It has been widely accepted that ten points:-

- When health is absent
- Wisdom cannot reveal itself
- Art cannot manifest
- Science cannot develop
- Strength cannot fight
- Wealth becomes useless
- And intelligence cannot be applied

To sum up the importance of health, a healthy person must have to possess (expected to possess) in general the following qualities :

- | | | |
|-------|---|---|
| One | : | Absence of disease |
| Two | : | Ability to work hard, with efficiency and enthusiasm. |
| Three | : | Ability to endure strain and stress |
| Four | : | Cheerfulness |
| Five | : | Courage |
| Six | : | Freedom from anxiety |
| Seven | : | Self-control and self-confidence |
| Eight | : | Sense of Well being |
| Nine | : | Wholesome mental attitude |
| Ten | : | Regularity in Work. |



1.2 AIMS AND OBJECTIVES OF HEALTH EDUCATION

3. What do you understand by health education? Discuss the role of the teacher in achieving the aims of health education.

Or

What are the aims and objectives of health education at different school level?

Or

What are the common aims and objectives of health education in school?

Or

Discuss the role of a teacher in achieving the aims of health education?

Or

Define health education. Discuss in brief the objectives of imparting health education in school.

Ans.

Meaning of Health Education :

Health education is that part of education by which we try to change the knowledge related to individual's health in practices at the individual and social level so that we can secure health not only of individual level but of wholesome society. By health education, we mean to all those resources which provide knowledge related to individual's health. Health education, theoretically as well as practically is component of School education programme because common aim of education is of promoting health also. Simply or briefly, health education is a process which brings about changes in the knowledge and attitude of people and there by effects the changes in health practices. Its intent is the generation of health knowledge, the exploration of options for behaviour change, their consequences, and the choices of the course of action open and acceptable to those affected. Undoubtedly, it is right to say that physical health is the Pre-requisite of all education. In this context, **Crow & Crow** state beautifully, "Platinal school building, extensive equipment, thoroughly prepared teachers, supervisors and other school personnel, expertly constructed curriculums, elaborate measurement techniques, and well organized and well administered programs of guidance all fail to achieve their respective purposes unless directed towards the improvement of physical, mental and emotional health of every child, adolescent or adult, who comes within their sphere of influence."

The student's health is the basic to achieve the aims of education. Thus education represents the sum of all experiences in school and elsewhere that favourably influence habits, attitudes and knowledge, related to individual, social and community health.

On the basis of the above statement, the health is an art of living and we can use this art only when we have sound body and mind.

To define health education, we can say there are as many definitions of health as there are health educators.

Dr. Thomas Wood defines health education as, "The sum of experiences (in school elsewhere) that favourably influence habits, attitudes and knowledge related to individual, community and social health."

According to the report of committee on health education (New York 1973) : "Health education is a process that bridges the gap between health information and health practices. Health education motivates the person to take the information and do something with it to keep himself healthier by avoiding actions that are harmful and by forming habits that are beneficial."

A strong point in this definition is its emphasis on process.

Ruth F. Grout defines, "Health education is the translation of what is known about health in to desirable individual and community behaviour patterns by means of the educational process."

This definition explains three things about health:-

1. What is known about health- the basic health concepts.

2. Desirable individual and community behaviour patterns- ultimate health goals and

3. Translation by means of the educational process.

In simple words, the basic concept about health should be clear to the child. He should know "Why to do, what to do and how to do?" For example, washing hands before taking meals is necessary. Why?

Because it reduces the risk of diseases. Health education, however is a human creation and although imperfect in many respects. It is a more manageable concept.

Education and Health Education

Education does not mean only to get education but education is to inculcate mental and physical power in an individual. It brings about changes in the habits and attitude of people and to promote character in them.

Old opinion of 3R-Reading, Writing and Arithmetic's has now been changed in to 4H-Hand, Heart, Head and Health.

In modern age, the techniques of imparting education have been changed and it caused a storm in the process of whole education system. In modern education system, stress is being given to develop internal powers and capabilities of an individual, which affect the habits, nature and thoughts concerned through education.

Education and health education are closely related. Though health education has a limited scope because it is related only to the health of person whereas education has a wide scope because it brings all round development in a child/person, though both are complementary to each other.

Aims and Objectives of Health education

The terms Aims, Objectives and Goals are used interchangeably by many people but they do have specific distinctions.

Aims-Aims are the main, big general things towards, which all education is directed. The aim of health education is to engage people actively in programmes and services which are organized for the solution of health problems that is to help people learn to do things themselves for their own health improvement. Health education aims at creating such a quality of life as may enable an individual to live most and to serve best.

According to **W.H.O. Expert Committee** on Health Education, "The aim of health education is to help people to achieve health by their own action and efforts."

According to **C.V.Good**, "Aim is for seen end that gives directions to an activity."

Objectives:-To achieve this aim of health education, there are specific objectives of health education. Objectives are more specific and definite things that lead up to aims and help in achieving them.**C.V.Good** defines, "Objective is a desired change in the behaviour of pupils as a result of experiences directed by school."

To achieve the aim of health education **R.C.E.Turner** has laid down certain specific objectives of health education :

1. To maintain healthy environment in the schools.
2. To examine physical diseases and to make efforts to cure and prevent those diseases.

3. To develop knowledge and dispositions related to health among the students so that they might take rational decisions for their personal health.

4. Promoting desirable health habits.

5. To seek measures to safeguard from infectious diseases.

6. Developing school, home and community co-operation in health promotion.

7. Discovering physical defects and other abnormalities in the child and promoting their correction, if they are remediable.

Ruth E.Grout has laid down certain specific objectives of health education. These objectives of health education are related to general objectives of education:

1. Optimum development of the individual with special reference to physical and emotional development.

2. Betterment of human relationships particularly from the stand point of health.

3. Application of health facts and principles in respect of economic efficiency in the production and consumption of goods and services.

4. Civic responsibility especially in respect to health.

Anderson has highlighted the following objectives of health education:-

1. To give knowledge about health.

2. To have knowledge of all the diseases and defects which act as obstructions in the maintenance of health and to cure it.

3. To save the nearby environment from pollution.

4. To conduct special health programme for students.

5. Health inspection of every student and to understand the needs of the students related to health.

6. To develop healthy disposition and attitudes towards their health.

7. To develop awareness towards social health.

C.B.S.E. has also given suggestions regarding the health education curriculum as :

1. In order to build up healthy dispositions among the students to have scientific knowledge is of utmost importance.

2. To make the students understand carefully the problem related to health and to cure and prevent these problems.

3. By presenting good specimen of health for the students to develop interest among them regarding good health.

4. To take interest in adopting new methods for the development of health.

5. To develop the capability to take decision regarding the health.

Aims and Objectives of health education in schools

The following are the aims and objective of health education in schools.

1. To provide the knowledge of First-Aid : To impart the knowledge of first-aid is the foremost aim of health education. First-Aid is definitely limited to the assistance rendered at the time of emergency. It includes students and other employees of the institution and its aim to acquaint them with principles of First- Aid. It is a help which calm the victims fear and reduces any chance of further injury and the life of the patient may be saved by giving timely helps.

2. To provide information about health and hygiene : It aims at acquainting the pupils and the teachers with the functioning of the body, the rules of health and hygiene and the precautionary measures for warding off diseases. It is to be brought to the notice of the pupils how bad habits, unhygienic ways of living, addiction to smoking and liquor and such unhealthy practices result in evil consequences.

3. To Maintain norms of good health : It helps the school authority to keep certain norms or standards of health in the school. A number of programs of physical health, develop in the pupil's adequate habits of hygiene living. The school authorities provide hygienic environment in the form of adequate ventilation, good sanitation and all round cleanliness.

4. To take precautionary and preventive measures : Its aim is to take adequate precautions against contamination and spread of diseases. So, good sanitary arrangements are made. Urinals and toilets are kept clean. Sweeping is done daily, and the rooms and furniture are kept neat and tidy. The eatables in the school tuck-shop are saved from flies.

5. Development of Positive attitude : Good health needs knowledge where on the other hand development of positive attitude has its own importance. No one can achieve aims successfully unless he has positive attitude towards that work. Health education has its aim to develop positive outlook, good habits and positive attitude and to get him know his capability.

6. To take curative measure : A physio-medical check-up is made, deformities, disabilities and disease detected and remedial measures suggested. An eye examination, teeth ache, deformities or body organs, whooping cough epilepsy are some common diseases of young children. It is the responsibility of the school to detect these and to inform their parents and at the same provide adequate medical treatment for their removal.

7. To develop and promote mental and emotional health : Mental and emotional health are also equally important along with physical health in the school health programme. While physical health makes a pupil physically fit, mental and emotional health enables him to maintain an even temper and a happy disposition.

8. To develop a sense of civic responsibility : There is a little sense of civic responsibility in our students. They generally fail in their duty to help their fellow students in particular and other person in general. They do not come to help the others in time of need and alleviate their sufferings. So, one of the objectives of health education is to cultivate a sense of Civic responsibility. Health education aims at teaching pupils to accept and apply democratic principles, relating to health matters at home, in school and in the community.

9. Prevention from communicable diseases : The main objective of health education is considered to give information regarding prevention and causes communicable diseases. It is very important to give information about causes, symptoms and incubation period of these diseases. How can these diseases be prevented because after the spread of the diseases it take, epidemic form which is a dangerous situation and very difficult to control? Thus the ultimate aim of all health teaching is the achievement of the finest kind of individual living. It aims at creating such a quality of life which enables an individual to live most and to serve best.

Objectives of Health Education at Different Stages of School

We have discussed above the main aims and objectives of health education in general. But infact aims differ from stage to stage, so we give below the specific aims of health education at different school levels.

(a) Objectives at Elementary Stage :

1. To make pupils realize the value of health and its personal and social importance.
2. To inculcate habits of healthy living regarding personal hygiene, food clothing and posture.
3. To give information about the need and importance of good health.

(b) At High School Stage :

1. To make the pupils understand the elementary structure and functioning of human body and the stages of human development and growth.
2. To help students to understand the importance of nutritious diet for physical and mental development.
3. To help pupils know how they can save themselves from accidents and carriers of diseases, like flies, mosquitoes, rats, dirt as well as from polluted air, water and food.
4. To help the students to know the relationship between health and health education.

Objectives at the Higher Secondary stage

Children enter in adolescent stage of growth and development at this level of education. It becomes necessary to give them information about following objectives:-

1. To give students sufficient knowledge and training in First-Aid.
2. To emphasize on students the effects of smoking and taking drugs and alcohol.
3. To give students desirable knowledge about marriage, sex and population explosion.
4. To make pupils understand the causes of the pollution of air, water, soil and food as well as the ways and means of their prevention.
5. To make students aware about the functioning of various organizations working for the maintenance and preservation of health.
6. To help students to understand the importance of physical training, sports, games, yogic exercise as well as their relationship with health education programme.
7. To create a positive attitude towards their health.
8. To make acquaint the students with individual and social health.

Role of a Teacher in health education

Health education is a dynamic process. Parents and teachers are responsible for pupil's health in homes and schools respectively. Teachers are friends, member of the peers group, guide, counsellor and Guru of the students. He can develop health of the pupils by means of the following task:-

1. He can make all round development of the pupils by giving information about the principles of health.
2. It is very essential that good health habits be inculcated in the children from the beginning.

3. Cleanliness is the basis of good living. So, teacher should form the habit of remaining neat and clean among the students.
4. To make the students aware of proper use of lavatories(toilets) and to have these neat and clean after its use.
5. The school can arrange training in First-Aid and home nursing for these students. There should be a motivation by the teachers.
6. The students should be given knowledge about different postures of body. A wrong posture leads to dangerous consequences. Teacher should find out the postural defects in student and should suggest the means of corrections and prevention of these defects.
7. The students should know about the Contagious and Common diseases, their causes, symptoms and effects. They should also be able to make use of precautionary measures in respect of these diseases by taking vaccination to prevent these diseases.
8. The students should know what is a balance and nutritious diet and to make arrangement of mid-day meal in the school.
9. To give the knowledge about community health and to improve the individual and the community life of the future, to ensure a second better generation and a still better third generation a healthier and fitter nation and race.
10. There should be medical check-up of the students quarterly. Besides, a doctor should be regularly employed for this purpose.
11. There is need of developing a scientific and positive attitude towards health education programme. Thus we find that an educator has to play a dominant role in this regard.
12. To make the students conscious about bad and harmful effects of drugs and alcohol and other.
13. The school should arrange general lectures which can be given by teacher, yoga expert, doctor. Even outside person of this field can be invited to speak on topics concerning health.
14. Health weeks may be celebrated by the school. For whole health week, the children can do social service for maintaining cleanliness before and after the school hours in some nearby area or some village. They can also go in a procession with play cards, charts and poster concerning health.



1.3 FACTORS INFLUENCING HEALTH

4. What are the influencing factors of health in schools?

Ans. Health is the basis of good life. Good health starts from the very infancy. A healthy child develops in to a healthy adult. In case the child does not grow properly and he remains handicapped in any way, his ill-health spoils his adult life. Life is for living. Without health, life is deprived of not only much of its usefulness but also its joys and pleasures. Health is multifactorial. There are

numerous factors which influence the health of people in the society. The factors lie both within the individual and in the society in which he lives. An individual's health is most affected by the combination of genetic and environment factors.

Some of the most known factors and conditions which influence health of an individual are :

1. Nutritious and Balanced Diet : It provides energy for the normal working during the day. Diet provides fuel to the working machinery. It constructs muscles tissues, builds the Skeleton, helps growth and development and provides continuous replacement of blood cells, consumed in the metabolic function of the body.

2. Heredity or Biological Factors : The traits which are being transferred from the parents to their wards are known as genes. They cannot be altered after conception. The common diseases which are transferred from parents to their wards may be mental retardness, diabetes, HIV, error of metabolism. The genetic constitution of man plays an important role in deciding the health of a person. There are biological agents which are known as living agents of disease i.e. virus, fungi bacteria etc. They are the few known living agents in the body which are responsible for transmission of disease in the body.

3. Environmental Factors : Environment includes those things to which is exposed after conception. It is of two types i.e. Physical and Social environment. Physical environment includes our surrounding things and natural state as building, trees, rivers, forest, mountains etc. which social environment includes our neighbours, their professions, their traditions and intuitions etc. It is an established fact that environment is an eyewitness to physical, mental and social well-being of all living beings in the world. Family problems, strained relations with colleagues and friends, excessive load of studies and job related problems are some of the common environmental conditions which affect the health of an individual.

4. Immunization : The resistance power of the body to fight against the diseases is called immunity. One who has more immunity, remains hale and hearty. The person who has developed good health habits, these powers would be developed naturally in him. These people do not get disease easily. We can enhance our resistance power through proper vaccination from time to time.

5. Way of living : The way of living is always distributed or developed through personal habits, attitude towards health, cultural influence or behaviour pattern of an individual. A healthy life style always develops a human in an appropriate way. It cultivates good habits in him. Insufficient night sleep, irregular daily routine, excessive use of alcohols, caffeine, intoxicants, bad living conditions. Inappropriate leisure time, improper nutrition, fast living and frequent weight gain are some of the factors which affect one's health.

6. Bodily or good Posture : Posture is more than a mere physical condition. A good posture is one which requires a minimum expenditure of body energy for the maintenance of good alignment. The body is held without any sense of endeavour, with its weight equally distributed our both the legs and feet in order to produce least fatigue in a good posture. It highlights the attitude not only of body but also of mind. In the case of children, bodily postures are very important for maintaining health. The child should have the knowledge

of correct postures of sitting, standing, walking, reading and writing. In case of poor posture, the bodily organs become deformed, the eye sight weakens and the nervous system hardness and leads to round shoulders and drooping body figure. It decreases physical efficiency and develop laziness and results in undesirable traits e.g. timidity, lack of courage etc.

7. Proper Physical Exercise : The first characteristic of life is an action or an activity, because the difference between a dead and alive is being established only by action. When the energy of body to move to walk, and to run is finished than that living body becomes dead or non- living. So, action is a sign and aim of life, whereas state of static life is a sign of the dead one. Exercises help circulation of blood, stimulate the glands, strengthen the organs, develop and promote general health and keep the body in movement or inaction to perform the daily routine work efficiently.

8. Personal Cleanliness : Personal hygiene concerns the actions/practice of an individual that help him to attain the highest possible standards of health. It covers such matters as proper diet, eating habits, clothing, personal cleanliness, shelter, posture and exercise etc. It is only through a healthy body that a person can achieve the highest goal in life.

9. Socio-Economic Conditions : In some Countries social and economical conditions are the major factors which determine and influence human health. Political system, education system, nutrition, employment, housing etc. of a country are some of those situations which determine the levels of the socio-economic status of that people of the Country. The economics status of a person is one of the most significant conditions because making available most of the sophisticated health equipments one can develop one's life style and the living standard.

10. Health Services : A society employing health practices produces healthy citizens. Health services are necessary for social and economical development. A good care of the citizen of a country will always produce a healthy society. Personal services, group service, community health services and family welfare programmes. The purpose of health services is to get the health status of the population improved and education assists in maintaining health irrespective of the availability of health facilities:



1.4 ROLE OF TEACHER IN SCHOOL HEALTH PROGRAMME

5. What do you understand by school health programme? Explain the role of the Teacher in school health Programme.

Or

Write down the role of teacher in school health programme.

(June 2018)

Ans. A comprehensive programme of school health education includes instructional contents and materials, wholesome school environment and protective health services. Children are the wealth of a nation. It is therefore, that the health of school children has always been and will continue to be, a

major concern of the school. It is the responsibility of the school to provide for their welfare and cooperate with the home and the community in organizing an effecting health education programme. All these sources, namely, the school, the home and the community can exert a very important influence on the health of the individual and the community. And out of these three, schools are in the best position to promote health by providing the latest scientific information by forming healthy attitudes and habits.

In the words of **H.F. Kilander**, "Schools health programme is defined as the composite of procedure used in school health services, healthful school living and health education to promote health among students and other school personnel. This programme is closely related to physical education and education of handicapped children."

It is hoped that every school should provide facilities regarding physical, mental, social and emotional health of the students. The responsibility of children's health depends on all schools personnel.

Role of the Teacher in School Health Programme

Health education is a study of human life and its process. Therefore, it involves all its related problems, interests and needs. Actually, there is nothing which does not involve health in man's social, emotional and physical life. Factors such as emotional stability, sexual and social maturity, physical development, adjustment to strain and stress, illness and several other problems, linked with personality development, all influence a person's health. To define these problems, to examine them and to teach about them in an appropriate manner with achievement and ability, is a task which requires great knowledge and skill on the part of a teacher. Hence, a teacher of health and physical education, besides being a specialist in his own field, is also required to possess knowledge of various social, physical and biological sciences, personal qualities, skills, attitude and professional efficiencies. The pivot of the role of the teachers, related to school health programme is based on the basic concepts which are as under:-

1. To Chalk out the Plan : In the beginning of each school session, the teacher should plan the health and physical education programme for the whole year, in advance. He should plan all the physical and health programme activities including those of the Annual Sport Day, Annual Medical Examination, Parents Day, Social Service campus, Distt. and State tournaments in advance and get it passed from the sports committee. It is rightly said that "No teacher is any better than the carefulness of the planning, which has proceeded the teaching."

2. Medical Examination : There should be medical check-up of the students quarterly. Besides, a doctor should be regularly employed for this purpose to see the problems of children. Medical treatment should be provided to the children at the right moment. The school may have Health and Hygiene Committee where the medical officer can be the Chairman and one or two staff members may be its members. In case of serious disease of some ward, the matter may be referred to the parents.

3. Education and Training : In addition to physical training, the teacher is also required to teach most of the essentials of health related with personal hygiene, safety and first-aid, mental hygiene, social hygiene, temperance and community health. The teacher is also responsible to inculcate good habits,

attitudes and skills of healthful living in his students through physical and health education programme and guide them to solve satisfactorily the individual and perplexing health problems.

4. To hold Seminar and health programme : The teacher should hold seminar on health related matter from time to time to give information about health related problems.

Health weeks may be celebrated by the teacher by organising individual cleanliness competition among students so that the positive attitude may be developed towards personal hygiene.

5. Supervision : The teacher has to supervise the total school health programme. This programme includes healthful school living, health services and health instruction. He is to supervise the work and achievement of students in physical exercise, games, girl- guiding, scouting, safety measures and first aid, social service, cultural programmes and recreational activities.

6. To maintain the record of Health Record : It is also teacher's responsibility to maintain all health records of children.

Each student should have cumulative health record throughout his or her school career. In addition to the date of medical and dental examination, the cumulative health record should also include the health history of the pupil, his family health history, symptoms and sign of health attendance record and result of all psychological tests.

7. Evaluation : The teacher is expected not only to teach but also to evaluate the achievements of the pupils from time to time, diagnose weakness and suggest remedial measures. In this programme, teachers, parents, health coordinators and students are all involved. All should cooperate in the development in the instruments, measurement of selected criteria and determination of recommendation for the future. The devices used in evaluation may include self-appraisal, individual and group conferences, rating charts, appraisal scales and tests.

8. To give Guidance : The teacher is required to guide the students in a number of matters. He is to guide them in the proper selection of Physical activities, athletics and games, suited to their aptitude and capacities. He is to guide them to remove their physical deformities, postural defects, mental illness and emotional immaturity. He has to give guidance to the backward and the slow learner. He has to guide and suggest remedial measures for the delinquent abnormal and maladjusted children.

9. Co-ordinating and assisting : He is required to coordinate the school health programme with other school teachers, the school doctor, parents, local and district health authorities and public or voluntary health agencies. He is to assist in the re-adjustment of those students who return to school after health specialist in conducting the medical examination of all students. He also assists the school authorities in obtaining films, books, health instruction material and equipment.

10. Follow-up Programme : The success of health programme is based upon the follow up programme. After evaluation the teacher has to submit his report of student's health and other tests record to the Principal so that complete information may be sent to pupil's parents and proper treatment be given to the sufferer. With the Co-operation of school medical officer and the parents, he also assists in the follow up of medical examination, control of diseases and prevention of bad habits like drinking and smoking.

11. Special attention on Nutrition : To give special attention on student's nutrition is also the responsibility of the teacher because nutrition plays an important role in the growth and development of the children. Keeping in view this, the Govt. has started mid-day-meal scheme in the schools. He is to give information about the essential elements of balanced diet.

12. Prevention and Control of communicable diseases : To make arrangement of pre disease vaccination for immunity is the responsibility of the teacher. He can chalk out a plan with the help of medical officer and plan can be executed in the school as well as in the community health centre. By spraying anti-mosquito's liquid spray, he can prevent communicable disease before its break out because "Nip into the bud" is an easy process.

13. Healthy Environment : The teachers are the most important parts of healthy environment of the school. They try to make teacher - taught relation cordial. Teacher can arrange all the facilities essential for making healthy environment in the school.

Keeping in view all the above mentioned functions of the health and physical education teacher, we can say that he serves as a key person in relationship within school and in the Community. He is concerned with the entire school programme contacts with student's parents and community health organizations creates many opportunities for guidance and leadership. Thus he plays a very important role in the life of the school and the community and is responsible for upholding the highest standards of the teaching profession.



2

Physical Education

2.1 CONCEPT OF PHYSICAL EDUCATION

1. What do you mean by the term Physical Education? State its right concept with its importance.

Ans.

Concept and Meaning of Physical Education

The human being is an active creature. He possesses capacities for movement. He has all the necessary neuro-muscular mechanisms which make movements possible. Without this basic movement there is no life, and physiologically, while man is alive, he must move in many ways. The ability to run, walk, throw, bend, manipulate the fingers, swing the stick, swim in a river or climb a mountain- all these movements have played a major role in man's evolutionary experience. This role has been not only physical but intellectual also.

The primitive man taught his young how to ride, how to fall a tree, how to shoot or stalk an animal and how to cross river or streams with the help of a pole or bamboo. These were planned and purposeful movements and the modern programme of physical education finds its roots or origin.

Now a days, physical education activities are necessary for the students in their school. Because of rapid industrialization and modernization, individuals are less involved in activities and along with they also have various facilities and machines available with them, and most of their daily routine activities are carried out by them only which results, less physical/manual labours by the people, which makes them more prone to various health related problems.

To avoid various health related problems in the early stages of their life, individuals must take part in some physical activity so that they are able to provide required exercises to various systems of their body and keep themselves healthy and fit.

Dealing with the concept of physical education, the **Secondary Education Commission Report** says, "Physical education is an indispensable part of all

health programme. Its various activities should be so planned as to develop the physical and mental health of the students, cultivate recreational interests and skills and promote the spirit of team work, sportsmanship and respect for others. Physical education is therefore, much more than mere drill or a series of regulated exercises. It includes all forms of physical activities and games which promote the development of both the body and the mind."

Describing the concept of physical education, **Helen Manley**, formerly Director of Health and Physical education, **Missouri** (U.S.A.) says, "Physical education is bigger than free play, exercises or races. It is education. It recognizes that a child is an integer (a whole) and as such cannot be torn into parts with mind, body and soul and educated separately. The unique contribution of physical education is educating boys and girls through the physical activities. The body is the vehicle, the larger motor areas are the tools.

The activities must promote organic vigour, neuro-muscular skills and social experiences, promotive of democratic living."

Thus physical education means total growth and development through the medium of physical activities which lead to a happy and useful life of an individual, as an adult member of his community.

Meaning of Physical Education

The literally meaning of physical education is 'education of body' but physical education is not only concerned with the physical outcomes that accrue from participation in activities but also the development of knowledge and attitudes conducive to lifelong learning and lifespan participation. The term physical education has been defined by different people in different ways. This term generally confused with physical training, physical culture. Whereas, physical training is a programme of physical conditioning as is undertaken in the army to improve the physical fitness. Physical culture is the building of a beautiful body, mainly through music exercises.

Although, defining a discipline may be an effective way of ending an argument, the fact remains, however, that no one has been able to put forth a definition of physical education that should be accepted to physical educators. Some of the views of experts are as follows-

D.Oberteuffer says, "Physical education is the sum of those experiences which come to the individual through movement."

In this definition, the emphasis is given only on experiences and process and left the rest aspects.

R.Cassidy says, "Physical education is the sum of changes in the individual caused by experiences which can bring in motor activity."

According to **Brownvel**, "Physical education is the accumulation of whole some experiences through participation in large-muscle activities that promote optimum growth and development."

J.B.Nash defines it as, "Physical is that phase of the whole field of education that deals with big muscle activities and their related responses." This definition throws light on the relationship between physical education and that of education.

Charles A.Bucher observes, "Physical education is an integral part of total education process and has its aim the development of physically, mentally,

emotionally and socially fit citizens through the medium of physical activities which have been selected with a view of realizing these outcomes.

In this definition, education is broadly defined as representing the ongoing process of learning and total development that occurs throughout our lifespan. Physical education includes the acquisition and refinement of motor skills, the development and maintenance of fitness for optimal health and well being, the attainment of knowledge about physical activities and exercises.

Need and Importance of Physical Education

Needs: The present era in which we all are living is full of health hazards because of pollution, rapid industrialization and mechanization. The life style of the people has changed. Mentally and intricate skills play a dominant role, and have resulted in frequent questioning of the need for physical education. The physical status of each individual and his daily physical activity affect the physical well-being, mental application, emotional stability, psychological adjustment and social efficiency. It is now proved that physical education plays an important role for the all-round development of the child.

A famous scholar **ROSSAN** emphasizes on the need of healthy body says, "It is the sound constitution of the body that makes the operation of mind easy and certain."

A famous educationist **Frobell** felt the need of physical education and he developed a play-way method for the children. According to him, "If we want the development of an individual, then we have to give exercise to every parts of the body."

Swami Vivekanand has considered that physical health and physical fitness are the essential elements for the all-round development personality of the child. He further said, "To-day India needs fields of Football not the Bhagavad Gita, even battle of Waterloo was fought at the playfield of Eton. According to a report of UNESCO, on the need of physical education, that every individual has a fundamental right for physical education and sports which is essential for the development of their personality."

Explaining the need of physical education, **Dr. Radha Krishanan** said, "Man is psycho-physical in nature and has a body, they follow the principles of growth. They should be kept in good health and physical wellness. No nation can become great without a strong physical foundation."

On the basis of studies conducted at different times, it is proved that physical education plays an important role for the all round development of the child.

Importance of Physical Education

The importance of physical education in helping out man from various self-created problems arising out of modernization of the society which cannot be undermined. The importance of physical education in modern society can be summarized as under :

1. Physical Well-being : Regular exercise plays an important role in developing and maintaining a healthy, well-functioning circulatory system and efficient functioning of other organic systems of the body. The sedentary person is more prone to various diseases than the active one.

The power of muscles and bones and the mobility of joints are geared up for this function of movement. Such a proper organic development is, of course, basic to the child's present and future health and this function can best be achieved through physical education. **Dr. Paul Dudley** has written on the importance of exercise, "Proper exercise is as essential to good health as eating and sleeping."

2. Mental Alertness : Physical fitness is related to mental alertness of the child. Studies have revealed that physical traits and intelligence are not only significantly related but, that a person's general potential for a given level of intelligence, is increased or decreased with his degree of physical fitness.

3. Helpful in Nation building and Character Development : Physical education is the first requisite, not only for an individual but also for society and nation, as a whole. Physical education is one phase of school work that tends itself particularly to the development of character. Physical education class provides opportunities to discuss character education theory; it furnishes a laboratory for actual practice. Thus physical education is a mighty force to build individual and national strength and foster individual and national character.

4. Emotional Development : When students take part in various physical activities, they also develop emotionally. Emotions such as love aggression, anxiety, jealousy, stress, tension etc. get better outlet when students participate on different physical activities. They also develop control over these emotions, when they are playing in a group.

5. Social Adjustment : Physical education makes a significant contribution towards the social adjustment of an individual. It teaches him how to get along with other person. It makes him a happy, stable and enlightened citizen, capable of performing social, vocational and moral functions to the best of his capacity. It develops social character by drawing the child into the community and making him aware of its collective life and ideals. Social awareness is most essential to avoid anti-social behaviour. Physical education (activities) also help in developing and maintaining good relations among the students. When students take part in physical activities they develop various social qualities like sympathy, cooperation, understanding, feeling loyalty, sportsmanship, courtesy, discipline etc., which ultimately help them to understand and adjust better with various individual in different situations.

6. Enhancement of Nation-Integration : India is inhabited by the various people of different caste, creeds, religions, languages etc. who live together, physical activities provide an opportunity for them to take part in training and in various tournaments at different levels. This indeed gives a platform, where they interact, comprehend, share feeling and learn to adjust with one another. All this ultimately leads to the development of the spirit of national integration among the students.

7. Proper use of Leisure : It contributes to the worthy use of leisure time. Through activities, the child can well utilize his surplus energies and make the best of the time available. This keeps the idle man occupied and does not let the unsocial behaviour develop.

8. Psychological Values : Physical education develops the desirable qualities of smartness, agility, elegance, initiative, resourcefulness and endurance. New skills of movement help an individual to overcome fear and to avoid frustration. This leads to his emotional development and inculcates habits of sportsmanship, self-discipline, tolerance, patience and fortitude. **H.C. Buck** says "A properly directed physical education should result in health, happiness, efficiency and character."

Physical activities, Games and exercises keep or have a special importance for the psychological point of view. By taking parts in these activities, they gain surplus energy & that energy can be (used) channelized in a proper way towards right direction so that children may become creative otherwise this surplus energy may divert them towards anti-social activities.

9. Sportsmanship : Physical education provides ample opportunities for the training of sportsmanship. Sportsmanship is that quality of honour that desires always to be courteous, fair and respectful. It is also interpreted in the conduct of players, spectators, coaches and school authorities.

10. Training for Leadership : Physical education programme develops leadership qualities through these activities. By providing such opportunities, Physical education helps in developing the qualities of good citizenship. The laws and rules of games must be obeyed; the penalties are imposed for any infringement of these rules. The word leadership is very impressive. It is the quality by which man becomes a superman. When passion instead of thinking for himself starts thinking for the welfare of a group, a society, a community and moreover of a nation. He is known as a leader and for this, he needs certain qualities of head and heart and physical education helps to develop these qualities of head and heart in child. So, Leader is a person, who with his qualities influences and leads other people. These are the qualities of leadership which are developed by a good physical education programme as : courage, deceiveness, clear view, correct judgement, good relations, discipline, organizing quality, sportsman spirit, patience, co-operation, sympathy etc.

In the words of Indian Education Commission Report "Physical education contributes not only to physical fitness but also to physical efficiency, mental alertness and the development of certain qualities like, perseverance, team spirit, leadership, obedience to rules, moderation in victory and balance in defeat."

To highlight the importance of physical education process, it has been said that physical education which is divine given, should be motherly fed and fatherly nourished in the young age of the child.



2.2 MISCONCEPTIONS OF PHYSICAL EDUCATION

2. Describe misconception about the meaning of physical education.

Or

What are the popular misconceptions about the physical education? Explain in details.

Ans. The word 'physical education' has been used in many forms and types. Games, sports, and related activities are also form as part of life in early civilized communities. Under them because of their practical nature, physical training rather than physical education became the goal. Necessary modification have been carried out to suit the needs of our times. Physical training, physical culture, body building and drill are the names given to physical education before it achieved its present form. In the first place, the physical aspect was only

considered for the physical training and it was thought that the aim of physical training is to develop the body only and keep it fit. The mental aspects were ignored completely. Then second known form of physical education is physical culture in which emphasis is given to develop muscles and to give them proper shape for body building.

Another name drill has also the credit to be known as physical education:-

The terms physical education is an unfortunate misnomer which has come as a legacy of the misleading medieval dualistic conception of body and mind. The wide variety of methods, objectives, contents and outcomes is partly due to heritage and partly because of lack of agreement as to the interpretation of the place of physical education in an ever-changing but democratic society. There are many misconceptions about it.

1. Physical education is play : Some are of the opinion that physical education is play. Play needs no instructions and no supervision. Leave children alone and they will play. One Instructor in physical education class can handle so many students at a time as instructions are needed in some aspect of school. It is a negative conception. Even horses are exercised with more care and individual attention. In fact, play is part of physical education and part cannot be equal to whole. So, the field of physical education is very wide, it includes sports psychology, sports philosophy, sports sociology, kinesiology, anatomy and physiology and research process etc. So, it is wrong to consider education as play.

2. Physical education and physical training are one and the same thing : There is popular misconception that physical training and physical education are one and the same thing. Some institutions, even name the department of physical education as 'Physical Training' but these are two different terms. Training implies exercise mainly for physical value related to some special attainment. Training is that programme, which is used in the army to train soldiers for vigorous duties. Such training includes conditioning, exercises, mass drill and gymnastics. Its purpose is to train a man and make him physically fit and robust. Training implies a trainer and his trainees, like animals. There is a strong note of authoritarianism. On the other hand, physical education implies expressions from within self-discipline, initiated response, reflective thinking, participation in planning as well as the desired outcomes in strength and organic vigour.

3. Physical education is body building : Some people have the impression that physical education is only body building. They believe it to be exercising for physical fitness. Hence anything which gives exercise or develops perspiration is assumed to be physical education.

4. Physical culture is physical education : Some people consider that physical culture is physical education. But physical culture is building one's body shapely and beautiful through special exercises. The muscles of the body are controlled and developed. Culture of any society influences the personality of the members of the society to a great extent.

The culture of any community always manifest the personality of the people. Games and sports are the contribution of civilization and culture, but we can guess that he has been playing games since he was born on earth. The phenomenon 'Survival of the fittest' can explain this.

5. Physical education, Sport, Games, Mass Drill : Participation of students in various Games and Sports are often misunderstood as physical education. Games and sports like, hockey, volley ball, athletics, Boxing, Wrestling, judo and fencing etc. are the activities which are important parts of physical education and these should not be understood.

Similarly Mass drill is a series of exercises done in a group, with or without music because of its spectacular effect and discipline it is taking the place of physical education but it is not. Physical education involves the whole man not his body alone. The term drill is related with training and practising of various movement with band or music. To practice a work or movement again and again, together with rhythm and proper coordination is called drill.

6. Other activities having no other objective than physical fitness : Some teachers believe that to be on the safe side get in everything; thus they perform calisthenics for conditioning the body, march past for discipline, recreation activity, play some indoor games just for fun and square dance for social values. That was a concept of the 19th century. Modern physical educationalists perform a variety of activities, presents them in progressive order and evaluates them for the goods. All these terms used are part & partial of the term physical education. Thus main cause of misconception about physical education is due to unawareness about the real meaning of physical education.

2.3 AIMS AND OBJECTIVES OF PHYSICAL EDUCATION

3. What are the aims and objectives of physical education? Discuss in detail with its meaning.

Or

What are the aims and objectives of physical education at school level?

Or

What is physical education? Explain the aims and objectives of physical education. (June 2018)

Ans. Meaning and Concept of physical education :-Most of the activities of primitive man were of a physical nature which included hunting, running, jumping and fighting and their primary aim was to secure the means of existence and to match the environment. Keeping in view the mentioned facts, it would not be wrong to say that the primitive form of education through imitation was nothing but education through physical activities or physical education in the modern sense. Changes in our social order brought about by the passage of time have led to the change in our educational technique also.

Fropel the father of Kindergarten system was a great advocate of the play activities of children. According to him play was highly beneficial for children. It makes education pleasant and effective and was itself education.

The term 'Physical education' is an unfortunate misnomer which has come as a legacy of the misleading medieval dualistic conception of body and mind. The present tendency is to lay the emphasis on the noun Education rather than on the adjective 'Physical'. Education could never be divided as purely, physical,

mental or moral. This shall be a vain attempt to divide an individual whole. In short, it is to be primarily education rather than mere health or exercise. If physical education is to be effective and intended to make its maximum contribution to the growth and development of every youth in our country, it must necessarily form an integral part of general education. The broadening objectives of education have gradually embraced physical education as an effective educational tool. The education of the body is not an end in itself, an ideal to be preserved for its own sake, but a means to and end for which the whole man has been created so that an individual may grow and develop fully and be enabled to live the abundant life" now as a child and later as an adult.": Thus, true physical education is education of the body and education through the body. Physical education is nothing if not educational in its approach, development and results.

In the right of the above facts where the education aspect of physical education has been emphasized, we may refer to the most illuminating definition of physical education by **Brownell & Hagman** as, "The accumulation of wholesome experiences through participation in large muscle activities that promote optimum growth and development."

According to **A.R.Wayman**, "Physical education is that aspect of education which is concerned with the development and education of their entire personality of man by physical activities."

J.F.William defines, "Physical education is the sum of man's physical activities, selected as to kind and conducted as to outcomes."

As per **C.C.Cowell** views, "Physical education is the social process by change in the behaviour of human organism, originating primarily from the stimulus of social, big muscle, play and related activities.

The Aims and Objectives of Physical Education.

Aims :The terms aims , objectives and goals are used interchangeably by many people. But they do not have distinction and specific purposes. Aims are the main big general things toward which all education is directed.It denotes a general purpose, a term used for general category under which general objectives appear.

The aims of physical education is the whole some development of human personality or complete living. According to **J.F.Williams**, "Physical education should aim to provide an opportunity for the individual to act in situation that are physically wholesome, mentally stimulating and satisfying and social sound."

The main aim of physical education is almost the same as that of all education namely to give the child full life each day.

Objectives: Objective are more specific definite things that lead up to the aim and help in achieving them. These are practical, more nearly attainable, major steps or points of significance towards realization of aims. The great value of aims and objectives is not just that they are stated and accepted but that they are pursued and lined out in action. Objectives help the physical educator to understand better what he tries to achieve. Objectives serve as guidelines for a meaningful, worthwhile programme. Objectives are relevant to participant's needs, experiences, and interest Objective can be long-term in nature, these are often expressed as goals or general statements of intent. Movement is the medium through which physical education and sport achieves

its objectives movement offers people an avenue for fun, recreation, physical fitness, sociability, emotional release, communication and healthy growth. Thus objectives are desired learning outcomes that can be realized from participation in a sound physical education and sport programme.

The Aims & Objectives of Physical Education:-

Several claims have been made by educationists about the objectives or realistic outcomes of a programme of physical education and it is worth considering a few representative types:-

1. The American Association for Health, Physical Education and recreation :

- (i) Develop and maintain maximum physical efficiency.
- (ii) Develop useful skills.
- (iii) Conduct oneself in socially accepted ways
- (iv) Enjoy wholesome recreation
- (v) Develop individual and inter- cooperative relation through sports competitions.

2. J.B. Nash's book (Physical Education-Interpretation and objectives) :

- (i) Organic development.
- (ii) Neuro-muscular development
- (iii) Interpretive development
- (iv) Emotional development.

1. Charles Bucher defines objectives as:-

- (i) Physical development objectives
- (ii) Neuro-muscular development objectives
- (iii) Cognitive development objectives
- (iv) Affective development objectives

2. H. Clarke stated as:-

- (i) Growth in physical Health
- (ii) Growth in social Values
- (iii) Development of Culture.

3. Book -Walter had given as:-

- (i) Health
- (ii) Right utilization of Leisure time
- (iii) Moral character.

4. Lesslee Listed the following objectives:-

- (i) Development of physical organs
- (ii) Development of Neuro muscular
- (iii) Emotional Development
- (iv) Social Development
- (v) Intellectual Development

1. Nixon and Cozens in his book (An introduction to Physical Education)states objectives as :

- (i) Development of organic power.
- (ii) The development of skill in physical education activities.
- (iii) The development of desirable social habits and recreation.

2. Irwin has explained five objectives in his book (The Curriculum in Health & Physical Education) as :

(a) Physical

- (i) Health
- (ii) Development of skill in physical activities.
- (iii) Physical growth and Development.

(b) Social development

(c) Emotional development

(d) Recreational :

- (i) Development of skill in recreational activities.
- (ii) Development of habits of participation in these activities.

(e) Intellectual :-

- (i) Health knowledge
- (ii) Knowledge of rules and strategy of sports.

1. Hetherington in his book(School programme in physical education) has described objectives as :

- (1) The organization of child life as indicated in big muscle activities.
- (2) Social outcomes
- (3) Development of
 - (a) Instinctive mechanism
 - (b) Intellectual mechanism
 - (c) Neuro muscular mechanism
 - (d) Organic Power.

2. Physical Education Committee Bombay has listed Five objectives as :

- (1) Physical fitness
- (2) Master over a variety of skills which would make a person Physically efficient in the ordinary task of living and contribute to his happiness and feeling of competence.
- (3) A knowledge and appreciation of a variety of worthy leisure time activities.
- (4) Development of personally rewarding and socially acceptable standards of behaviour.
- (5) Preparedness for the defense of one's country.

There is a wide range of similarity in objectives listed above and the objectives of physical education particularly common have been worked out, masterfully by **Mr. Buck as:-**

(1) Development of Organic Vigour : This is dependent upon a wide selection of activities arising out of the inherent interests of the participant, and so conducted that the normal function of the body are developed and improved. The racially old, big muscle or natural activities are the ones that have made man what he is to -day both functionally and structurally. It is our belief too that moral health is largely dependent upon physical health, or functional power of the vital organs.

(2) Neuromuscular Development objectives : The development of skills in a large variety of physical activities makes it possible for individuals and groups to obtain satisfaction and happiness in a variety of ways during leisure time. Physical activities and games or sports provided many opportunities to develop better neuro-muscular co-ordination which ultimately helps to

make skilfull, smooth, accurate and efficient movements. The neuro-muscular development is concerned with improving the relationship between the nervous system and muscular system. Neuro-muscular co-ordination also enables the individuals to perform various simple movements like walking, running, jumping, throwing, catching, climbing etc. more easily and with minimum energy expenditure and delay fatigue during tough physical activities.

(3) **Emotional Development** : Pupils get emotional satisfaction and pleasure by overcoming difficult challenges such as learning to swim or creating a new dance pattern, get a thrilling experience out of co-operative success or through team work showing loyalty to the team or developing aesthetic tastes from experience in dance. Emotions like sympathy, co-operation, aggression, anxiety, jealousy, stress, tension etc, get better outlet when students take part in various physical activities. They also develop control over these emotions, when they are playing together.

(4) **Character development** : Crop effort, loyalty to the team and strong ties are much in evidence in play and physical activities. Physical education also aims at inculcating civilized behaviour among the rising generations. Physical education provides valuable contribution to the development of good moral character.

(5) **Development of right attitudes towards play and physical activities in general** : It is not only possible, but necessary, to base the programme on such sound psychological principles that there will be developed in the masses wholesome attitude towards play and physical activities and habits of life through long participation in them. This can be done only, by providing activities that appeal, that give opportunity for self expression and self-improvement, that afford satisfaction in the doing and a desire to continue. Teaching people to look upon physical activities as a recreative measure rather than as an exercise process or money-making spectacle will go towards creating desirable attitudes.

(6) **Cultural objectives** : The term culture means enrichment of human experience through physical activities. This experience leads to better understanding and appreciation of one's environment as well as competency to utilize leisure profitably. Cultural aim includes development of understanding and appreciation of the techniques and strategies of sports, appreciation of music, rhythm and design, preparation for leisure and improvement of morale by improving the physique.

(7) **The development of desirable social attitudes and conduct** : This is possible in a programme of physical activities where emphasis is placed not on spectacular feasts or on winning, but on the ethical values inherent in playing games with and against others. The relationship and experience of co-operation and competition on the athletic field call for decisions very similar to those which have to be made in every -day life. A programme of activities that does not afford opportunities for developing ethical values which function in life is not educationally sound and has no reason to exist. Every human being has certain basic needs like recognition, self respect and love, feeling of belongingness and desire to win etc. Fulfillment of these needs make an individual socially well adjusted. A good physical educator will plan such activities that enable an individual to learn social qualities and co-operation, courtesy, sympathy, friendship, honesty and respect for others.

Social efficiency embraces moral and spiritual values. These values when applied in human behaviour exalt and refine life and bring into accord with the standard of conduct that are approved in democratic culture. These values are willing co-operation, devotion to truth, emotional control and moral responsibility for one's conduct.

(8) **Development of Correct health habits** : Health is physical, mental, social and emotional. Leaders in physical education should strive to make people conscious of their health and health problems. As health is manifold, the importance of all those aspects of health must be explained to masses and such activities be provided as would make them physically active, mentally alert, morally healthy and emotionally sound. Stress should be laid on the ways of hygienic living.

(9) **Development of spirit of Patriotism** : In India, where various people of different castes, creeds, religions, languages etc. live together, physical activities provide an opportunity for them to participate in training and in various tournaments at different levels. This actually provides a platform, where they interact, understand, share feelings and learn to adjust with one another which finally leads to the development of the spirit of national integration among the students.

2.4 RELATION WITH GENERAL EDUCATION

4. "Physical education is an integral part of education." Discuss.

Or

How can you say that physical education is an integral part of education?

Or

Explain physical education's relation with general education.

(June 2018)

Ans.

Relationship between Education and Physical Education

Physical education is education. In the modern age, physical education is being considered as an essential part of education. Some time back the aim of education was nothing but the development of mental abilities and all efforts were directed towards the provision of mental education facilities. The focus, as such of attention was classroom teaching. However mental and physical work cannot be separated into different sections because both are interdependent on each other.

The term 'Education' implies the drawing out and development of all the powers of an individual-physical, mental, moral as well as social. Mahatma Gandhi has defined education as "By education I mean, an all round drawing out of the best in child and man-body, mind and spirit."

To-day preparing individual for a meaningful, self directed existence is viewed as a primary focus of education. When properly taught, physical education, with its emphasis on building a physically, emotionally, mentally and socially fit individual, plays an important role in the educational process. If experiences are provided that are satisfying, successful, and directed towards enriching the student's life, the purposes of education will be accomplished.

J.B.Nash writes in this context, "Physical education is that phase of the whole field of education that deals with big muscles activities and their related response."

In the words of **H.C.Buck**, "Physical education is that part of general education programme which is concerned with the growth, development and education of children through the medium of big muscles activities. It is the education of the whole child by means of physical activities". **An official report on National Plan for Physical Education and Recreation** published by Ministry of education Govt. of India says, "Physical education is education. It is education through physical activities for the development of the total personality of the child, to its fullness and perfection in body, mind and spirit." On the basis of above facts we may say that, Physical education is an integral part of education process. Education aims at the development of complete man and it is also a process of learning which modifies our behaviour towards progress.

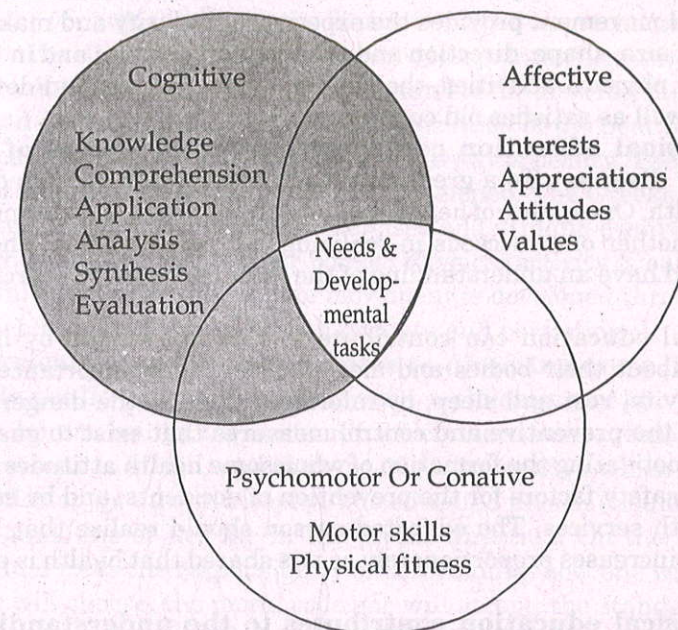
Now the question arises how the physical education is an integral part of the education? Or How education is related with that of physical education?

The education of an individual takes place through three learning domains- the cognitive domain, the affective domain and the psychomotor domain. In general words, the meaning of education is to acquire knowledge and because language is considered to be an important means of change and the source of knowledge & education. There are three methods of communication for a living creature right from the birth i.e. (i) Physical movement (ii) Sound/speech/ language and (iii) Writing.

In these above mentioned methods-physical movement, the first one is being the acceptable means of communication and remaining two come at later stage because in human living cycle physical movements start at the earliest and then come speech and writing.

To describe more fully the role of physical education in the educational process, the potential of physical education will be discussed in relation to the three educational domains, namely cognitive, affective, and conative (Psychomotor). The cognitive domain includes the development of intellectual abilities including the acquisition of knowledge, formulation of ideas and concepts, problem solving and the analysis and evaluation of information.

The effective domain focuses on the development of interest, attitudes and values. Whereas cognitive or psychomotor domain includes the development of physical fitness and the acquisition of neuromuscular and motor skills. These domains are interrelated. Figure below illustrates the inter-dependence of the affective, cognitive, and conative or psychomotor domains.



Interdependence of cognitive, affective, and psychomotor domains and their relationship to needs and development tasks.

(A) Cognitive Domain

The objective of cognitive development is increased knowledge and understanding, physical education can contribute to cognitive development in such ways as:

1. Physical education contributes to academic achievement : Physical education programmes may contribute to academic achievement in a number of ways as the following research findings have implications for physical education. Intellectual, physical and emotional developments are closely associated. Endocrinology has shown mentally changes as body chemistry changes.

Psychology points out the fact that the child's earliest learnings are factual and kinesthetic. Just as it is important to teach English so that students can communicate effectively with one-another, mathematics so that they can understand the technology of society and history, so that they have an understanding of their cultural heritage, it is also important to educate students regarding their physical selves so that they can function most efficiently as human beings.

2. Motor activity is related to higher thought process : The various research studies indicate that the child's earliest and first learning's accrue from an interaction with the physical and social environment. A Swiss psychologist **Jean Piaget** has found that a child's earliest learnings are motor (involving neuro muscular systems and resulting in movements such as running and reaching) in nature and form the foundation of subsequent learning.

Physical movement provides the experience to clarify and make meaningful concept of size, shape, direction and other characteristics and in addition to that through physical activities, the child has new feelings and develops new interests as well as satisfies old curiosities.

3. Physical education contributes to a knowledge of exercise, health, and disease : To a great extent, an individual's success depends on personal health. One's state of health and physical fitness will determine in large measures whether one succeeds in realizing self potentialities. The educated person should have an understanding of the facts pertinent to exercise, health, and disease.

Physical education can contribute to this knowledge by instructing individuals about their bodies and movement and the importance nutrition, physical activity, rest and sleep, by informing them of the dangers of drugs; by exploring the preventive and control measures that exist to guard against diseases by motivating the formation of wholesome health attitudes and habits by stressing safety factors for the prevention of accidents; and by establishing various health services. The educated person should realize that health is a product that increases proportionately as it is shared that health is everybody's business.

4. Physical education contributes to the understanding of the human body : Physical education can provide knowledge and understanding relating to the various organ systems and how these systems function and can be maintained. Every individual should know something about their bodies and their biological make-up. It is also concerned with knowledge of short and long term effects of activity to body structure and function. Such knowledge and understanding can result in greater intellectual productivity and play an important part in the general education of each individual.

5. Physical education contributes to an understanding of cultures of the world : The sports and physical activity constitute a very important part of the cultures of the world. They affect the country's politics, govt., economy and educational systems. Sports and physical activity dominate the newspapers, magazines, radio, and television. Culture of any society influences the personality of the members of the society to a great extent. According to Taylor, Culture is that complex whole which includes knowledge, belief, art, moral law and other capabilities acquired by man as members of society."

Culture is an accumulation of thoughts, values and objects, it is a social heritage acquired by us from preceding generations through learning. Thus games and sports are the contribution of civilization and culture. Of course, a body of sport knowledge also exists concerning such things as rules, safety measures, terminology, and games etiquette.

(B) Affective Domain : The affective domain is primarily concerned with interests, appreciations, attitudes and values. It stresses the individual's, value system and philosophy that are basic to maturity. Here are some of the contributions of physical education to this domain as:-

1. Physical education contributes to actualization, self esteem and a healthy response to physical activity : A well planned and conducted physical education programme can achieve such outcomes as a recognition of the potential of activity for the relief of tension, an awareness of what one's body is capable of doing, and a better physical self-image.

2. Physical education contributes to an appreciation of beauty : From the time of early childhood, the foundation of an appreciation of beautiful things can be developed. Architecture, landscapes, paintings, music, rivers, trees and animal can ring a note of beauty in the mind of the growing child and adult. The educated person should develop an appreciation of the beautiful.

Physical education has much to offer in the way of beauty. The human body is a thing of beauty if it has been properly developed. The Greeks stressed the 'body beautiful and performed their exercises and athletic events in the nude to display the fine contours of their bodies. Physical activity is one of the keys to a beautiful body. Also, a beauty of movement is developed through physical activity. Such beauty comes only with practice and perfection.

3. Physical education contributes to directing one's life towards worthwhile goals : A person should develop a philosophy of life. The way one treats fellow human beings, the manner in which one assumes responsibility, the objectives one sets to attain, and the type of government in which one believes will all be affected by this philosophy. The educated person should consciously attempt to guide his or her life in the proper direction. On the shoulders of each individual rests the responsibility of determining how one will live, what religion one will choose, the moral code one will accept, the standard of values one will follow, and the code of ethics one will believe. This is the characteristic of the democratic way of life :

Physical education can help in formulation of an individual's philosophy of life. Through the medium of physical education activities, guidance is given as to what is right and proper goals that are worth competing for, intrinsic and extrinsic values.

4. The physical education programme stresses humanism : The physical education programme should stress humanism because the human being is the most valuable and important consideration in this life. Therefore, human welfare should receive careful consideration in all walks of life. When a new law is passed by Govt. Its effect on human welfare should be considered. When an activity is planned, it takes into consideration the needs and welfare of the participants when a rule or regulation is made. The physical education programme takes into consideration unfit less skilled and disabled individuals and makes sure that adequate arrangements have been made for such individuals.

It is a student centered programme with the attention focused on the individuals for whom the programme exists. Throughout the entire programme the thought that the human aspects are the most important consideration is prevalent among students, teachers and administrators.

5. The physical education programme enables each individual to enjoy a rich social experience through play : Children and youth need social experience that can be gained by associating with other persons in a play atmosphere. Play experiences offer an opportunity for a rich social experience, which can help greatly in rounding out a child's or youth's personality, in developing proper standards of conduct, in creating a feeling of "belonging" and in developing a sound code of ethics.

The school is one place where children and youths have an opportunity to mingle, and physical education offers an opportunity for them to play together. The potentials are limitless in planning social experiences through physical activities, rhythms, games of low organization, and more highly organized games. Here the child or youth can learn behaviour traits characteristics of a democratic society. Because of the drive for play, a child will be more willing to abide by the rules, accept responsibility, contribute to the welfare of the group and respect the rights of other.

6. The physical education programme helps individuals to play co-operatively with others : Physical education should stress leadership and followership traits. Everyone can not be a captain on hockey, relay, or soccer team. Everyone does not have leadership ability. The leaders and followers are needed for accomplishment of any enterprise.

The physical education programme should stress co-operation as the basis for achieving the goals an individual or group desires. Each member of the group works as though he or she were a part of a machine. The machine runs smoothly, and every part does its share of the work. Pulling and working together bring results that never are obtained if everyone goes in different directions

7. The physical education programme teaches courtesy, fair play and good sportsmanship : Man is a social animal by nature. He reaches a socialized state by the development of social qualities. The development of we feeling in association and the growth in their capacity and will to act together. The amenities of social behaviour should be part of the repertoire of every educated person, courtesy and politeness are characteristic of good family training, just as fair play and sportsmanship are characteristics of good training of physical education activities. One hand, it reflects the character of the parent or guardian and, on the, the teacher or coach. The main objective of a physical education programme should be to provide an experience that will help the members of a group realize value that will help them live enrich lives. Games situations provide opportunities for individuals and groups to be courteous, fair and respectful.

(C) Psychomotor or Co-native Domain : Our body is a beautiful and most complex living organism. We divide it into various parts in order to understand the working of each organs. Two broad physiological divisions of the human body are : (i) Mind (ii) Body. Although the body is the home of the mind. Modern psychologists like **Medougall** believe that psycho-physical interaction does take place, so the physical processes play a part in determining behaviour. This is nothing but an expression of the principle of psychophysical unity of man, which states that body and mind are indivisible and inter-dependent parts of single unit.

In physical education, the psychomotor domain is largely concerned with motor skills. Physical education can contribute to psychomotor development in the following ways:-

(a) Physical education contributes to movement, skills, as a participant and spectator in sports and other physical activities : The development of physical skills in all persons rather than in just a select few individuals is an educationally sound objective. However, no such effort is required for making us play because play is an innate tendency. The play

activities attract us automatically and hence become a simple method of education itself. Physical education not only develops skill in the participant but at the same time develops an interest and knowledge of other activities that at times may be engaged in by individuals as spectators. The so-called recreational sports receive greater emphasis because these activities may be engaged in during an entire life-time. Physical education can help by supplying a knowledge of various sports so that role of spectator may be more meaningful and interesting.

(b) Physical education contributes skill to utilize Leisure hours in mental and cultural pursuits : A whole gamut of activities offer, entertainment and relaxation after working hours for a great many people. Recreation is not a matter of motion but rather than emotion, it is a personal response, a psychological reaction, an attitude, an approach, a way of life. Recreation is a broader term than physical education includes in addition to sports, games and rhythmic and other activities in which a person participants for the pleasure and entertainment of participation. 'Leisure' may be regarded as the genus of which recreation is a species. The primary purpose of recreation is to "recreate" oneself in body, mind and spirit. A leisure time sports such as fishing, dancing, singing, cultural activities, indoor games motivate the development of skill and a hobby.

(c) Physical education contributes skills essential to preservation of the natural environment : The part of the great wealth that belongs to any country is represented in terms of wild-life, fish, forests, water, soil and scenic beauty. These resources contribute to the living standard, appreciation of beauty, recreation, and pride that characterize one's country.

Physical education is concerned with ecology and especially with preserving national resources. These represent the medium through which many enjoyable movements are spent by sports persons, campers and seekers of recreation and relaxation. Many physical educators teach skills such as the right method and procedure for making a camp fire, the right way to preserve wildlife and fish and how to prevent forest fires. Thus physical education contributes to learning in all the three domains i.e. cognitive, affective and conative of general education. A strong body, sound health, mental alertness and social and emotional balance are essential for the complete and all-round development of an individual's personality. It is therefore, that physical education is an indispensable area of any programme of good education.



5. Discuss the importance, aims and objectives of teaching physical education at teacher training institutions.

Ans: As physical education is an integral part of general education. In the words of **H.C.Buck**, "Physical education is that part of general education programme which is concerned with the growth, development and education of children through the medium of big muscle activities. It is education of the whole child by means of physical activities. Physical activities are tools. They are so selected and conducted as to influence every aspect of child's life, physically, mentally, emotionally and morally."

In the similar form **J.B. Nash** says, "Physical education is that field of education which deals with big muscle activities and their related responses."

Thus we observe that there is close relationship between physical education and general education. But it is also specialized field, with its own tools and techniques. It is, therefore, essential that teachers of physical education are properly trained for the achievement of best possible results. But a physical educator should not be narrow specialist. He must have understand and co-ordinate with general educational programme. However, it may not be possible for single teacher of physical education to undertake an effective programme of physical education for reaching all pupils in a school. It is therefore, that all pupils teachers in training colleges, must learn physical education, both in theory and practice. The general plan and direction of physical education programme will, of course, be given by the specialist in the field but its implementation will require the cooperation of all teachers.

The following are, in brief the aims and objectives of teaching physical education in Teacher Training Institutions.

1. Development of skills and abilities : The aim is to develop in pupils teachers psycho-motor skills including quick choice and immediate action, to develop proper coordination of senses with body movement, including the ability to judge time, speed distance, force, weight etc. Correctly development of natural activities like running, jumping, rolling, climbing, bending, pulling, throwing, pushing, lifting, swimming etc. and development of general bodily control.

2. Development of personality : Here the aims and objectives include attainment of sportsmanship, leadership, positive mental qualities of self-confidence, self reliance, alertness, enthusiasm, self-control, cooperation, sociability, resourcefulness, courage, initiative and discipline. All these personality traits are essential for teachers of all subjects and not confined to physical educators only.

3. Development of physical well being : This aim means that we have to assist the teachers under training in providing for normal physical growth and development, in developing their strength and endurance to do normal tasks of life as well as meet the demands of the stress of life, without feeling undue strain and in maintaining and developing proper functioning of organs and organic systems.

4. Development of functional knowledge : Our pupil-teachers must attain sound knowledge of rules, techniques and methods of various games and sports, especially meant for school students. They must also acquire knowledge of first-aid and proper health procedure as related to physical exercise. Besides this they should attain applied knowledge of presenting interesting shows and performances and promoting school spirit among students. Then and only then, they will be in a position to introduce direct and guide such activities in their respective school after training.

5. Cultural Development : Cultural development means the inculcation of certain desirable habits of thought, speech and action and a special kind of behaviour, suited to different situations. It aims to produce men of a certain type of mind and breeding, who may play their effective role in new democratic set up of their own country as well as in the international field, if need be. Our

aim is to prepare our teachers under training for the proper utilization of their leisure time in joyful recreational activities, through physical education. We also aim to develop in them understanding and appreciation of the rich contribution made by their own sportsmen as well as by those belonging to other countries of the world to the field of physical education :

6. Development of Mental Hygiene : Mental Hygiene comprises those activities and techniques which promote and maintain mental health. It is the capacity of an individual to form harmonious relations with others and to participate effectively and contribute constructively to the changes in his social and physical environment. In physical developing adequate interest in physical activities, and keeping violent excitement at the minimum level.

7. Development of desirable habits : Another important aim of teaching physical education in Teacher Training Colleges is to help the pupil-teachers in establishing a schedule of daily activities and acquiring the habit of cleanliness and that of spending a position of their leisure in enjoyable physical activities. If the teachers are neat, clean, orderly, punctual and regular, they will be able to inculcate these very habits in their students.

It may, thus be concluded that physical education, properly conceived presented and taught can contribute effectively to the education of teachers under training, in various ways.



3

Posture

3.1 CONCEPT AND VALUES OF GOOD POSTURE

1. What do you mean by good posture? (June 2018)

Or

Describe concept and values of good posture.

Ans: There is no single good posture, but many and the main beauty in it is alignment of parts in relaxation rather than tension. Posture is more than a physical condition.

Good posture is that in which the body is held without any sense of effort, with its weight, equally distributed over both the legs and feet so as to produce least fatigue. It is also a reflection of moods and emotions. It indicates the attitudes not only of body, but also of mind.

What is Posture

Posture concerns the way a person carries himself while standing, walking or sitting. It means carriage or the manner of holding one's body.

It does not conform to rigid standards of body positions. It is not necessary that we may always stand in a certain position or sit firmly in a chair or sleep like a log in order to have good posture. On the other hand, the secret of good posture is a frequent changes of position. Even during sleep, our body continually shifts its position. Remaining in one position for a long time is fatiguing and tiring. It is therefore, necessary that we must consciously try to achieve good posture.

There are two types of Posture as:

(i) Good Posture and (ii) Bad Posture or Poor Posture. The good posture is defined by many scholars as **Avery** defines, "Good posture means that condition in which the body is held in balanced position for a long time without feeling fatigued."

Hence good posture makes it possible for the ligaments and muscles to maintain position of the body which are conducive to efficient movement. The efficiency and health of our body depend upon a balance of its various opposing forces. When we keep a natural or working posture, we are said to have good posture.

(42)

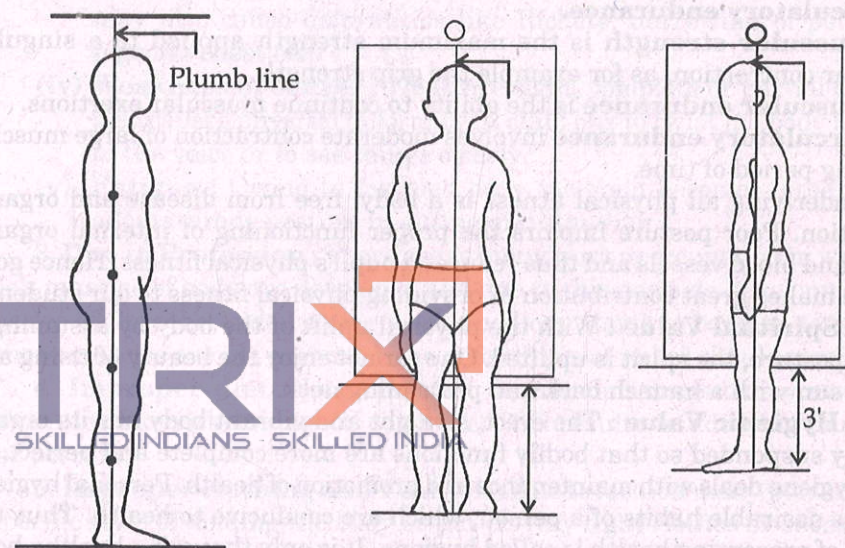
When the balance is altered by disease, faulty habits or accident, we are said to have bad or poor posture.

A good posture is a symbol of good health, self confident and firmity, while poor posture is related with unhealthy respiration, anxiety and sadness.

Knowledge about Good or Bad (poor) Posture

To decide about the good or bad posture, we can have a Plumb Line Screen Test as shown in the pictures :

If we draw a straight line, or right angel line called Plumb line, from the one side of the body it will through, starting from the centre of the upperhead, ears, touching the shoulder and passing from the middle of the hipbone, then from the centre of knee, it will drop at the bone of ankle. See in the picture below for more clarification and understanding.



Plumb Line Screen Test

Values or Importance of Good Posture

The importance of posture lies in the fact that there is a definite relationship between good health and good body posture. There is clinical evidence to prove that good posture is very important, both as preventive and as a cure of disorder like gout, backache, foot trouble and abnormalities of menstruation.

The values of good posture may be related to a person's appearance, movements, efficiency and physical fitness. These values are as given below:-

1. Appearance : The first impression of a person includes how he carries himself. Carriage reflects his alertness, breeding and strength of character. Everyone tries to appear as attractive as possible. Great efforts are made by all men and women to appear attractive in their neighbourhood, in educational institutions, in clubs, in social gathering and where not. The large sums of money are being spent, for this purpose, on clothing, on keeping in latest style and on cosmetics etc. No doubt, all these things do play their effective role in making a man or woman attractive, but body itself contributes a great deal to this end.

Nobody would judge a person as having an attractive and pleasing appearance if he or she possesses a thrusting –out head, rounded shoulders and sagging abdomen. This appearance is the first criterion of good posture.

2. Movement efficiency : Good posture makes it possible for the ligaments and muscles to maintain positions of the body which are conducive to efficient movement. The efficiency and health of our body depend upon a balance of its various opposing forces. In sports activities, the body posture of a player is vital in the performance of his function. It is, therefore, that in standing, walking or running, a person will be more effective, graceful and co-ordinated if he or she possesses good posture. The good posture of player will keep the body in equilibrium, each organ in place and each set of muscles doing its own specific job. All this facilitates efficient movements of the body.

3. Physical fitness : Posture is a basis of physical fitness. The basic components of physical fitness are **muscular strength, muscular endurance and circulatory endurance.**

Muscular strength is the maximum strength applied to a singular muscular contraction, as for example the grip strength.

Muscular endurance is the ability to continue muscular exertions.

Circulatory endurance involves moderate contraction of large muscles for a long period of time.

Underlying all physical fitness is a body, free from disease and organic exhaustion. Poor posture impairs the proper functioning of internal organs, nerves and blood vessels and thus reduces a pupil's physical fitness. Hence good posture makes great contribution in providing physical fitness to our students.

4. Spiritual Value : With the physical uplift of the body by assuming a correct posture, the spirit is uplifted. One cannot enjoy the beauty of rising and setting sun with a haunch back and protruding neck.

5. Hygienic Value : The erect, straight and vibrant body has its organs properly suspended so that bodily functions are more complete and perfect.

Hygiene deals with maintenance and promotion of health. Personal hygiene includes desirable habits of a person, which are conducive to health. Thus the science of preserving health is called hygiene. It is only through a healthy body that a person can achieve the highest goal of life with good posture.

6. Economic Value: Good posture speaks of the spirit within the body. Seeking a job depends on the way we hold our body. Alertness portrays the way we sit and stand. Thus good posture provides capability to earn livelihood and bear the burden of the family.



3.2 CAUSES OF POOR POSTURE

2. What are the causes of Bad or Poor Posture? What measures will you adopt to prevent the bad posture?

Ans.

Causes of Bad Posture

The following are the main causes of Poor Posture :

1. Congenital : Some children have congenital postural deformities. These deformities are present at the time of birth of the child, like club foot, flat foot and hypoplasia etc.

2. Acquired : Other types of deformities are acquired due to so many reasons e.g.

(i) **From diseases :** Various diseases are responsible for bad posture of a child, as inflammation of the bones (Osteomy-litis), Rickets, Tuberculosis, Polio etc.

These diseases may cause knock knee or develop curvature of spine.

(ii) **From Accident or Injury :** Due to accident, an injury can also cause deformity like shortening of one limb and deformities due to contraction of scars or burn.

(iii) **Improper diet or Mal-nourishment :** Improper diet or malnutrition may also cause deformities like Rickets, narrowing of pelvis, the pigeon's chest etc.

(iv) **Weakness of senses :** Weak eye sight, complete or partial deafness also causes physical deformity. A child has to twist his body to adjust to the voice or to see things clearly.

(v) **Fatigue :** Owing to fatigued body the child becomes lethargic and adopts wrong posture in sitting and standing.

3. Due to Profession : There are so many work or occupation in which one side's muscles of body are developed and due to this one side development, the muscles of the other side become weak and body starts to bend on to one side. If these muscles are not exercised, the deformities of round shoulder will occur.

4. Improper diet : Improper diet or malnourishment may also cause deformities like rickets, pigeon chest etc. This results in adopting faulty and poor posture.

5. Improper clothing and Fashion : Due to fashion many persons adopt a specific style of holding the body or put on very tight clothes or shoes, which hinder the free movement of the body, one cannot even breathe properly and has to twist his or her body to feel easy and to last it becomes a habit which results in poor posture.

6. Over Work Load : Over work, mental or physical, causes fatigue. The body gets tired after a specific time and needs rest. So continuous over work will lead to wrong postures as the person will change many postural positions to lessen tiredness and to finish the work. Sometimes these positions holding for a long time causes poor posture.

7. Obesity : Because of burden of excessive body weight, the posture of body may become faulty because to keep the centre of gravity of body low, one has to wide his legs while walking, standing and bending and this results in poor posture such as knock knee and flat foot.

8. Delicacy and limitation : It is very common amongst ladies. To prove their delicacy, they walk, sit and move their body delicately which spoils their figures. Children generally imitate their teachers or best liked persons, may be some film hero or heroine. Without knowing the reason, they imitate and adopt their style, which disfigures them.

9. Improper Furniture : Unsuitable size of the chair and table or insufficient furniture also causes deformities.

10. Lack of knowledge : Students do not know what posture is good or how to sit and stand properly. They do not know what type of diet they should take to meet out the growing needs of the body. So, they may allow the spine to sag, the abdomen to stretch out or shoulder to become round.

11. Improper Time-Table : If all strenuous periods are arranged one after the other, it causes bad posture. It also assists in the changes of posture and long sitting.

12. Wrong Punishment : Long standings, holding ears under the legs or raising arms upwards for a long time are responsible for bad postures.

13. Heavy Bags : Carrying heavy bags on one's shoulders or on the upper back results into round shoulders or one shoulder high and the other low.

14. Heredity : Heredity is another factor which is responsible for poor posture. Heredity defects such as Kyphosis and other genetic defects may lead to poor posture.

15. Unhygienic School Condition : Overcrowded classrooms, insufficient air, bad ventilation or bad lighting are other factors responsible for poor posture.

Remedial Measures of Defective Posture

Childhood is the best time to improve healthy postures. Every attention should be paid on the postural aspect of the child's personality. The following measures should be adopted to prevent bad posture:

1. It is one of the important functions of the school to provide knowledge of good posture to its pupils. The class teacher must understand it and transmit it to the pupils. Individual instruction in correct posture may also be given to certain pupils with faulty posture habits, to achieve best results.

Instructions before full-length mirror can be most effective because, in that case, the pupils can see as well as feel the correct position.

(2) For congenial deformities, the students should be directed to go to orthopaedic hospitals only. The teacher himself should never try to correct such cases.

(3) Practice of remedial or corrective exercises should be given to the students individually according to their physical needs.

(4) Children should not be allowed to carry heavy loads of bags. Drawers or almirahs can be provided in the school to keep books.

(5) Students should be shown the correct body mechanics : A posture sense ' should also be developed in the mind of the students.

(6) Every possible sources of fatigue and strained attention must be investigated and corrected e.g. deafness, eyestrain etc.

(7) (a) Remove the causes of faulty occupational practice.

(b) Faulty sitting accommodation

(c) Faulty shoes or clothes.

(8) Knowledge about nutrition should be given. Cheap nutrients should also be suggested. It will be appreciable if provision for mid-day meals is made by the school authorities.

(9) Continuously long sittings and long periods should be avoided. Short intervals of activity be introduced.

(10) It is appreciated if the school has subjectwise classrooms. It also helps in the changes of posture and long sittings.

(11) Front seats be provided to the students who suffer from weakness of senses like short sight or hard of hearing.

(12) Teachers should not give wrong punishment or too much of punishment which is injurious to health.



3.3 COMMON POSTURAL DEFORMITIES AND THEIR MANAGEMENT

3. What are the common postural defects in school children? What measures would you suggest for their management?

Or

Discuss in details Common Postural deformities found in Children.

Or

What do you understand by postural deformities? Explain any two postural deformities with its causes and remedy.

Or

Explain common postural deformities and their management.

(June 2018)

Ans. It is of utmost importance that various deformities are detected at an early age and proper steps taken at right time to prevent the deformity. Here below are the chief and common postural deformities found in children which may be dealt with:-

Postural Defects

1. Kyphosis or Round Back
2. Lordosis or Hollow Back
3. Rigid Spine
4. Kypho- Lordosis or Round & Hollow Back
5. Scoliosis or Lateral Spinal Curve
6. Knock- Knee
7. Rickets
8. Flat-Foot or Claw foot
9. Talipes

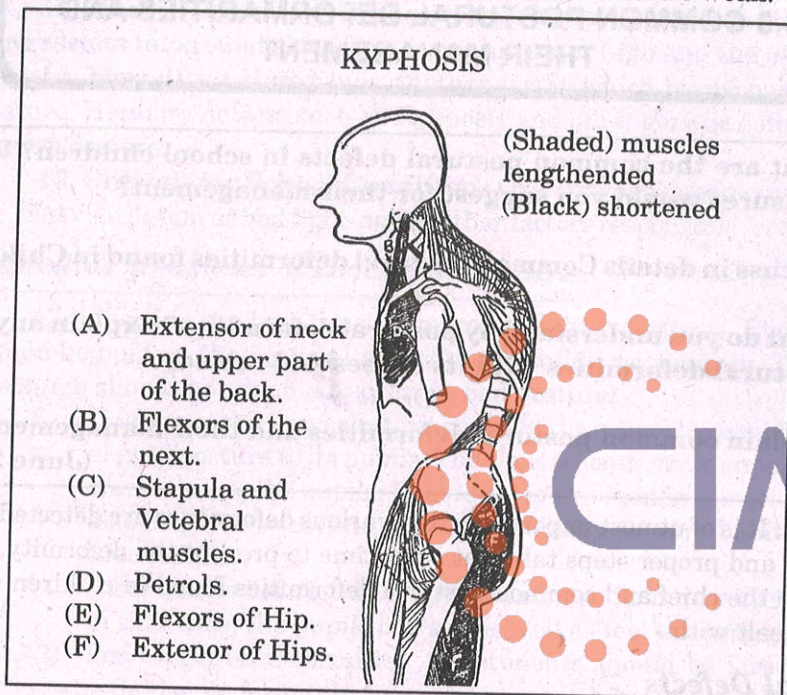
1. Kyphosis or Round Back

There is an abnormal curvature of spine from front to back resulting in hump towards the back. This deviation of anterior posterior posture with an exaggerated curvature is found mostly in thoracic region associated with round shoulders. Displacement of shoulders is caused by contraction of the front muscles of the chest and stretching of back muscles as a result head and neck

droops forward. Shoulder blades are pushed forward and the person walks with head and neck almost dropping forward. The muscles of extensor of neck and upper part of the back are length ended. The petorals and extensor of hips muscles are shortened. See in the picture the shape of the body in Kyphosis postural defects as below :

Causes :

- (1) It is due to tight or ill fitted clothes which prevent the child from duly expending the chest.
- (2) It may be due to tuberculosis in the spine or continued faulty posture especially in a person whose muscles of trunk are weak.



Treatment and management of Kyphosis:-

(i) **Position of neck and shoulder:-** Splaxlis Cafritis, the muscles of neck (flexors of the neck) are shortened and the muscles like Coli and Scaleni of back side of the neck are lengthened. For this lying on back feet straight and hand at sideways and palm down. Then raise chest, arching upper back. Support on back of head by helper with both of hands and try to pull the neck upward while the patient will press his head downward. Hold the position for a few seconds and repeat.

The second exercise is given to push the neck backside. In a standing position patient makes a sling with both of his hands interlocking fingers and try to stretch the neck forwards the help of this sling and at the same time try to push the neck back side.

The third exercise is given with the help of a sand bag. In this exercise patient lies on his back and keeps the sand bag under his shoulders. Then he tries to push his neck downward by stretching his body.

For more clarification of these three exercises, we can examine the three different pictures Nos. 1,2, and 3 below:-

For improving round upper back and Kytohosis : To treat the round upper back or round shoulder we manage some exercises such as :

- (a) Standing position arms stretched upside then and circling (routaliner) both the hands forward and backward alternately.
- (b) Standing with back to wall, touching with buttocks, shoulders and back of head. Then raise chest, flatten lower back, pull in the abdomen and press the back of the head against the wall. Hold this position for a few seconds and repeat it.
- (c) To companions standing with back to back, touching the buttocks and shoulders and back of head. Then they will lock their hands into each other and try to lift the patient on his back by bending a little forward. By this exercise, all the chest muscles of the patient are stretched. See the figure no. 4 for more-clarification below:-
- (d) **Wall bar exercise :** Standing with back to a ladder fix in a wall. Then he tries to hung himself by holding the one step of ladder as per his size and hold this position for a few minutes and repeat it again. See the figure below no.5

Flex of Hip bone : In this situation, the muscles responsible for closing of hip become shortened and muscles which are responsible for opening of hip become lengthened exercise for treatment :

Boat Asana or Boat Pose : Lie down on the ground with your face downward, inhale deeply.

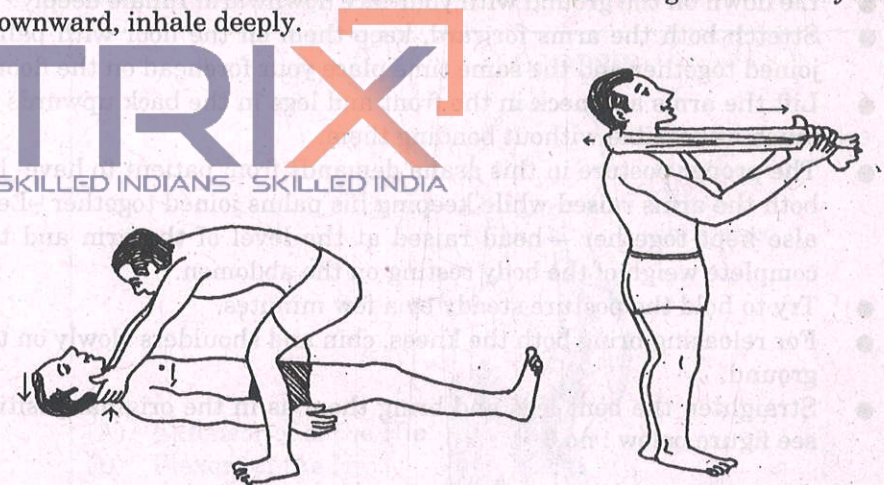


Fig. 1

Fig. 2

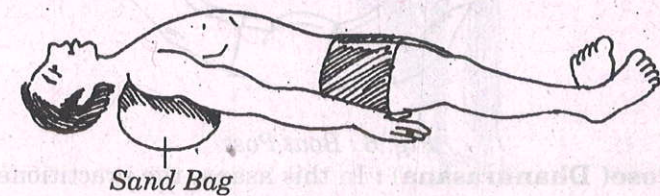


Fig. 3



Fig. 4 : Stretch both the arms



Fig. 5

Flexers of Hip Bone : In this situation, the muscles which are responsible for closing of hip become shortened and muscles which are responsible for opening of hip become lengthened.

Exercise for treatment :

The Boat Pose or Naukasana :

- Lie down on the ground with your face downward. Inhale deeply.
- Stretch both the arms forward, keep them on the floor with palms joined together and the same time place your forehead on the floor.
- Lift the arms and neck in the front and legs in the back upwards as much as possible without bending them.
- The proper posture in this asana demands from patient to have- his both the arms raised while keeping his palms joined together -Legs also kept together - head raised at the level of the arm and the complete weigh of the body resting on the abdomen.
- Try to hold the posture steady by a few minutes.
- For releasing bring both the knees, chin and shoulders slowly on the ground.
- Straighten the bent legs and bring them as in the original position see figure below : no.6

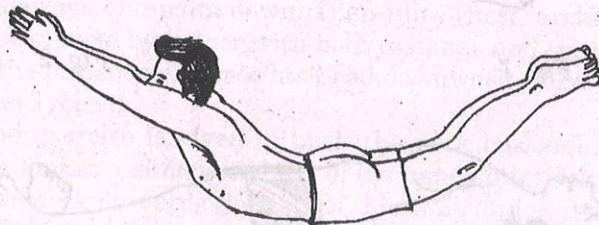


Fig. 6 : Boat Pose

Bow Pose (Dhanurasana) : In this asana, the practitioner makes use of his hand and arms to pull his trunk and legs up together to form a curve resembling like an archer stringing a 'dhanush' meaning bow.

- Begin trying down on the ground with your face downward.

- Bend your legs and grasp your ankles with your hands, keeping all the five fingers of the both hands on the inner side of the legs.
- Raise your head and chest and simultaneous by pulling your ankles up, lifting the knees and thighs off the floor.
- Thus by lifting legs, head and chest, arch the back into a bow. Retain breathe, then exhale and lie flat. Repeat three times .See figure below:-

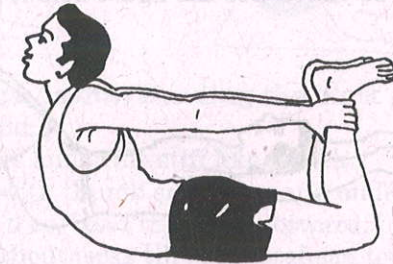
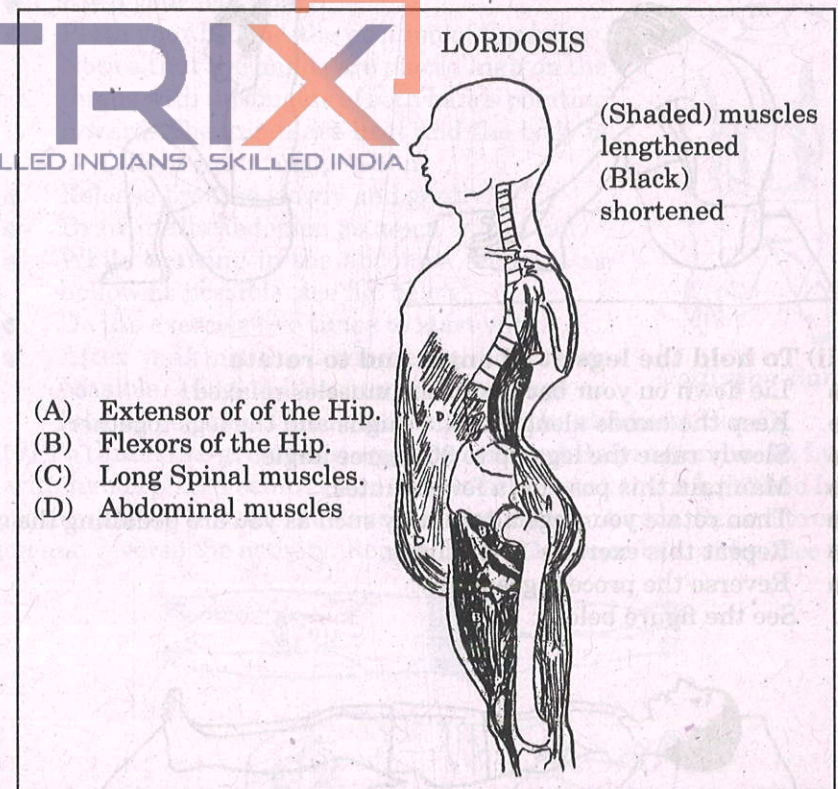


Fig. 7 : Bow Pose

2. Lordosis or Hollow Back : This is the condition when there is exaggeration of the normal forward curve in the lumbar region resulting in a hollow back. This mostly seen in lumbar region, resulting in a protruding abdomen.

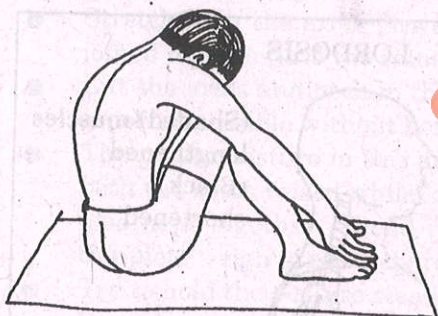


Causes : Causes for lordosis may be an early symptom for tuberculosis of the spine or hip disease or malnutrition with poor muscles.

Exercise for treatment : In this deformity of body, the muscles of the back bone such as quadriciceps and Psoas are to be lengthened and to shorten the muscles of rectus and hamstring.

(i) Situps : Lie down on back, knees bent and feet flat on floor.

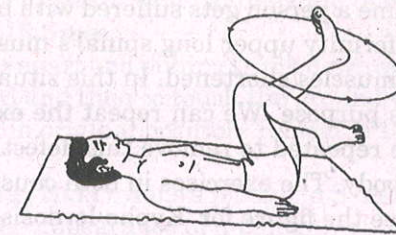
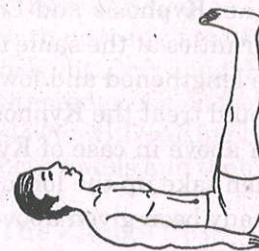
To bring both hands behind head and then to rise slowly with both hands and to sit with raising hands up side. Then to hold the feet with hands in sitting position. Repeat it 10-15 times. See the figure below:-



(ii) To hold the legs at 90 angle and to rotate.

- Lie down on your back with the muscles relaxed.
- Keep the hands alongside the thighs and the legs together.
- Slowly raise the legs up to 90 degree angle.
- Maintain this pose for a few minutes.
- Then rotate your legs alternately such as you are pedalling the cycle.
- Repeat this exercise 10-15 times.
- Reverse the process gradually.

See the figure below :



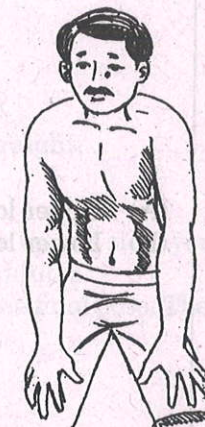
(iii) Paschimottana Asana (Bending the back pose)

- Sit on the ground.
- Stretch your legs and arms stiff like a stick.
- Catch the toes with thumb and index and middle fingers.
- While catching toes, bend the trunk forward.
- Slowly bend without jerks till your forehead touches your knees.
- When you bend down, draw the belly back.
- Retain the pose for five seconds. Gradually increase the period to ten seconds.

See figures below:-

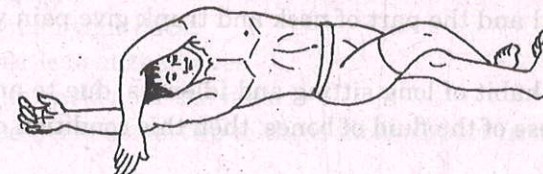
(iv) Uddiyana Bandha:-

- Maintain an erect position of the body.
- Keep your feet apart.
- Place your body in the position of Fig below. Notice that the hands are placed high on the thighs with the fingers of both hands pointing inward. The knees are bent and the body is in a slight squatting position.
- Release breathe slowly and gently.
- Draw in the abdomen as much as you can.
- While drawing in the abdomen, make it as hollow as possible .see fig. below.
- Do the exercise five times to start with.
- After making the abdomen a hollow as possible. Hold the vacuum in the lungs as long as you can. This is drawing in of the abdomen. See fig.



Uddiyana' Bandha

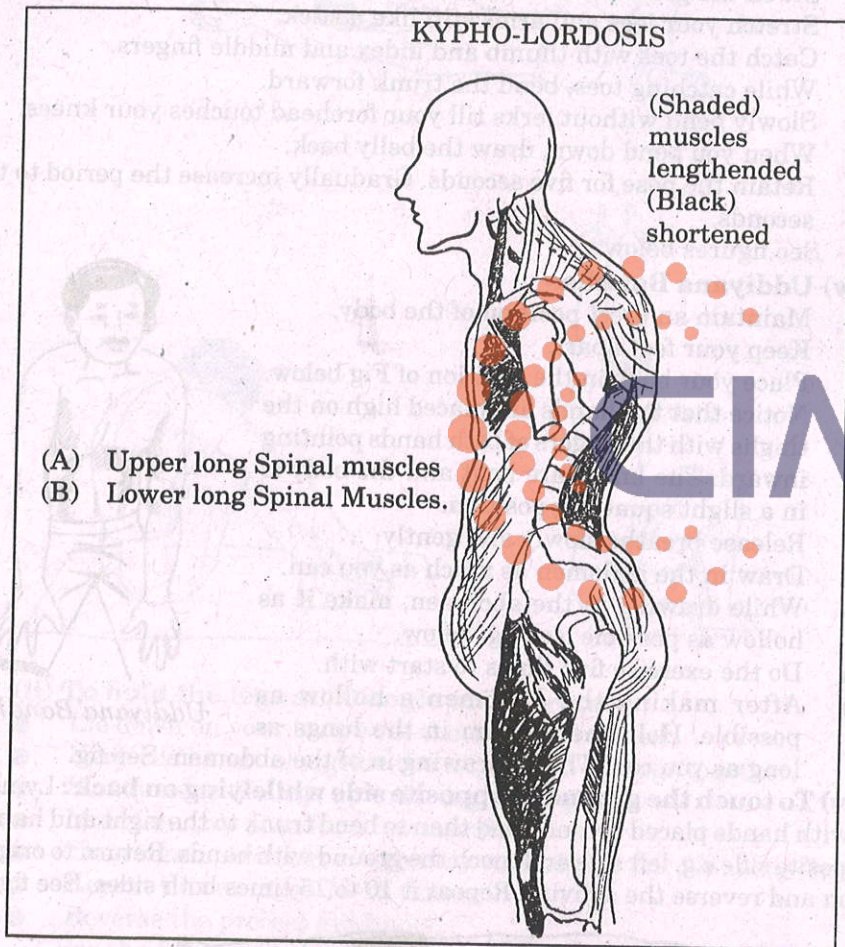
(v) To touch the ground in opposite side while lying on back : Lying on back, with hands placed behind head than to bend trunk to the right and hand to the opposite side e.g. left side and touch the ground with hands. Return to original position and reverse the activity. Repeat it 10 to 15 times both sides. See figure:



3. Kypho- Lordosis or Round & Hollow back : This deformity is the mixture of both the deformities mentioned above i.e. Kyphosis and Lordosis. Sometime a person gets suffered with both the deformities at the same time. In this deformity upper long spinal's muscles become lengthened and lower long spinal muscles shortened. In this situation, we should treat the Kyphosis first for this purpose. We can repeat the exercise given above in case of Kyphosis, may be repeated to remove this defect first and then take up the lordosis side of the body. The exercises in both causes have already been given above:-

See the figure for 'Kypho-lordosis deformity below:-

Causes:- Causes for Kyphosis are weak muscles, Long illness, malnutrition, deficient, ventilation, over crowded places, weak eye sight, Rickets etc.

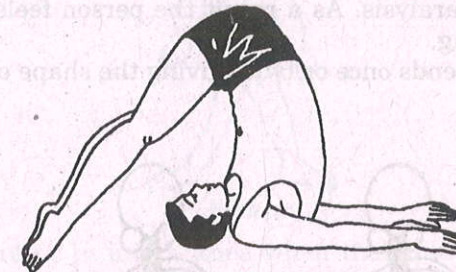


4. Rigid Spine : It is a defect in the back bone. When flexibility of the body is almost lost, then it is said rigid spine. In this case, the chain of bones of the body is rusted and the part of neck and trunk give pain while we try to bend down.

Causes : The habit of long sitting and idleness, due to an injury on the trunk. Due to dryness of the fluid of bones, then this condition occurs.

Treatment :

- (1) Stride standing position, then trunk flexion, touching left feet toes with opposite hands. Repeat it to opposite side i.e. touching of right feet with left hand. Repeat it 10-15 times.
- (2) Standing position feet a few inches apart and pulling trunk downwards slowly with raising hands upward and then to touch the ground with both hands and then slowly back in original position. Repeat it 10-15 times.
- (3) **The Plough Pose or Hala Asana :** Hala means a plough in Sanskrit. In this pose, the body assumed the appearance of a plough.



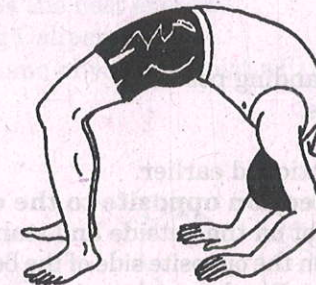
Plough Pose

The Technique:-

- (i) Lie flat on the ground.
- (ii) Stretch out the whole body. Make yourself quite straight.
- (iii) Bring the heels and toes together.
- (iv) Lift your body. Throw the legs forward.
- (v) Bring your thigh above your head. Your legs will be on one side, your arms on the other side. Hold this pose, for a few minutes.

See figure below for various stages of this Asana before the final pose. Then return to the normal position.

4. The Bridge Pose or Chakra Asana



Bridge Pose

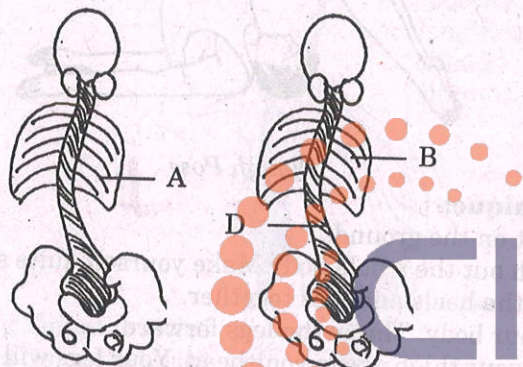
The technique:-

- (i) Lie down on your back.
- (ii) Fold your legs at the knees.
- (iii) Bring the heels near the hips.
- (iv) Keep the heels about two to three inches apart from each other.

- (v) Let the knee also be apart from each other by about three or four inches.
- (vi) Make a semicircular shape of the body.
- (vii) If necessary, support the trunk with your hands on both sides.
- (viii) Using the force of your hands and legs, slowly push yourself up until your body is fully extended in an inverted (see figure). Feel the blood rush to your head.
- (ix) Hold the pose for a few seconds. Then let yourself down slowly to the original position
- (x) Repeat it 1 to 2 times

5. Scoliosis or Lateral Curve to the Spinal Cord : In scoliosis defect, the Vertebral column and the shoulder bend to the right or left side. There is one sided infantile paralysis. As a result the person feels pain in the back, lameness while walking.

The spinal cord bends once or twice giving the shape of letter 'C'. See the fig. 6.05.



Scoliosis or lateral curve to the spinal cord

Causes :

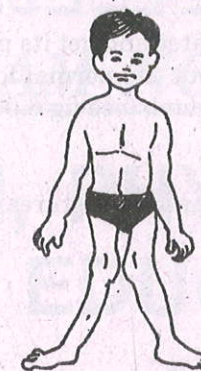
- (1) Improper development of legs.
- (2) Marasmus
- (3) Heavy weight lifting
- (4) Diseases of bones
- (5) Paralysis
- (6) Defective sitting or standing postures.
- (7) Disease of the muscles:

Treatment :

- (1) Bar exercises as mentioned earlier.
- (2) **Bending in the direction opposite to the defect :**
 - (a) Open both the feet on the outside and stand.
 - (b) Raise the hands on the opposite side of the bend of vertebral column and touch the ear. Bend the other side hand down and touch the ground. Repeat this 10-15 times.
- (3) Join the feet and stand, swing the hands over the head in the direction opposite to the bend.
- (4) Breast stroke in swimming.
- (5) Bending and swinging exercises.
- (6) Sleeping on pillow on the opposite sides of the bend.

6. Rickets : It is also called marasmus and occurs in children up to 5 years.

Causes : The rickets is caused because of the deficiency of Vitamin D, Calcium, Phosphorus, salt and sunlight or due to the lack of nutrition, milk, unhealthy environment in the home and impure air. Remedy lies in removing the causes. See fig. below.



Rickets

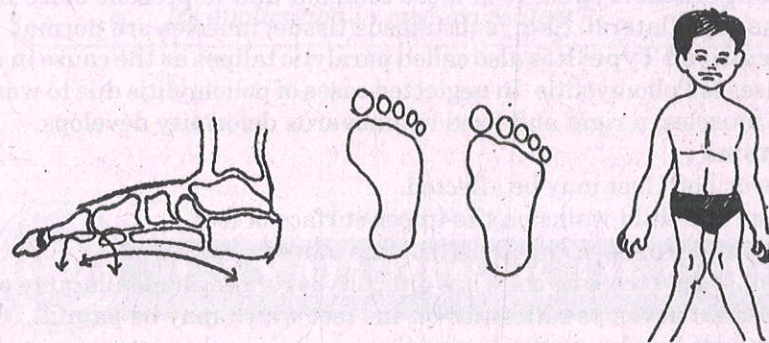
7. Knock Knee : In knock knee when the child stands, the knee join together and the feet parallel. There is a big gap between the ankles varying directly with the degree or deformity. see fig.

Causes : (1) Rickets

- (2) Deficiency of Vitamin D and Calcium in the diet.
- (3) Prolonged standing
- (4) Flat foot
- (5) Obesity
- (6) Heavy body weight
- (7) Chronic illness

Treatment :-

- (1) Use of shark liver oil in diet will help in the deficiency of Vitamin D
- (2) Treatment for flat foot should be given.
- (3) Avoid prolonged standing.
- (4) Horse riding is the best exercise.
- (5) Wear walking Calipers
- (6) Massage by some physiotherapist will also help.



Healthy Foot

Flat Foot

Knock Knee

8. Flat -Foot : A healthy foot has two curves:-

(i) Longitudinal from the heel to the thumb.

(ii) **Transverse-** From the side of thumb to little finger

The flat foot does not have these curves. The place of curves is elastic or hard. The elastic foot curve is formed during walking and running functions but is not visible. The hard foot curve does not function.

Flat foot Test :

(i) Dip the foot in coloured water and get its print on the ground or paper.

Flat foot impression is complete but the normal foot impression is incomplete and cut out from the feet to the thumb (see fig 6.06, 6.07, 6.09)

Causes:

(i) Weak foot muscles

(ii) Defective walking and standing postures.

(iii) Over weight

(iv) Defective shoes

(v) Lack of exercise

(vi) Injury

Treatment :

(i) Special shoes - Such as raising the inner sides of the soles and heels, to throw body weight on to the other side of the feet, will help.

(ii) Remedial exercises to strengthen the muscles, which keep up the arch, will help

(iii) Walking on outer sides of the feet is good.

(iv) Long standings should be avoided.

(v) In case of pain in feet, give complete rest.

9. Talipes : Talipes is of different types. They are described below briefly.

(1) **Talipes equinus :** In this case, the person walks on toes (like a horse). Tendon Achillies is short.

(2) **Talipes Calcaneus:** In this case, the person walks on heel as calf muscles are short.

(3) **Talipes Varus:** In this case, the person walks on the outer border of foot.

(4) **Talipes Valgus:** In this case, the person walks on inner border of foot.

10. Talipes Equinovarus (Club foot) : It may be (a) Congenital (b) acquired

(a) **Congenital Types:** It is most common and is present since birth, usually bilateral. Skin, subcutaneous tissue, muscles are normal.

(b) **Acquired Type:** It is also called paralytic talipes as the cause in most cases is Poliomyelitis. In neglected cases of poliomyelitis due to wasting of muscles, a rigid and fixed equinovarus deformity develops.

Symptoms :

(1) One or both feet may be affected.

(2) When the child walks on the upper surface of foot.

(3) The child walks on the upper surface of foot.

(4) Gait is defective and child has difficulty in running and falls quite often.

(5) The child develops callosities on the feet which may be painful.

Treatment: It is by surgical operation.



LAXMI[®]

EXAM NOTES

HEALTH, PHYSICAL & YOGA EDUCATION

[Paper- 5 (B)]

UNIT-I

4. Communicable Diseases

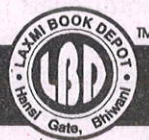
- Meaning and Characteristics
- Mode, control and prevention
- First Aid- Meaning and scope
- Qualities and duties of a First- Aider

5. Yoga Education

- Meaning and importance of yoga
- Aims, scope and functions of yoga education
- Components of Patanjali's Ashtang Yoga

6. Yogic Diet

- Concept and types of diet / food
- Its application in modern context



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LAXMI BOOK DEPOT

Communicable Diseases

4.1 COMMUNICABLE DISEASES : MEANING, CHARACTERISTICS, MODE, CONTROL AND PROVENTION

1. What do you understand by infectious diseases? Describe any two such diseases, their causes and prevention measures.

Or

What are the various infectious diseases which are prevalent among school children? Give suggestions for their prevention.

Or

Write names of some common infectious diseases. How can school health programme help in checking the spread of such diseases among the students?

Or

What do you understand by communicable diseases? Explain signs, symptoms and preventive steps of any three communicable diseases.

Or

What do you understand by communicable diseases? Explain their general modes of transmission and means of prevention & control.

Ans. Infectious diseases continue to dominate the health scene in less developed parts of the world. Recently in more affluent countries incidents of communicable diseases have shown dramatic fall in the last 50 years. In less developed countries, especially in the tropics infection continues to be one of the commonest cause of death particularly in children.

Each infectious disease is caused by a distinct type of germ and virus, which is too small to see with human eye but can be seen with the help of a powerful microscope.

No doubt all germs are not dangerous and some of them are very helpful and necessary for human life. Many of the dangerous diseases are caused by viruses which are much smaller than germs.

Meaning of Communicable Disease

It is a disease which can be transmitted from one person to another, either directly or indirectly. These are of two types:-

- (i) **Contagious diseases:** When the infection is transmitted by direct contact with infected person or object.
- (ii) **Infectious diseases:** When infection is transmitted through the pollution of some media like food, water and air.

Contagious and infectious diseases have a few things in common. Both signify the existence of some effective material, which when transmitted from one person to another, find a suitable soil in the later and starts increasing, so as to produce a specific disease.

So, thus infectious diseases are which spread from one source to the other, but without the direct knowledge of the person who is suffering from it.

Causes: Each type of infectious diseases is caused by a distinct type of germ and virus. One type of germ can cause only one particular diseases. So, there is difference in the site of infection and in the severity of symptoms of different diseases. It is interesting to note that like all other living things, germs also require suitable conditions of food, temperature and moisture for their growth and reproduction and an infectious disease becomes a community problem.

- (i) The infection is either through the mouth due to contaminated food or liquid or unwashed hands.
- (ii) In some cases, infection is caused by direct contact, one touches or is touched by an infected person, such as hand to body and hand to mouth contact, or sexual inter-course.
- (iii) Indirect contact diseases are caused by water, air, food or influence of environment or atmosphere.

How does the Disease spread?

The germs and viruses that bring about the spread of various contagious and infectious diseases come out of one person and find entry in the body of the other person.

In this way, they bring with them injurious things from one body to another body and disease is spread.

Modes of Transmission of Communicable Diseases

There are different types of the germs for each communicable disease. Some germs are of comma (,) type, others are of a bending stick type (i), some are of like water wave (= = =), some are of like stick or T (T) type.

All these germs enter into healthy body by various means of transmission and multiply themselves there in number and then attack the body.

There are several routes by which germs gain entry into human body. They are generally spread in one or more of the following ways:-

1. Droplet Infection: That is to say by minute droplets, carrying the germs which are coughed or sneezed into air by the patient suffering from disease. These droplets can be projected into the air upto 10 feet or more at a very high speed. They are expelled while talking and breathing (exhale). Respiratory tract infections and many of the common infectious diseases of childhood such as measles, influenza and whooping cough.

2. Oral Faecal Spread : (Spread through food and a drink) The next common mode of spread by infected food, water and dirty hands of those who prepare and handle food. Low standard of personal hygiene, amongst Kitchen workers causes cholera, dysentery, food poisoning and typhoid fever. Handwash and proper disposal of the night soil are the vital factors in the prevention of such infection.

3. Direct Contact : Sexually transmitted disease (S.T.D) like syphilis and scabies spread by contact with the infected individual or by wearing other's clothes or sleeping in infected bed linen, kissing, handshaking etc.

4. Through Intermediary Host : The organism adopt various means like lice fleas and mosquito to carry infections to different patients. Thus mammals cause disease like rabies. Blood sucking insect are important mediators (Vectors) in the transmission of many important diseases such as malaria, filaria etc.

5. Through Cuts in skin : Sometimes cuts occur in the skin through accidents or with sharp blades, knives and other similar weapon. Germs enter through such cuts in the skin and spreads infectious diseases like tetanus etc.

6. Infection resulting from bacteria already within the body Disease Carrier : Bacillus Coli lives in the large intestine of the body and is harmless. If the organism get access in to the bladder as happens in ladies, this results in cystitis.

When a person having disease germs and passes them on to the other, without becoming ill from himself, he is known as a disease carrier. In other words, his body is immune or tolerant to infectious germs that may cause the disease in a very active form in others. Disease like typhoid may spread in this way.

7. Through genital passage : The organisms of venereal diseases gain access to the body via genital passages. Diseases like S.T.D. , syphilis and gonorrhoea spread in this way.

Common Symptoms of Communicable diseases

Every Communicable disease has some specific symptom but some of the symptoms are common in all like:-

- (i) Shivering is one symptom. The patient feels cold before and during the rise of temperature.
- (ii) There is rise in temperature. It is because of the toxin produced due to germs, which upsets the balance between the heat production and heat consumption of the body.
- (iii) Rise in temperature is followed by rashes on the skin. It is due to the excretion of waste matter, accumulated in the sweat glands and other body parts.
- (iv) Headache, nausea or vomiting and sore throat are very common symptoms.

Stages in Infectious Diseases

When infection occurs in a person, it may spread to other parts of his or her body, increasing the severity of the disease. It may spread directly through tissues as happens in bad cold, through the blood stream as happens in blood poisoning through the lymphatic system or through the nervous as happens in rabies.

There are the four ways through which the diseases may spread.

After the entry of the germs in human body, there are three distinct stages which are given below:-

1. Incubation Period : It is the interval from the time the germs enter the body and the appearance of actual symptoms. The length of this period differs in case of different diseases usually the period is from one to several days.

During this period the germs settle down, multiply and produce their poison. But in this period, the patient generally, does not communicate the disease to other.

2. Active demonstrable Period : At this stage, characteristics symptoms appear and the patient becomes definitely sick. Generally the duration of most of the infectious diseases is short, but in case of tuberculosis, the symptoms may last for years. During the period, the patient feels headachè, pain, fever, dizziness, irritation, redness and coughing.

3. Decline period - At this stage the symptoms of diseases are reduced slowly and patient gets some relief.

4. Convalescent Period : This period follows the active period, when symptoms are pronounced. During this period, recovery process is at work and the health of the patient begins to get restored. But at this stage, there is a likelihood of complications, involving other organs, either by spreading of same germs or infection from other germs. So, we should always guard against such complications.

Prevention and Control of Communicable diseases

It is very important that the spread of infectious diseases be checked and controlled immediately, otherwise the health of entire local community can be in danger. The following steps may be taken for their control:-

1. Information to Authorities or Notification : The local authorities should at once be contacted and informed of the occurrence of any case of infectious disease. Then health authorities will take immediate steps to check the spread of that disease in the community by notifying its consequence, symptoms and preventive measures at public places such as Railway stations, bus stand etc. This information is essential in case of diseases like cholera, small pox, malaria and plague.

2. Isolation of the Patient : Another important step of controlling the spread of infectious disease is the isolation of the affected person from healthy people, who come in contact with him. The patient may be isolated in a separate room, away from the members of his family. If there is no separate room in the house, the patient may be shifted to the isolated ward of a hospital. Only those persons, who attend the patient, should be allowed to go into his room. By this way, the spread of infectious disease can be checked to a great extent.

3. Disinfection : After the recovery of the patient, the clothes, bedding, utensils, furniture, etc. used by the patient, should be got disinfected and his room be fumigated.

In the absence of this step, the infection may pass on to other members of the family after some time.

4. Good hygienic and sanitary Practices : The next important step of prevention and control of diseases is personal cleanliness. It consists of keeping all the house hold articles and utensils quite clean, washing hand with soap, flush water after toilet, after handling a patient and not eating or drinking food stuff exposed to dust and flies.

5. Immunization: This is also essential for controlling the spread of infectious disease. All the members of the patient's family should take the preventive inoculation. In case of epidemic, mass immunization is must. But in the actual treatment of infectious disease, drugs and antibiotics are invaluable.

6. Segregation : Person from the infected house must be secluded or isolated from going to school or office or in the crowd until the risk of carrying the infection with them is over.

7. Quarantine : In case of suspicious of carrying of the germs or having been exposed to infection, the person should be isolated to prevent the spread of infection until the incubation period of that particular disease expires. During the period, the person should be kept under observation. He will either develop the symptoms of the disease or will be free from infection.

8. Fumigation : It is a process by which the destruction of insects, such as fleas, mosquitoes, bedbugs and body lice and animals like rat is accomplished or completed by the employment of gaseous agents.

9. National measures : To eradicate any disease, National means are adopted to eradicate any disease from the scene. Due to national efforts, the small pox has been eradicated from the India and similarly, India is trying to eradicate Polio from India by declaring Polio Free India.

Various Common Communicable Diseases found in school Children

In simple words, communicable disease is that which is transmitted or transferred from one person to another, either directly or indirectly.

Infectious diseases are those which are spread from one source to the other, but without the direct knowledge of the person who is suffering from it.

The common ailments of school children are measles, chickenpox, small pox, whooping cough and Diphtheria

I. Disease spread through Air : During coughing, sneezing and speaking loudly, small drops of sputum which are laden with germs are sprayed into air. When this air is inhaled by a healthy person, the infection is conveyed to him. Infectious diseases spread through air are:-

1. Small -Pox : Small pox stands eliminated from India. It is known as serious infectious disease not only children, even the grown-ups also come under the grip of this infection.

Causes: It's major spreading virus is variola. It's germs are given off in the breath, excretions, and scabs from the skin. Droplets spread contamination, from the skin lesions and fornicates.

Incubation period : The incubation period of small pox is 10 to 14 days

Symptoms and signs :

- (1) There is chill with fever and headache in the beginning.
- (2) Severe pain in the back and limbs of the body.
- (3) Sometime face becomes red.
- (4) After three or four days eruption appears on the forehead, then spread throughout the body and become watery after four days.

- (5) Itching feeling is also there in eruption.
- (6) Fever remains high for eight to nine days. After that fever will start diminishing and scabs also begin to dry and when the scabs fall off, they leave permanent pits or marks for life and make the face disfigured. If pock appears in the eyes, it causes blindness.

Treatment :

- (1) Keep the patient in dark room.
- (2) Keep the patient warm in bed.
- (3) If the temperature goes very high, cold sponge should be done.
- (4) Give liquid diet to the patient. Plenty of water should be given to drink.
- (5) Use hot fomentation to relieve pain in back and legs.
- (6) Keep the bowels cleaned, if necessary give an anaema.
- (7) To relieve itching, anointing with carbolated vaseline will be effective.

Precautions:-

- (1) Primary vaccination of all new born at 3-9 months should be given.
- (2) To control infection report to the health officer immediately.
- (3) Do not allow any child to come to the school if suspicion of any spot is seen on the face or arms.
- (4) Isolate the patient.
- (5) No person from the infected house should attend school or office.
- (6) Vaccination should be given to healthy children for protection.
- (7) No medicine should be given except proper nursing.
- (8) Patient should not be given salt.

2. Measles : Commonly it is a disease of the preschool children and is not considered to be very serious. But if any case of measles is not nursed properly, it may develop complications and cause death. It may start convulsion in children.

Complications:

- (i) Convulsions in children.
- (ii) Diarrhoea and infection of ears.
- (iii) Malnourished children health may further deteriorate.
- (iv) Pneumonia

Causes: This disease is caused by some ultra-microscopic viruses.

Incubation period: The incubation period of this disease is 10 to 14 days.

Symptoms:

- (i) There is temperature for a few days.
- (ii) In some patients certain raised patches appear, first on the forehead below the hair and then they appear, all over the body.
- (iii) The crusts of the patches are formed after three or four days when they are fading.
- (iv) Patches are generally red in colour.

Treatment:-

- (i) Fever can be reduced by aspirin or paracetamol.
- (ii) Keep the patient in bed in a well ventilated room and protect from Chill.
- (iii) Its vaccine should be given to other children in the family to avoid infection.
- (iv) Isolate the patient from other children.
- (v) Protect the patient from bright light.

- (vi) Proper care of the child should be taken otherwise it may develop from chitia.

(vii) Keep the body of the patient clean by giving bed bath.

- (viii) If diarrhoea develops, give oral rehydration Powder(ORP), boiled milk and plenty of fluids.

Precautions :

- (i) Give measles vaccine injection at 9 months of age and repeat at 15 months of age. Such children are less prone to attacks of diarrhoea.
- (ii) Children suffering from this disease should not be sent to school for three weeks of the appearing of bloches or rashes.
- (iii) Quarantine the child if exposed to infection.
- (iv) Close the school if it is in the form of epidemic.
- (v) Parents should be instructed or educated in the methods of controlling it.
- (vi) Inform the health officer of the area.

3. Whooping Cough : Whooping cough is a very serious disease of the young Children.

Cause : The cause is a specific germ spread by direct contact or through droplets. The disease is most contagious specially during incubation period when its symptoms do not appear clearly.

Symptoms:

- (1) The patient breathes fast after coughing.
- (2) The face grows red.
- (3) A feeling of nausea causing vomiting.
- (4) The sound of coughing resembles hooping or whistling.

Incubation period : The incubation period of this disease is from 6 to 18 days.

SK Complications: (1) Convulsions.

- (2) Ulceration of mouth.
- (3) Broncho- Pneumonia which may cause death.

Treatment:-

- (i) Keep the patient warm in bed but plenty of fresh air should come in the room.
- (ii) Avoid chilling the patient.
- (iii) Give liquid and easily digestible diet. Avoid fatty foods. Generally the fit of the cough start when the patient eats anything. Due to vomiting, the child becomes malnutritive.

Precautions:

- (1) Get the child vaccinated against whooping cough.
- (2) Homoeopathy has its best treatment. Drosera has proved to be very effective.
- (3) When the disease is prevalent in the area, prevent the child from mixing with other children even if he suffers from cold and respiratory Catarrhs.
- (4) Infected children should be excluded from school for at least two months.

4. Tuberculosis : It is a chronic and infectious disease, but curable and preventable. About 1.5% population is suffering from active tuberculosis and out of these ¼th are infectious, who pass tubercle bacilli in sputum and spread disease.

Causes: It is caused by Tubercle bacillus also known as Koch's bacillus (After the name of Robert Koch who identified it). It can live for several months in dried sputum and is not destroyed by gastric juice.

Pre-disposing factors:

- (i) Bad food and non-nutritive diet.
- (ii) Lack of ventilation and fresh air.
- (iii) Heredity.
- (iv) Dusty and damped atmosphere.
- (v) Lack of vitamins and blood in the body.
- (vi) Addiction to alcohol, chain smoking.

Types: Types are identified according to presence of the tubercle bacillus in men, cattle (bovine) and birds which are rare. The bovine type is responsible for 10% cases.

Source of infection: The main two sources of infection are:-

- (i) Infected sputum
- (ii) Infected milk and meat.

When the sputum dries up, tubercle bacilli are scattered freely in dust. The bacilli are also discharged while coughing and sneezing. Tubercle bacillus enters the body by droplet infection or by taking infected meat or milk.

Symptoms :

- (1) Low grade fever with night sweats not relieved by any drug.
- (2) Persistent cough with or without blood.
- (3) Lassitude, loss of appetite, loss of weight, anaemia, rapid pulse and diarrhoea.
- (4) Tubercle bacilli can effect any part or organ of body. Hence the patient may present symptoms referable to that organ.
- (5) The disease begins with coughing. After some time, there is pain in the chest and the throat.

Treatments & Prevention:-

- (i) Knowledge about balanced diet.
- (ii) Providing better ventilation in houses
- (iii) Improving environmental sanitation.
- (iv) The infective cases can easily stop the spread of disease by covering mouth with piece of cloth while coughing and sneezing.
- (v) The children should avoid playing in dusty areas.
- (vi) The person suffering from tuberculosis should be kept away from others.
- (vii) The patient should be sent to some Sanatorium.
- (viii) B.C.G. vaccination produces good resistance to the disease.
- (ix) Living places should be kept clean and free from smoke, dust and dirt.
- (x) The sputum and excreta of the patient should be burnt properly.
- (xi) Regular morning walk is very helpful.
- (xii) The patient should be kept free from worries.

5. Influenza: Influenza is an active illness. It is an Italian word meaning influence (referring to the influence of stars).

Causative factors: Influenza is caused by a group of virus. These are of the following three types:-

(i) **Type A (Flu of the gastric):** It causes virulent disease which pandemic in nature and is a major epidemic. Vomitting and diarrhoea also occur in addition to the general symptoms of influenza.

(ii) **Type B (Flu of the nervous).** It causes less virulent disease having headache, bodyache, sleep lessness and mental depression are more dominating.

(iii) **Type C (Flu of the respiratory):** It occurs rarely. Eyes and nose become watery, nose gets blocked and makes breathing difficult. Its tendency is towards pneumonia.

Spread: Droplet infection from man to man by coughing, sneezing and fomites etc.

Incubation period: Its incubation period is 1 to 2 days and duration of disease is one week.

Symptoms :

- (1) Person suffering from influenza may have fever of a order of 104 degree F.
- (2) There may be pain in waist and the feet and illness starts suddenly with patient feeling feverish, headache, nausea and vomiting.
- (3) The fever remains for two to three days with chills.
- (4) There is sneezing and irritation of nose or throat and later running of nose. The face with sneezing is flushed.
- (5) Conjunctive is congested. Pulse is rapid and there is harsh cough.
- (6) Causes excessive weakness

Prevention :

- (1) Do not send the child to school for at least 2-3 weeks in severe cases.
- (2) Isolate the patient and keep his utensil separate.
- (3) No common tubler should be used in school.
- (4) Keep the child under observation.
- (5) School should be closed during epidemic and avoid taking bazaar things.
- (6) Patients should be given boiled water.
- (7) Children should be clothed adequately with woolens in winter.

Treatment :

- (1) Keep the patient warm in bed. Avoid chilling patient otherwise he is liable to get bronchitis or pneumonia.
- (2) If symptoms of broncho pneumonia appear, take the patient to the hospital or consult a physician.
- (3) Give liquid diet to the patient.
- (4) Medicated steam inhalations will relieve blocked nose and help smooth breathing.
- (5) Keep the room temperature warm.

(11) Disease caused by Food and Water: The infection is either through the mouth due to contaminated food or liquid or unwashed hands. Fly is also a carrier of the infection. Generally a fly sits on the sputum of a patient and on the other hand, it sits on the food. Hence it causes various diseases like cholera, dysentery, diptheria, scarlet fever, typhoid and tuberculosis etc.

(1) Cholera- Cholera is an acute infectious disease of the gastro-intestinal tract caused by microbes, known as Vibrio-Cholera. These are comma shaped. The germs develop into lacs in the stools and intestines of the patient and spread in the earth and water.

Prevention-

1. Protect the stored water and purify it by chlorination and boiling.
2. Disinfect the toilet (excreta).

3. Prevent against fly breeding.
4. Boil milk and protect milk products from contamination.
5. Proper supervision of sanitation in the town particularly near eating places and make pro-up to causes 1961 most of the out-breaks of cholera were caused by Vibro Cholera but the 7th pandemic which originated in Sulawesi was caused by Vibro Cholera(Eltor). Other offenders in the list are Vibria Inaba, Orgawa, flies and Hikojima.

Mode of Spread and Predisposing factors:-

- (1) Contamination of water, eatables, milk by indiscriminate defecation, flies and food handlers.
- (2) From one person to another by contact.
- (3) Cholera affects low socio-economic groups with poor hygiene. Also in fairs where low standard of hygiene is observed.

Incubation period: The incubation period of cholera is a few hours to five days.

Symptoms & Signs:-

- (1) After ingestion, the cholera germs produce toxin in the stomach and intestine where they multiply, hence leading to violent diarrhoea and vomiting. This leads to severe dehydration, intense thirst and even death.
- (2) There is sudden vomiting and purging with excessive rice watery stools.
- (3) The patient feels thirsty, eyes and cheeks are sunken, skin gets pale and shrivelled hands and feet become cold.
- (4) Blood pressure falls leading to shock.
- (5) The child may get fever with convulsion or coma.
- (6) Urine is scanty and severe pain in the body.

Treatment and Precautions:

- (1) Report to the health officer immediately.
- (2) Inoculation against cholera should be given to the patient and other members of his family. The immunity lasts for 3-6 months.
- (3) Patient's vomiting and stool should either be burnt or some disinfection should be used.
- (4) Boiled water should be used for drinking purposes.
- (5) Avoid eating outside the home during epidemic, specially avoid eating chat from the vendors.
- (6) Vegetables and fruits should be washed in a dilute solution of potassium permanganate.
- (7) Water of the village well should be chlorinated or potassium permanganate.
- (8) Keep the drains neat and clean by using disinfectants.
- (9) Do not keep the eatables open to flies.
- (10) Special care should be taken in storing of drinking water in the school.
- (11) The toilets of the school should be cleaned. Better use sanitary toilets for proper disposal of human excreta.
- (12) Use of over ripe, rotten, cut fruit like watermelon should be avoided.
- (13) Avoid prevention of fly breeding with proper disposal of garbage.

(14) Knowledge of preventive measures be imparted to the mothers and the community people.

(15) Treat dehydration by replacing fluids by ORS solution (oral rehydration mixture).

(16) Give pectin kaolin suspension.

2. Typhoid: Typhoid occurs where sanitation is primitive. Outbreak occurs from time to time where infection contracted by persons travelling abroad. It has worldwide distribution.

Causes: Typhoid is caused by bacillus typhus. Salmonella typhi and Paratyphi. Other members of salmonella group many of which cause infection and disease in animals produce disease in man ranging from mild food poisoning to serious infection.

Mode of Spread:- Contaminated food, milk, milk products and water by faeces and carried through unwashed hands, flies etc.

Incubation period: The incubation period of this disease is 10 to 14 days.

Symptoms : (1) The onset of Typhoid is slow.

(2) The patient feels frontal headache, loss of appetite, cough coated tongue, continued fever, loss of weight, malaise, slow pulse.

(3) Rash may be seen on abdomen.

(4) The rash may be seen on abdomen.

(5) The untreated case will be severely ill, with rapid pulse.

Prevention:

(i) Protect the stored water and purify it by chlorination and boiling.

(ii) Disinfect the toilet (excreta).

(iii) Prevent against fly breeding.

(iv) Boil milk and protect milk production from contamination.

(v) Proper supervision of sanitation in the town, particularly near eating places and provision of hand washings.

(vi) Immunization with typhoid vaccine at regular three yearly intervals to school children, infected persons, travellers and crowds in the fairs.

Treatment:-

(1) Give complete bed rest to the patient.

(2) In case of high temperature give cold compress. Ice bag on forehead will relieve headache.

(3) In case of pain in the abdomen, fomentation with hot water bottle will help.

(4) Give aspirin or paracetamol tablet to bring down the temperature.

(5) Give liquid and easily digestible diet.

(6) Give information to the health authorities.

(7) Chloromphenicol capsules can be given with the consultation of the Physician.

3. Dysentery : The dysentery is of the two types :

(i) Bacillary dysentery and

(ii) Amoebic dysentery.

(i) **Bacillary Dysentery:-** This type of dysentery is caused by bacillus shigella.

Incubation period of this type of dysentery is 1 to 7 days.

Mode of Spread: Faecal contamination of water or food, poor nutrition, poor sanitation, overcrowding, flies and unclean hands are largely responsible for infection. More commonly seen at fairs.

Symptoms: (i) It has sudden onset with nausea, vomiting, frequently loose stools which have more blood, mucus and pus.

(ii) In severe attack, there is fever, pain or aches in the body.

(iii) Cold, clammy skin, fingers wrinkled, eyes sunken, voice is hoarse, urine scanty.

(iv) The patient feels thirsty, skin and tongue are dry.

(v) Soon dehydration sets in with marked prostration. There is fall of blood pressure, rapid weak pulse and shock.

Preventive Measures :

(1) Prophylactic. Always wash hands with soap before cooking, eating and after going to toilet.

(2) Do not eat unwashed vegetable or eatable sold on pavements which are not covered from flies and dust.

(3) Do not wash clothes near well, pump or any source of drinking water.

(4) Keep fingers nail trimmed and maintain proper cleanliness.

(5) Use proper toilet for defecation.

(6) Use oral rehydration solution at repeated intervals.

(ii) Amoebic Dysentery : It is caused by *Entamoeba Histolytica* – a protozoa.

The incubation period of this type is from 3 to 4 weeks.

Mode of infection : The mode of spread of this type of dysentery is same as in bacillary dysentery.

Ingestion of water or food contaminated with faeces from flies and food handlers.

Symptoms:-

(1) It runs a chronic course with mild pain, 3 to 5 stools a day.

(2) There may be diarrhoea alternating with constipation.

(3) The stools copious, offensive, dark red containing blood and mucus mixed with faeces. If the toilet is flushed it does not adhere.

(4) There is pain in the abdomen.

(5) Perforation of intestine, liver, lung and brain abscess.

Prevention and Treatment- Same as for bacillary dysentery.

(i) Sanitary disposal of faeces.

(ii) Protection of water supply.

(iii) Fly control and protection of food.

III. Diseases caused through Germs “ Certain insects transmit disease through bites on the skin. The examples of this type of diseases are Malaria, yellow fever, plague and sleeping sickness.

(A) Plague: The word ‘plague’ is used to describe any epidemic disease with a high death rate. More specifically, it refers to a serious infectious disease of rats, caused by the bacterium *Yersinia pestis*.

Mode of spread: This is transmitted to human beings by blood-sucking rat fleas. It is spread from person to person mainly through infected droplets expelled during coughing and sneezing.

The plague was the cause of the Black Death, which killed more than half of Europe’s population. Outbreaks occur both in rural communities and cities, in areas where housing conditions and sanitation are poor, they are usually associated with infected rats and rat fleas that live in the home.

Type of Plague: There are two types of plague commonly known as:

(a) Bubonic Plague : Bubonic plague, the more common form of the disease, has an incubation period of two to six days.

Causes: (i) Bubonic plague is a infectious disease caused by bacterium *Yersinia pestis*.

(ii) The disease mainly affects rodents but may be transmitted to a human being through the bite of an infected rodent flea.

Symptoms: Early symptoms are:-

(i) Headache, nausea, vomiting and aching joints

(ii) Sufferers develop painful swellings (Buboes) in the armpit, groin or occasionally the neck and fever.

(iii) After about a week, the buboes may burst and discharge pus, and then heal. Otherwise subcutaneous (under the skin) bleeding may occur.

(iv) This produces black patches, and can lead to ulcers that may prove fatal.

Treatment: Urgent treatment with antibiotics is essential for recovery. If bubonic plague is left untreated, death is likely within one to two weeks.

(b) Pneumonic Plague: Pneumonic plague, in which bacteria enter the lungs, can occur as a complication of bubonic plague.

Causes:

(i) It is also transmitted by coughing and sneezing.

(ii) The skin of a pneumonic plague victim turns purplish and the patient becomes exhausted and left untreated, most pneumonic plague victims will die.

Prevention: A vaccine is available for people at high risk. The injection gives protection for six months.

Treatment: Both forms of plague respond to antibiotics, especially streptomycin; prompt treatment reduces the risk of death to around 5%.

(B) Malaria : Malaria is a very common disease which is spread by the bite of female mosquito.

Malaria is an infection caused by a protozoan producing fever, shivering and sweating.

Vector: Malaria spreads quickly from sick person through female mosquito which bites the human beings at sunset or at night and sucks blood along with the malaria parasites which are present in the sick person. These germs multiply in the body of mosquito. When this infected mosquito bites another healthy person, it sucks blood and during this process regurgitates a part of its saliva and thereby injects and deposits malarial germs in the blood of that person. The malarial germs now multiply in his blood and in a few days, he gets sick.

Case and type of Malaria: Malaria is caused by a protozoan ‘Plasmodium’ which is of three types :

- 1. Plasmodium Falciparum:** It causes malignant tertian fever which recurs every 48 hours. It has high mortality. If not treated, it lasts for one year.
- 2. Plasmodium vivax:** It causes benign tertian fever. It recurs every 48 hours and lasts for 3 years if not treated.
- 3. Plasmodium Malariae:** Fever recurs every 72 hours. Incubation period-usually 10 days but varies with species of malaria. For falciparum, vivax and malarial. For falciparum, vivax and malarial it is 12, 17 and 30 days respectively.

Symptoms: (i) It has sudden onset with nausea, vomiting, frequently loose stools which have more blood, mucus and pus.

- (ii) In severe attack, there is fever, pain or aches in the body.
- (iii) Cold, clammy skin, fingers wrinkled, eyes sunken, voice is hoarse, urine scanty.
- (iv) The patient feels thirsty, skin and tongue are dry.
- (v) Soon dehydration sets in with marked prostration. There is fall of blood pressure, rapid weak pulse and shock.

Preventive Measures :

- (1) Prophylactic. Always wash hands with soap before cooking, eating and after going to toilet.
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Symptoms:-

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Prevention and Treatment- Same as for bacillary dysentery.

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Treatment: Urgent treatment with antibiotics is essential for recovery. If bubonic plague is left untreated, death is likely within one to two weeks.

(b) Pneumonic Plague: Pneumonic plague, in which bacteria enter the lungs, can occur as a complication of bubonic plague.

Causes:

- (i) It is also transmitted by coughing and sneezing.
- (ii) The skin of a pneumonic plague victim turns purplish and the patient becomes exhausted and left untreated, most pneumonic plague victims will die.

Prevention: A vaccine is available for people at high risk. The injection gives protection for six months.

Treatment: Both forms of plague respond to antibiotics, especially streptomycin; prompt treatment reduces the risk of death to around 5%.

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- Symptoms:** (i) High temperature
(ii) Headache, cold and shivering
(iii) Excessive weakness, and
(iv) Perspiration.

Prevention and control of Malaria : The preventive and control measures advised by the W.H.O. expert committee on malaria are:

- Prevention of man/vector/contact by the use of repellants, protective clothes, mosquito nets and by providing wire-mesh doors to houses etc. and selection of proper sites for houses.
- Destruction of adult mosquito** by use of domestic sprays i.e. flit and fogging etc. at place of living.
- Destruction of mosquito larvae :** Prevention of water stagnation near or inside the house, drying up coolers, tanks once a week and adopting antilarva measures in big stagnant ponds and drains.
- Source reduction of mosquitoes:** By filling up small pits, cleaning drains, environmental sanitation and water management drainage schemes.
- Measures against malarial parasites:** Taking drugs as a preventive measure.

Treatment :-

- Keep the patient warm in bed during attacks of chills.
- In hot stage when the temperature rises above 104 degree F reduce it with cold sponging on head, upper and lower extremities. Never use cold sponging on abdomen. Continue sponging till the temperature comes down to 38.5° C. or 101.3° F.
- Give light liquid diet. Stress should be given on enough liquids i.e. milk, juice, water etc.
- Give aspirin or paracetamol to patient, to relieve headache and fever.
- Take the patient to nearly hospital or a doctor and get a blood slide made and if the patient is positive case of malaria, use drug like Chloroquine, Camaquine, Primaquine or daraprim as advised by physician.



2. Write short note on Aids and Poliomyelitis (Polio) stating steps for their treatment.

Ans. Aids: Acquired Immuno Deficiency syndrome is the full form of Aids.

Causative Factor: The causative organism is a Virus HTLV-III. The virus is found as harmless in Africa Green Monkeys. This virus of Aids has undergone an adaptation towards human beings due to close association. A large number of African population has migrated to European countries resulting in the wide spread of the disease.

Mode of Spread :

- Homo-sexual
- Multiple sexual partners
- Blood transfusion
- Drug addiction and indiscriminate use of infected syringes.
- Kissing
- Use of infected razor.

Symptoms:

- | | |
|---|-----------------------|
| (1) Weightloss | (2) Chronic diarrhoea |
| (3) Prolonged fever | (4) Persistent cough |
| (5) Generalized itching of skin | |
| (6) Chronic repeated infection if not relieved any treatment. | |

It is mainly prophylactic. Once the disease sets in, there is no cure.

Poliomyelitis: -History : Poliomyelitis has an age old acquaintance with human history and culture. The early Egyptian knew the crippling effect as evidenced by carving in a pyramid. They considered it a wrath of the Almighty. Heine in Germany in 1840 gave the clinical description, Landsteiner in the early 20th century proved the infective cause of poliomyelitis.

Generally known as polio, poliomyelitis is an infectious viral disease that invades the central nervous system.

Polio immunization is now wide spread and cases of polio are rare.

Causes: Poliomyelitis is caused by a virus which multiplies in gastrointestinal tract. It is of three types:

Type-I: It causes severe epidemic. It is prevalent in India.

Type-II and Type -III: They lead to moderate and mild type of symptoms respectively. Most of Polio victims experience a mild form of the disease and paralysis is more common when infection occurs in older people.

Mode of spread : The virus is excreted in the faeces of infected people, and so polio often occurs in areas with poor sanitation. But even in a modern and hygienic conditions it can strike people, who have not acquired immunity during childhood. The main mode of transmission is infected food and droplet infection.

Incubation Period: The incubation period of Polio is 7 to 10 days.

Symptoms: After entering the body through the mouth, the virus multiplies in the intestine. In the vast majority of cases, paralysis does not occur.

The virus may get no farther than the blood stream, causing mild flu-like symptoms. If it enters the central nervous system, symptoms will include headache, vomiting and stiff muscles in the neck and back. Many people recover at this stage.

Muscle weakness and paralysis occur if the virus goes on to destroy nerve cells. The limbs particularly the legs, are most commonly affected, but paralysis can occur in abdominal muscles and those of the back, neck and face. Polio becomes life-threatening if the throat or breathing muscles are paralysed.

Prevention and Control:

- The single most effective preventive measure is polio immunization.
- Isolate the patient and give bed rest.
- Improve environmental sanitation i.e. by sanitary disposal of excreta and provision of safe drinking water.
- Disinfect respiratory discharges, stools and soiled articles.
- Wash hands after attending to the patient and before handling food.
- Avoid surgery especially of nose and throat and D.P.T. immunization during an epidemic of Poliomyelitis.
- Active immunization of all infants and children with oral polio myelitis vaccine.
- If paralysis persists, rehabilitation of patient by physiotherapy should be done

Treatment : There is no cure for polio, although, specific symptoms may be treated.

The patient should be kept in bed and give absolute rest with support to the affected limbs.

Outlook: Most people make a full recovery. If nerve cells are destroyed, paralysis is permanent, otherwise muscles may recover after six months or so.

4.2 FIRST-AID –MEANING AND SCOPE

3. What do you understand by First-Aid? Enumerate its scope and essential principles.

Ans. Learning First-Aid is a civic responsibility of each citizen. An organized worldwide effort to impart first-aid came in 1877 with the formation of St. John Ambulance Association of England after the apostle of St. John.

You could be faced with medical emergency at any time, you could be the first person at the scene of a traffic accident or be present when a health crisis occurs at home, and your actions in those first few minutes may be vital. Knowing just a few simple techniques will equip you to offer basic first-aid to treat and relieve minor injuries and may help you to save a life.

What is First-Aid? Or Meaning of First-Aid :

Ordinarily, the elementary assistance given to the needy in case of emergency is known as first-aid.

Sudden accidents take place e.g. injuries, fractures, poisoning, drowning, fainting, exposure to heat or cold, electric shock etc.

Man does not have any defense against these accidents except being careful. First-aid lessens the bad effect of the accidents that have occurred.

It is an immediate and temporary aid given to the victim of an accident or sudden illness before medical help is obtained. It is not expected from First-aid to impart any treatment but to practise the basic principles of first-aid and render such help as needed by the victims till the medical help arrives. It is a help which calms the victim's fear and reduces any chance of further injury.

As per statement in the book entitled "First Aid to the Injured" "First Aid is definitely limited to the assistance rendered at the time of emergency, with such material as may be available. It is not intended that the first aider should take the place of the doctor. It must be clearly understood that the redressing of injuries and other such after treatments are outside the scope of First-Aid."

The Scope of First-Aid

The scope of first-aid includes the diagnosis, the treatment and the disposal of the case.

The Diagnosis: For diagnosis, the first aider must first know how the accident or sudden injury has occurred. This can be got from the victim if he can tell it or from witnesses. This is called history of the case.

"To identify the symptoms of the disease."

The next step in diagnosis is to watch the symptoms, like faintness, thirst, pain or shivering. Then the first aider looks at the signs which are variations from normal conditions. These may include swelling, congestion, paleness or deformity which can be very easily observed by the first aider. Signs are the most reliable indications on which diagnosis can be based.

Treatment : For treatment, the cause of the condition should be immediately removed with a view to prevent the condition from becoming worse.

Special attention should be paid to cases of reverse bleeding, shock, unconsciousness and failure of breathing.

The Quick Disposal: For quick disposal the casualty or the victim should either be examined by the doctor on the spot or if, that is not possible, he should be immediately taken to his home or to a suitable place of shelter or to a hospital, according to the circumstances. The members of the victim's family or his relative should also be informed at once.

Principles of First-Aid :

- 1. Not to take the place of a Doctor:** The first aider should never take the duties and responsibilities of a doctor. The first aider should remember that he is not a doctor.
- 2. To remove the cause of injury:** Remove the causes of injury, or the patient from the cause, as early as possible.
- 3. Crowd should be kept away:** Do not allow people to crowd around, it causes anxiety or embarrassment. Ensure the free air supply to patient.
- 4. To stop bleeding immediately:** Attend to serve haemorrhage immediately irrespective of other injuries. Bleeding must stop first of all.
- 5. Must know about A, B, C of First-Aid:** Observe the ABC of first aid according to the basic life-support.
Airway in a emergency, first check for any obstruction of the airway and then position the person to keep the airway open.
Breathing, if the victim is not breathing, artificial respiration is given mouth to mouth to ventilate the lungs and provide vital oxygen to tissues.
Circulation if there is no pulse, the victim's heart is not beating. There will be no circulation of blood, no breathing and he or she will die unless CPR (Cardio pulmonary resuscitation) is given
- 6. Watch and record any change in the condition of the casualty.** Keep special watch on the following:
 - (i) Rate and depth of breathing.
 - (ii) Rate and character of pulse.
 - (iii) Colour of face.
 - (iv) Body temperature.
 - (v) Bleeding from ear, nose or mouth.
- 7. Determine the level of consciousness.** He should check whether the patient is conscious, semi-conscious or unconscious.
- 8. Do not give anything by mouth to the patient,** who is unconscious, who has suspected internal injury, or who may shortly need an anaesthesia.
- 9. When the patient is able to swallow,** give him a stimulant, strong tea or coffee with plenty of sugar, milk as hot as can be taken.
- 10. Keep the patient warm up by wrapping him in blankets,** coat or rug or by using hot water bottle.

11. Arrange the best means of transport and make provision of proper care at the place of shelter.
12. The first aider must have complete knowledge of anatomy and physiology. It will enable him to render proper first aid to the injured.
13. The injured should be given as much rest as possible and his body should be kept in a restful position.
14. Give reassurance sympathy to the patient and next to kin; so as to lessen fear and anxiety.
15. In case of fracture, do not move the patient till bone has been made immovable.



4.3 QUALITIES AND DUTIES OF A FIRST AIDER

4. Write down qualities and duties of a trained first -aider.

Or

Write a detailed note on the need and importance of First-Aid.

Or

Write down the qualities of a good first aider along with his duties. (June 2018)

Ans. Children are very active by nature. When they gather in large number in school, they must indulge in various types of activities, both constructive and destructive. It is but natural for them to get injured while jumping, running and playing on the ground and in the school compound.

In such cases, something must be done at once, before actual medical aid is provided, by the first aider.

The first aider must be able to handle the situation and should have some good qualities which are essential in the field of first-aid

Qualities of the First-Aider

1. **Expert** : The first-aider must not over play his duty of doing what is not in his domain. He must have the knowledge of A,B,C i.e. Airway, Breathing and Circulation. He must be skilful to handle every situation occurring at the time of casualty.
2. **Sweet tempered and sympathetic**: The first aider should use sweet and encouraging words to lessen the victim's distress. He should keep the victim as comfortable as possible. With sympathy, he should be able to calm the victim's fear and anxiety.
3. **Calm and Patience**: He should be a calm and controlled sort of man because he has to take immediate action, without any fuss of panic.
4. **Self confidence**: The First-Aider should have a full confidence in his own skill, knowledge and style of working so that his self confidence may enhance his courage because lack of self confidence leads to inefficiency and work or activity does not get completion. Hence self confidence is an essential quality of a first-aider.

5. Immediate and appropriate decision makers : The domain of the first -aider is of such type where prompt and quick decisions have to be taken. As soon as casualty takes place the first should be prompt and quick, to render help to the victim so that his life may be saved.

6. Wise and Intelligent: He should be wise and intelligent enough to decide that immediate treatment is essential even before a complete diagnosis, specially in case of serious injuries and severe bleeding etc.

7. Immediate diagnostic: The first -aider should be able to make immediate diagnostic. After knowing the sign or symptoms and causes of the casualty, he should start prompt and quick action to stop bleeding to reduce the pain. He should lessen the effect of injury. He should not take much time to diagnose the injury.

8. Must be resourceful: He should be resourceful enough to make available his first-aid material at once or get the required things on the spot alternately for giving immediate relief to the injured person.

9. Skilful and Tactful : He should be skilful and tactful enough to know the symptoms and history of the case, without any wastage of time. He must also be skilful to secure the confidence of the injured person. If there is any crowd around the victim, he should be tactful to control it and if needed; get the assistance of one or more bystanders, to the best advantage of the case in hand.

10. Faith and Perseverance: He should have full faith in himself and in the success of his efforts. He should continue his efforts, even if he does not find any improvement initially.

11. Dexterous and Clever: The first-aider should be clever enough to handle the patient without unnecessary pain and use appliances efficiently within his limit. The first-aider should not work out of his domain.

Thus it is essential that the first-aider should be trained, active, tactful, kind hearted and intelligent enough to handle all serious and non-serious situations promptly and accurately until proper medical aid is received.

If we take the wordly meaning of FIRST-AIDER or analyze each word of it, then we get a complete glimpse of qualities of a first-aider as :

F	-	Fast in action
I	-	Immediate Diagnosis
R	-	Resourceful
S	-	Sweet and smart
T	-	Tolerance
A	-	Adroitness
I	-	Intelligence
D	-	Disciplined
E	-	Emotionally sound
R	-	Responsible

Need of First -Aid

Children have a store of energy in their body and often get themselves hit during play. Hence need of a first aid corner in every school and this corner should be under the charge of a qualified teacher.

Learning first-aid is a civic responsibility of each citizen. There is universal understanding on imparting first-aid to people suffering from various kinds of

injuries or illness. Obviously the implements to give first-aid have to be simple and available almost every where without notice. If first aid is rendered in time, the patient's trouble can be alleviated before the arrival of the doctor and person can be saved from death.

Importance of First-Aid

- (1) If first aid is rendered in time, the life of a patient can be saved.
- (2) To check the deterioration of the condition of the body of the person by the time the doctor arrives at the spot.
- (3) The training of first-aid strengthens the will of saving power of trainee and he concentrates his attention on self security and saving the life of the others.
- (4) A first -aider or a trained person provides help to his family and neighbour.
- (5) First aid is known the world over, and has been practiced ever since the inception of humanity. In India, the historical evidence of rendering first-aid to the wounded and sick is available in our history.
- (6) Learning first aid is a civic responsibility of every citizen.
- (7) First -Aid training inculcates the qualities of moral values, service to humanity, and talent in the trainee.

Duties of a First-aider

In the domain of first-aid, the duties of a first -aider are diagnostic and disposal with the following:-

1. Understanding the Situation : The first duty of a first -aider to understand the situation surrounding the casualty and then take action accordingly. He has to decide promptly and quickly whether the patient needs the help of a doctor or not.

2. Diagnosis : For diagnosis the first aider has to inquire how accident takes place, this can be asked from the patient or from crowd present there at the time of casualty.

The next step in diagnosis is to observe the symptoms such as, unconsciousness, thirst, pain or shivering etc. It is the duty of the first-aider to give attention on those symptoms which are different from the normal symptoms such as swelling, blood clotting, pale face which can be seen easily.

3. Treatment : For treatment the cause of the condition should be immediately removed, with a view to prevent the condition from becoming worse. Special attention should be paid to cases of severe bleeding, shock, unconsciousness and failure of breathing.

4. Immediate Disposal: For quick disposal, the casualty or the victim should either be examined by the doctor on the spot or if, that is not possible, he should be immediately taken to his home or to a suitable place of shelter or to a hospital, according to the circumstances. The members of the victim's family or his relatives should also be informed at once.

5. Willingly involved completely: It is prime duty of a first aider to involve himself completely in the casualty willingly and selflessly and remain with the patient with spirit till the disposal of the injured and till the doctor knows all the details of the condition.

6. To keep the environment peaceful: If there is any crowd around the victim, he should be tactful to control it and if needed, to get the assistance of one or more bystanders, to the best advantage of the case in hand. The peaceful environment will encourage the patient to faith in first -aider.

7. Sweet temperament: It is the duty of a first-aider to keep his behaviour sweet and friendly so that he can win the faith of the patient. He should always be back up and encourage the injured and tell him that there is nothing happened special, everything is O.K. and you will be alright shortly.

8. Sense of responsibility: It becomes a duty of the first aider that once he has taken the case in hand, he must finish it completely or till the disposal of the injured to hospital, he should take responsibility and remain with injured and explain the complete condition before doctor. It also becomes the responsibility of the first-aider to inform the relatives or family members and call them to reach at that particular place and encourse them.

9. To remain in his limit.: The first-aider should not cross his limit because to be secure himself, he should have the knowledge of anatomy and expertness. He should have positive talk with patient to encourage his faith in the first-aider.



5

Yoga Education

5.1 MEANING AND IMPORTANCE OF YOGA

1. What do you understand by Yoga? What is its importance in man's life?

Or

Define Yoga. Discuss its importance in detail.

Or

Write down the meaning and importance of yoga. (June 2018)

Ans. Meaning: The yoga system in India is a culture that has been practiced by the yogis in India in ancient time. Yoga is a vast subject like an ocean, many fathoms deep in the middle but shallow enough at the shores for a little child to walk in knee-deep waters, and like Newton gather pebbles even while the big ocean remains unknown to him. But the knowledge of the ocean lies hidden in those very pebbles. One who fully understands a pebble will finally comprehend the ocean. Verily, the sea lies in a drop as much as the drop lies in the sea. So, yoga can be made as easy as you like and as difficult as you imagine. According to Pantanjali 'Yoga-Chitta-Viritti-Nirodh.'

Yoga is the inhibition of the modification of the mind. It means it prevents the contents of the mind from taking different forms or the withdrawal of sense organs from the worldly objects and their control is Yoga.

It means yoga helps an individual to exercise restraint on his body and mind by keeping him away from the allurements of Roop Ras, Gandha, Sparsh and Savda.

Yoke and Yoga mean almost the same thing. Yoga and Yoke have a common origin, both being Aryan words.

'Yoga' comes from the Sanskrit word 'Yuj' which means "to join". By the practice of yoga the individual soul (jivatma) is united with or joined to the supreme soul (Paramatma).

In other words, Yoga means union with God. Union with god is the goal of human life. It is the be-all and end-all of human existence. It is the sum mum bonum of life.

In the light of its derivation root and the attached meanings, a number of scholars have tried to define the term yoga in a number of ways. Let us try to reproduce a few significant ones out of them.

Maharishi Vyasa's words, "Yoga is ecstasy (the Samadhi)".

In the words of Maharishi Yagyavalkya, "The integration or merger of the soul with the greater soul is termed as yoga."

A yogi drinks the nectar of immortality. That is why Lord Krishana said in Bhagavada Gita (VI.46) "Tusmat Yogi bhava Arjuna" (O, Arjun! Therefore, become a yogi)

Later on he said, "Doing a task successfully comes in the domain of yoga."

According to Vedanta, "The union of the jiva (individual self) and soul is termed as yoga." According to yoga Vashitha, "The device in strategy employed for leading the journey of life in a successful way may be termed as yoga". In the words of Jainacharya, "By means, through which we get purity of soul and Moksha that is yoga"?

According to the great philosopher and former president of India Dr. Radha Krishnan, "Yoga may be termed as an eternal means or method to illuminate the path of a man for bringing him into light from the darkness.

In this way, Yoga can be termed as the way and means of helping an individual to reach at the maximum in terms of his physical, mental and spiritual gains, to live a happy, well contented and peaceful life having perfect harmony with the self and others and to concentrate and strive for the attainment of the ultimate goal of life i.e. Nirvana or Moksha.

Importance and Utility of Yoga

Yoga is a way of life. It is your habit of living. The end of yoga is to get merged into the supreme power, like a drop in the ocean. A yogi attains that smoothly, harmoniously and painlessly, while a non-yogi undergoes many pangs of births and deaths.

Yoga helps you control the wayward waves of your thoughts and transforms them into dynamic power like steam driving a mighty locomotive engine with a large train-load behind. If steam is not properly controlled, it cannot even blow a whistle, let alone drive a train.

The well being of mind and body is intertwined and yoga alone offers that system of exercises which helps you to have a robust psycho-physical personality.

Kin Hubbard, throwing the light on importance of yoga, said, "It is pretty hard to tell what does bring happiness; poverty and wealth have both failed. Yoga does not merely bring you physical health. It creates a blissful shake-up of your entire personality. It causes a transformation to your attitudes of life and brings about a revolution in your ideas, feelings, emotions and sentiments. Both physiological and psychological processes undergo a subtle change.

Yoga involves the control both of breath and of mind. The control of breath enables you to exercise control over your mind as well. The reverse is equally true. If your mind is peaceful and harmonious, there is a rhythm in your breathing processes. The overall importance, value and utility of the yogic activities may be outlined in brief below:

1. Physical Importance: Yoga is a many-petalled lotus flower in the many splendoured house of life. There are thousands of exercises and you can choose those that suit you best. Yoga exercises have a direct and indirect bearing upon the strengthening and stretching of both the skeleton and muscles. Consequently yoga is superior to any other form of physical exercise eastern or western. The muscles of the abdominal wall receive adequate attention in yoga. The pelvis, the chest and the neck are strengthened. The muscles of the limbs are stretched and strengthened. Yoga restores the tone and tune of the internal organs.

- By performing Asana or Yogic Poses, we give a full chance to each and every cell of the body to contract and relax to its utmost capacity. Thus we secure through elimination of bodily poisons and perfect assimilation of pure blood by the system.
- As a result of yogic exercises, our excretory organs can perform their function with ease, comfort and efficiency.
- By performing Pranayama or Yogic rhythmic deep breathing, the purified, oxygenated and vitalized blood flushes into the body to make it healthy and strong.
- While performing Asanas by physical exertion, we create a demand of the blood.
- It is during relaxation that all the parts of the body get a chance for appropriate supply of the blood according to the demand created during the performance of Asanas.
- These help us in having increase in our immunity power and keeping our body disease free by not allowing the harmful and disease spreading material accumulated in our body.
- It improves the Cardio-Vascular fitness of the heart.
- Metabolic activities of the body are improved.

2. Mental Importance (Or Psychological Value) : Yoga helps you control the wayward waves of your thoughts and transforms them into dynamic power. Similarly, unless you practise yoga for the control of your body and the restraint of your mind, you cannot make full use of your potentialities and your God-given gifts cannot flower forth. Without yoga, you cannot attain high station which truly belongs to you. Yoga and thought combined make a great force. They have tremendous power with yoga power and thought force, you can move the world. Yoga is the control of mind and its modification.

Yoga does not merely bring you physical health. Yoga involves the control both of breath and of mind. The control of breath enables you to exercise control over mind as well. The reverse is equally true. If your mind is peaceful and harmonious, there is rhythm in your breathing processes.

Yoga activities also play quite substantive role in seeking proper gains in terms of securing proper mental health and psychological functioning to the practising individuals. The benefits gained on this front may be summarized as:

- For mental peace, yoga is panacea.
- It helps in alleviating psychosomatic disorders.
- Yoga teaches us art of relaxation, nervous and muscular fatigue is removed.
- Yoga eliminates physical and mental tension and brings harmony in body and mind.
- Medical and Psychological research have proved that negative mental attitude are dangerous and lead to illness. Your good or bad thoughts affect the world in a good or bad direction. While yoga is like a bow, thought is like an arrow. It travels and moves with great speed.
- Thought has a tremendous power. Thought directed by a yogi can heal any disease anywhere. Thought can transform the mentality of persons.
- Thought and yoga can do anything. Yoga can work wonders. The velocity of thought is unimaginable.

- Negative mental attitude may result into heart attacks or illness caused by tension.
- Constant worries and tensions result into a small obstruction in kidney.
- Frustration and over mental work leads to nervous exhaustion. In short mental energy, when used negatively will cause illness sooner or later.
- Positive use of mental energy, positive thinking and healthy attitude help a person to possess inner force to overcome all difficulties. Swami Vivekananda has rightly said, "If matter is mighty thought is Almighty", Strong positive emotions of love, joy and happiness bring peace to the mind and make the body healthy.

3. Moral Importance : The food that eat affects your thoughts as well as your performance of yoga. The food habits of a yogi, being Satvik and controlled his thoughts will be pure too, and practice of yoga will be of a superior quality. A man with pure thoughts speaks powerfully and produces a deep impression on the minds of listeners.

- Yoga Sadhna develops right control over emotions and inculcate the capacity to keep emotional balance.
- Yoga also recommends the adoption into one's life of the Yamas and Niyama i.e. the rules of social behaviour and personal conduct as: Yama-Self-restraint as such: Ahimsa-not indulging in an action which proves harmful to oneself and to others.

Satya-There should be uniqueness in one's thought, word and deed.

Asteya-Not to steal or not to dream of bringing under one's possession anything which does not belong to him.

Brahmcharya- Involuntary full control over one's sexual impulses.

Apigraha-Not to fall a prey to worldly temptation when these five Yamas are conditioned, they denote moral importance of yoga.

4. Social Importance : Man is a social animal by nature. If it is not impossible to live without society but surely difficult, because a man takes everything from the society. The first school of individual's quality and bad things is family and last school is society. The society is constituted by the men's so as such the men, so will be the society. Yoga Sadhna does not benefit the only individual but society also. Thus yoga has its importance in the social aspect of the man as:

- A yogi will construct a healthy society as per his will and social attitude developed by him through yoga sadhna and definitely, it will be a better society to live in.
- The true path of yoga promises the highest reward but it also demands the highest sacrifices. Accordingly to a Vedic saying "you cannot tread on the path unless you become the path itself."

But it is by no means an unpleasant road to follow. The yogic way is the most pleasant way of life. If there were a more blissful footpath or motorway, the Yogis would have known it and transmitted it to those coming behind them in an endless procession.

Yoga is the best way of life. In this jungle of technologies, you will not find a better way out. Mankind today is like babes lost in the wood. Yoga alone can pull man out of his numerous miseries. The world is full of evils as drugs-habits,

corruption, Black-marketing, violence, cheating and other subjects like sexual harrasment. In the world of yoga, there is a healthy competition between yogis who try to out do one another for the benefit of humanity. A yogi does not live for himself.

In Yoga the high road is the road of self sacrifice, selflessness, self renunciation and self- effacement.

5. Spiritual Importance : "The instinct of self-preservation is strong", says **Harvey Day** in his book about yoga "More than that, most people have secret desire for immortality, which is one reason why the theory of life in the hereafter is so accestable." Few of us can conceive a future in which we shall not exist. We resent the encroachment of age, and like to feel that when we die and our bodies are interred, something of us will continue. We know that no material part can continue to live on, so we talk about the immortality of the 'soul'. This desire deeply embedded in the heart of man is not meaningless. There is the spark of the divine in the mind of the meanest creature on earth. There is one universal spirit which is undying and which pervades the universe. We are puppets made and remade out of the same materials. The puppets die but the material of which they are made is immortal. In order to accomplish spiritual tasks, it is necessary to stimulate higher processes of the brain for which yoga helps us to a great extent. Dhyana and samadhi may draw an individual quite closer to self realization and strive for attaining great heights to his spiritual development.

6. Preventive of disease and immunization : Yogic asanas and Pranayama are a cure and prevention of many diseases especially those of stomach or digestion.

- It is a means by which the delicate balance of the bodily, kait, vata, pita is maintain.
- Yoga has a hygienic effect. Kriyain like Neti, Dhuti, Neoli etc. are meant for cleaning various internal vital organs of the body.
- Regular practice of yoga will result in harmonious development of all body parts and establish a functional balance among various organs.
- It improves the cardio-vascular fitness of the heart.
- Yoga asanas help control obesity by removing excess fat.
- Yoga helps in alleviating psychosomatic disorders.

7. Corrective Value and Relaxation : Good posture is largely and individual matter of common sense. No one can deny the importance of good carriage. The first impression of a person includes how he carries himself. Carriage reflects our alertness, breed and strength of character and good carriage means good posture. With the physical uplift of the body by assuming a correct posture, the spirit is uplifted. One cannot enjoy the beauty of the rising sun with a haunch back and protruding neck.

1. Yogic Asanas and Pranayama are a cure and a prevention of many physiological deformities.
2. Yoga is the simplest form of relaxation, for mental poise and peace yoga is panasea.
3. Yoga can provide a valuable platform, ways and means for such self improvement and enhancement of one's abilities and capacities that may contribute equally to one's personal development and social welfare.
4. Yoga techniques are of great value both for corrective and for restorative purposes.
5. When go to bed, relax. Let your face assume its most pleasant expression.

8. Character makes you Beautiful : Yoga makes your character and your character makes you beautiful. We are often drawn to people who are not beautiful by cosmetic standard-it is their character which makes them beautiful. Their eyes are kind and they radiate a rich vitality. There are no self pitying lines around their faces. We are all sculptors of our face with tremendous powers to make beautiful models, if we practice yoga regularly and intelligently.



4.2 AIMS, SCOPE AND FUNCTIONS OF YOGA EDUCATION

2. **What do you understand by Yoga education? Discuss in detail the aims, scope and functions of yoga education?**

Or

Write down the aims and scope of yoga education in modern society. (June 2018)

Ans. Yoga Education : Human beings are made up of a body, mind and soul. The body is the temple of the soul. The mind is the seat of the instincts and emotions, while the soul is the self, the divine spark. If we want to have healthy body, our emotions have to be in union with the life force lying inside each one of us.

The yoga system of health is a culture that has been practised by the yogi in India in ancient days. The technique of practical training and theoretical knowledge both for the body and mind always remained a secret, guarded by renewable yogins (female yogi), who handed over this treasure chest of knowledge only to the most deserving disciples.

This tradition of yoga education served not only the purpose of cultural purity because of its implied secrecy but also resulted in confusion for its rightful place for the progress of society.

The science of yoga is as old as the hills of India. The eternal subject is to-day appearing in modern costumes. The practice of yoga as well as all know develops our moral and spiritual backbone. At the same time, it tends to increase the physical and intellectual abilities in man by the exercise of the nerve-power and will-power. Thus the yoga system (education) brings about a harmonious development of the physical and mental capacities. Thus yoga is the priceless gift of the ancient Rishi's to the modern man. It is gratifying to note that this great psycho-physical science has captured the imagination of the modern man. Its votaries are to be found in almost every corner of the civilized world. It is why in a scheme of study at any level of school education, the teaching of yoga can play a quite leading role in the overall realization of the aims and objectives of the system of school education

Aims of Yoga Education

Yoga is the science that allows man to arrive at perfect concentration by controlling his mind and thought -Waves. To enable one to advance physically, mentally and spiritually, one must avoid constant agitation and prevent the

mind from becoming dispersed. Yoga education aiming at the development of all the higher powers in man to their fullest expression -physical, mental and spiritual. Physically by purifying the blood, strengthening the heart and toning up the nervous system. Mentally, in giving control over the mind and the power of concentration. Spiritually, in preparing the body for the awakening of powers of which the causes are not within the range of scientific measurement.

The aim of yoga education is also to help them in learning the yogic means of acquiring the art and philosophy of maintaining purity, and cleanliness of the inner organs and systems of their body by practising shast Karma and observance Yama and Niyama for their thoughts and feelings. Dhayana and Dharma for turning out to be the absolutely pure personalities in deed and actions.

To help them in imbibing right conduct and humanistic values through the study of yoga philosophy and literature and practice of yoga sadhna and activities.

Scope of Yoga Education:

Yoga plays quite vital role in all the spheres of one's life. One can be able to harvest its proper benefits only when he is able to get adequate knowledge and understanding about its use and applications through its planned study and practice. Accordingly, in chalking out a scheme of study for the subject yoga education as:

- Yoga, its meaning and concept.
- The importance and utility of yoga-personal and social.
- The study of different types or kinds of yoga.
- The knowledge about the ancient texts related to the study of yoga.
- The theoretical and practical knowledge about the components of Ashtang yoga propagated by Maharishi Patanjali.
- The knowledge and understanding about the essentials of physiology, the yogic activities helpful to the internal purification of the body organs. Yoga diets, massage and bath.
- The knowledge and understanding about the application of the various yogic activities helpful in the proper mental and intellectual development and upkeep of a good mental health.
- The knowledge and understanding about the yogic ways and means are helpful in the attainment of spiritual benefits of yoga including self realization and seeking merger with the greater self i.e. God.

Functions of Yoga Education

The scope and applications of the subject yoga are quite wide, comprehensive and extensive. The applications and functions of yoga influence and affect each and every aspect of our life. The functions and purposes served through yoga education on this account, may be briefly summarized as:

1. Functions related to Physical health and Development:

- In rigorous and vigorous type exercises like gymnastics, racing, boating, swimming, wrestling etc. only particular muscles are rapidly and repeatedly exercised.
- In yogic exercises, there is a development of the outer muscles as well as the internal organs. Above all, there is a harmonious and rhythmic development of mind or psyche and the body.

- If there is no peace and harmony in your mind, mere muscular strength may not be of much use to you or to others. With no proper mental development, you are likely to put your animal strength to evil purposes. Only yoga can help you put your physical faculties to noble human causes.
- Mere physical exercises in schools and colleges are not enough for the youth. They should be initiated into the techniques of yoga for an all-round development of personality.
- Most of the western exercises bring about what is known as 'phasic' contraction of muscles, while yogic exercises create a static contraction, which maintains a muscle under tension without causing repeated motions.
- Yoga is a many-petalled lotus flower in the many splendoured house of life. There are thousands of exercises and you can choose those that suit you best. Yoga exercises have a direct and indirect bearing upon the strengthening and stretching of both the skeleton and the muscles. Consequently, yoga is superior to any other form of physical exercise, eastern or western. The muscles of the abdominal wall receive adequate attention in yoga.
- Yoga restores the tone and tune of the internal organs. Yoga techniques are of great value both for corrective and for restorative purposes. Simple easy exercises can keep you in a state of sublime health and happiness.
- Lastly but not the least, Yoga helps in the increase of the life span of the individual.

2. Functions related with mental development.

- I. Yoga does not merely bring you physical health. It creates a blissful shake up of your entire personality. It causes a transformation to your attitudes to life and brings about a revolution in your ideas, feelings, emotions and sentiments. Both physiological and psychological processes undergo a subtle change.
- II. Yoga involves the control both of breath and of mind. The control of breath enables you to exercise control over your mind as well. The reverse is equally true. If your mind is peaceful and harmonious, there is a rhythm in your breathing processes.
- III. It is a popular saying that a healthy body possesses a healthy mind. Yoga education is helpful to an individual to equip him with a sound and disease free body and as a result one can be naturally and automatically benefitted in terms of having a sound as a gift for his healthy body.
- IV. Yogic activities provide opportunities and measures for exercising control over the fluctuations of the mind and the greediness and lust of the sensory gratification.
- V. The theory and practice of yoga also substantially help in the proper awareness, practice and development of one's power of concentration, sustaining of attention, memorization, reasoning and thinking powers helpful in one's adequate mental development and intellectual functioning.

- VI. Yogic activities in the form of Pranayama, Dharana, Dhyana and Samadhi may prove quite beneficial to an individual to have proper concentration on his inner self. It helps him to focus on positive thinking and push all the negative thoughts away leaving his mind free for the needed intellectual pursuit and consequently for the development of higher cognitive and mental faculties.
- VII. A number of yogic activities provide immense help in making one's senses quite alert, attentive, receptive and sensitive. Since senses are said to be the gateway of the knowledge and information, their proper development and sensitization may prove a great asset for the adequate mental development and functioning.

3. Functions related with mental health and peace : Besides helping the individuals to enjoy proper physical health, yoga education may also provide valuable assistance in making one enjoy a good mental health and inner peace such as:

- I. Mental fatigue is relieved to a great extent through practice of yoga. A person remains free from anger, anxiety, and emotional disturbance. It is well explained in Bhagavad Gita that when the mind and body are working together harmoniously due to yoga discipline, we can find calm and peace of mind at every moment.
- II. Yoga education helps in the development and promotion of the abilities and capacities of one's sensory organs particularly in terms of their reception and sensitivity. Such sensitization and reception ability can make them able to strive for the attainment of harmony to their self and environmental surroundings leading to their mental peace and contributing significantly towards their mental health.
- III. Mental health is the balanced development of the individual's personality and emotional attitude which enable him to live harmoniously with his fellow men. Good physical and mental health demands a sensible balance between work and recreation; rest and recreation. Helping in harmonizing the individuals with the yoga's belief that every disease and sickness is nothing more than an imbalance in the natural harmony of the body and mind and engaging them in necessary yogic activities for restoring this balance and thus leading to the true healing of their various psycho-physical and mental ailments.
- IV. Providing a better deterrent and preventive measure for protecting one from the hazards of breaking down and losing one's mental health and also becoming helpful in providing the best possible cure and treatment for a number of mental illness and ailments.
- V. Yoga helps in the promotion of one's mental health by keeping his nervous system including spinal cord and brain healthy, vigour, active, alert and efficient.

4. Functions related to Social Development : In this domain, the functions of the yoga education may be summarized as:-

- I. Yoga education helps in the progress and prosperity of the society by adding to the working efficiency and capability of the individual.
- II. Yoga education helps in paving the way of appropriate social development of the younger generation by letting them grow and

develop into a harmonious, well balanced, co-operative and adjusted personality instead of egoistic, self centered and non cooperative individuals of the materialistic society, Yoga programmes provide a chance or stage to explore such types of social qualities and produce good citizens.

- III. Helpful in bringing desirable modification and rectification in the behaviour and conduct of the individuals through the useful instructions and practices of the yoga philosophy and activities, especially related with the lessons on good conduct, satvik diet and living, and regular and disciplined life.
- IV. Yoga education helps in the establishment of an ideal social order by reducing or eliminating the prevalent social evils and deficiencies through replacing faith in the physical values with the hope in the outcomes of the moral and spiritual values.
- V. Yoga education in the establishment of a world society based on the principles of universal brotherhood, harmony and co-existence in place of the cut throat competition and enmity, envy and jealousy among the people and countries, the most likely outcomes of philosophy of materialism.

5. Functions related to cultural development : Yoga education may serve the following functions in the task of providing valuable help for the desired cultural development of the individuals.

- I. Helpful in the preservation, promotion and transmission of the values and traditions of Indian culture.
- II. Yoga education is helpful in taking cognition and feel elevated in the values associated with Indian culture through the study of the literature and philosophy of yoga and then assisting the individuals for assimilating them in their ways of life.
- III. Yoga education has contributed in developing the individuals as a civilized and cultured personalities as per demands of the humanistic and cultural trends of one's society and culture by the inculcation of desired values and virtues through the means and ways of yoga like Yama, Niyama, Dhyana, Dharana and restraint exercised on the fluctuation of the mind and over indulgence of the sense.

6. Functions of Yoga education related to Emotional and Moral development:

- I. Yoga education contributes in maintaining the desired equilibrium and balance over the emotional make up of the individuals by equipping them with the knowledge and skills of the task of proper management and control over their emotions.
- II. Yoga education inculcates and cultivates the essential moral values and humanistic virtues like honesty, truthfulness, kindness, sympathy, tolerance, cooperation and peaceful co existence involving mutual understanding, love and respect for the opinions and ways of living as well as faiths maintained by others.
- III. Yoga education gives an exposure to the individuals in expressing their emotions in a desirable way at the desired time in the desired amount by arranging for desired knowledge and practices of the various yogic activities helpful in exercising restraint over the satisfaction of sensual desires and expressions of emotions.
- IV. Yoga education gives knowledge and understanding to remain away from the excessive worldly attachments, sexual lust and allurements as well as from the usual human errors and evils like indulgence in

the activities involving fraud, deceits, alcoholism, dependence on drugs and other intoxicating objects, uncontrolled anger, envy, jealousy, hatredness and blind competitions etc.

7. Functions related to the spiritual development:-

- I. Yoga education may perform the following functions for the purpose of helping the individuals in their spiritual development. Yoga education is helpful through its theory and practice in taking proper perception and cognition of the true nature of matters and the real states of Purusha (God) and Prakriti (Matter), liberation from the painful bondage of matter through the planned journey towards the path of enlightenment leading to Moksha, the abode of everlasting bliss.
- II. Yoga education helps in bestowing a divine light with which we are able to resolve not only the gross worldly problems and inner doubts but also the controversies arising out of the different beliefs prevalent in respect of matters beyond the ambit of senses.
- III. Yoga education helps in learning to provide more importance and cognition to the spiritual values and enlightenment in place of the material values and comforts in one's life.
- IV. Yoga education helps in taking cognition of the existence of the subtle and eternal state of the body beyond the physical existence of one's body and mind.
- V. Yoga education is helpful in observing the attitude and feelings of love and respect to all by taking cognition of the fact that all that exists on the earth are subjected to equity and equality in the sense that all are creation of the Almighty.
- VI. Yoga education helps in taking cognition of the Hindu Philosophy that the ultimate goal of our life is to seek merger with the identity of the Greater Soul i.e. God termed as the attainment of salvation or Moksha.

4.3 COMPONENTS OF PATANJALI'S ASHTANG YOGA

3. Write detailed notes on Yama, Niyama, Dhyana, Pranayama & Samadhi?

Or

What is Ashtanga Yoga? Explain its various components in detail.

Or

Explain the Asthang yoga in detail.

(June 2018)

Ans: Raja Yoga usually refers to the system of yoga that is described in the yoga Sutra of Sage Patanjali. In this ancient text Sage Patanjali describes eight stages of Yoga which are known collectively as Raja Yoga or Ashtanga Yoga. This ashtanga yoga is a comprehensive Yoga system which deals with the refinement of human behaviour and personality through the practice of the Yama (restraint) and Niyama (discipline) attainment of physical health and vitality through asanas (Postures) and Pranayamas (organic breathing techniques),

management of mental and emotional conflicts through Pratyahara (sensory withdrawal) and dharana (concentration) and developing the creative aspect of consciousness for transcendental awareness through dhyana (meditation) and samadhi absorption in the universal identity.

Maharishi Patanjali has emphasized yoga as a means for restraining and controlling Chitta Vrittis by stating "Yogas Chitta-Vritti-Nirodhah". In his system of Ashtanga Yoga, Patanjali has provided eight types of practices through the eight limbs of yoga. However, as far as the exercising of restraint and control over the vrittis of chitta directed towards the attainment of the transcendent state of Samadhi.

Eight Limbs of Ashtanga Yoga

One can ascend the ladder of yoga through its various rungs by unlimited patience. The highest summit of the ladder is Asamprajnata samadhi or the highest super-consciousness. In this state, samskaras (impressions) of successive births are completely burnt up.

The eight limbs of Ashtanga Yoga are:

1. Yama (Self restraint)
2. Niyama (Religious observances)
3. Asana (Posture)
4. Pranayama (Restraint of breath)
5. Pratyahara (Abstraction of Indriyas or organs of the body)
6. Dharana (Concentration)
7. Dhyana (Meditation)
8. Samadhi (Super Consciousness)

The first five make external yoga while the other three internal yoga. All of these elements have further sub-divisions. Let us have a detailed discussion on each of these limbs.

I. Yama

The process of controlling the internal and external senses are called Yama. The limbs of Yama work as a security line for Yogi or Sadhak. Yama may have different meanings in different contexts. It may mean "rein, curb or bridle, discipline or restraints." In the present mean "self control, for beariness or any general rule or duty." A strict course of self-discipline in the form of the enforcement of yamas have been emphasized for serving this purpose. Yama, thus comprises the 'shall not' in our dealing with the external world specially to the fellow beings and other creatures.

The term Yamas is the first limb of the eightfold path, (Ashtanga yoga) propounded by Patanjali. In this Yoga, Sutra, he has used this term to mean 'bridle' or 'rein', to describe a restraint that we willingly and joyfully place on ourselves to focus our efforts, the way a rein allows a rider to guide his horse in the direction, he would like to go.

Components of Yamas : There are guidelines for how we interact with the outer world, the social disciplines to guide us in our relationships with others. There are many interpretations of and opinions about the components of Yama as such:-

According to Bhagavada Purana, there are twelve Yamas named as:

- (i) Ahimsa (Non Violence)

- (ii) Satya (Truthfulness)
- (iii) Astaya (Non stealing)
- (iv) Asangata (Non attachment)
- (v) Lajja (Feeling of shame for evil)
- (vi) Aprigraha (Not to engage in hoarding)
- (vii) Sridha (Faith in God and Vedas)
- (viii) Brahmacharya (Divine conduct, Continenence)
- (ix) Mouna (Observation of silence)
- (x) Sthirta (Firmness)
- (xi) Akshama (Forgiveness)
- (xii) Abhaya (Fearlessness)

According to Parashara Samhita, there are 10 Yamas:-

- (i) Ahimsa (Non Violence)
- (ii) Satya (Truthfulness)
- (iii) Asteya (Non-stealing)
- (iv) Brahmacharya (Continenence)
- (v) Akshama (Forgiveness)
- (vi) Dhriti (Stead fastness)
- (vii) Daya (Compassion)
- (viii) Saralta (Simplicity)
- (ix) Mitahara (Moderate appetite)
- (x) Shancha (Purity)

Patanjali in his Yoga Sutra has limited their number to five as such:-

- (i) Ahimsa (Non Violence)
- (ii) Satya (Truthfulness)
- (iii) Asteya (Non stealing)
- (iv) Aprigraha (Not to engage in hoarding or collection)
- (v) Brahmacharya (Continenence or celibacy)

Let us know in detail about these five Yamas that provide rules or code of conduct for restraining or modifying one's action, speech and thoughts in relation to external world.

1. Ahimsa (Non-Violence) : The word Ahimsa literally means not to harm, injure or show cruelty to any creature or any person in anyway whatsoever through our behaviour such as feelings, thoughts, actions and speech.

According to Yajna Valkya Samhita, Ahimsa or non-violence is the awareness and practice of non-violence in thought, speech and action. The path of Ahimsa is very difficult but its fruit is very sweet.

In its practical form however, we may classify the practice of non-violence or Ahimsa in three kinds such as:-

- (a) **Intellectual Non-Violence:** In this type of non-violence, one has to restrain even the thoughts of waves of any kind providing harm or injury to others. We can follow the path of 'Ahimsa Parmo Dharma' only when we think over it.
- (b) **Speech Non-Violence:** In practising this type of non-violence, one has to avoid any kind of verbal statement or dialogue causing harm and hurting the feelings of others.

- (c) **Physical Non-Violence:** In such kind of non-violence, one has to avoid any type of physical actions and deeds causing harm, injury and pains to the body of others.

Mahatma Gandhi, a known believer in non-violence once said, "Ahimsa is not merely a negative state of harmlessness but it is a positive state of love, of doing good even to the evil-doer. But it does but mean meek submission to the will of the evil-doer; it means the putting of one's whole soul against his will."

2. Satya (Truthfulness) : The uniqueness or unity in action, thinking (mind) and words (speech) is Satya. Satya means truth or not lying. In practicing Satya means truthful in our feeling, thoughts and words and deeds. It means being honest with ourselves and with others. Patanjali describes truthfulness as: "To be in harmony with mind, word and action, to conduct speech and mind according to truth, to express through speech and to retain it in intellect what has been seen, understood or heard". Satya may also be classified in three kinds as:-

- (a) **Verbal Truthfulness:** In this type of truthfulness, one has to speak truth, the true representation of the reality reached through his intellectual powers. As union of mind, thoughts and deeds is truthfulness i.e. saying exactly what one sees with one's own eyes, hears with one's ears, and understands through one's own brain. It is exactly internal as well as external.

- (b) **Intellectual Truthfulness:** In intellectual truthfulness, one has to make use of his intellectual powers quite honestly in arriving at the true generalization of the reality of the objects, thoughts and events before reacting to them.

- (c) **Physical Truthfulness:** In the practice of this kind of truthfulness, one has to act or resort to practice the things or actions in the same ways and realities of their happenings as experienced by him through his seeing, listening or reading.

Thus, this component of truthfulness of Yama stands for being honest and truthful in thoughts, speech and acts.

3. Asteya (Non-Stealing) : Asteya implies not to steal. Not to have desire for which one does not belong to you. Do not have greed for what is not earned by you and not to be greedy of others' wealth or possessions.

The Sanskrit word Steya means robbery, theft or stealing, and thereby Asteya is termed as abstention from theft or stealing. We are to refrain from taking that which is not ours by right of consciousness and Karma (deed). It up holds foregoing the unauthorized possession of thought, speech and action and consequently it may be of the three types such as:-

- (a) **Intellectual Asteya :** It refers not to bring even any idea or thought of stealing or taking away the other's thing without asking or against their will.

- (b) **Verbal Asteya:** It refers not to use any word, statement or language meant for persuading others for resorting to steal, robbery or taking possession of the things belonging to somebody else without his consent.

- (c) **Physical Asteya:** It refers not to get engaged in the actions and deeds of stealing, robbery and unauthorized possession of the things belonging to others in its physical aspect.

4. Brahmacharya (Continenence or Celibacy) : In Yoga Sutra, Maharishi Patanjali has defined Brahmcharya as, "Brahmacharya patisthayam virya labhah" meaning thereby that on being firmly established in sexual continence

one is bound to gain Virya (sexual energy, vigour and strength). To have control over sense organs including the organs of procreation and not to be tempted by the lustful enjoyments through thoughts, words and deeds.

Thus, the term Brahmacharya in yoga practice may be simplified into non-lust, or continence and self control. It is abstention from sexual indulgence, such as a chocolate binge or speaking unnecessarily. Thus in its general use in our day to day life the term Brahmacharya is used mostly in the sense of abstinence, particularly in relationship to sexual activity. It is believed to be a behaviour, which brings man nearer to the Divine.

Brahmacharya is also of three types as:-

- (a) Mental or Intellectual Brahmacharya :** It refers to such kind of Brahmacharya in which one is required to restrain his thoughts regarding the sensual desires especially connected to sexual lust.
- (b) Verbal Brahmacharya:** In practicing such type of Brahmacharya, one is required not to engage in the sexual or sensual practices through the words, statements and language including gesture.
- (c) Physical Brahmacharya:** In physical Brahmacharya, one is required to restrain his actions and deeds on the physical basis related to the indulgence in sensual encounters.

In this way, in its most severe application Brahmacharya includes not only refraining from sexual intercourse, but not thinking sex, not looking with desire, or even conversing in private.

5. Aparigraha (Non-Covetousness) : In Sanskrit the term for hoarding is Parigraha, thus Aprigraha is to abstain from possessiveness, greed, selfishness, or acquisitiveness. Thus in its literal meaning the term aprigarha stands for the non-accumulation of worldly objects, caused by covetousness and attachment.

Aparigraha (non coveting) urges us to let go of everything that we do not need, possessing only as much as necessary. It also meant not coveting what is not ours and hoarding that is not actually needed by us for the fulfillment of our immediate basic needs. It urges to remain away from the practices of acquiring and boarding worldly objects and be greedy in thoughts, words and deeds.

Accordingly aparigraha is also of three kinds such as:-

- (a) Intellectual Aparigraha:** In this kind of aparigraha, one is required not to bring even the idea or thoughts of hoarding that is actually needed in his mind.
- (b) Verbal Aparigraha:** In practicing this type of Aparigarha, one is required to keep restraint over his utterances. He must refrain from unnecessary comments over others, criticizing their behaviour or conduct, calling bad names, lie or unpleasant words to others.
- (c) Physical Aparigraha:** In this kind of aparigraha, one is required to keep himself away from the actions and deeds in their physical aspects leading to any kind of hoarding, and unwanted collection or greed of the worldly objects including praise, honours etc.

II. Niyamas (Observances or disciplines)

Niyama is the second step or constituents of the Eightfold path of Patanjali. Like the five Yamas, the Niyamas are not exercises or actions to be performed in relation to one's behaviour to others. Compared with the Yamas, the Niyamas are more intimate and personal. They refer to the attitude we adopt toward ourselves. The Niyamas are thus clearly meant for self regulation- helping us maintain a positive environment in which to grow.

Components of Niyama : Our religious scriptures and yoga texts have a quite difference of opinion regarding the components of Niyamas. Let us try to enlist in a summarized way:-

According to Yajnavalkya Samahita, there are ten Niyamas such as:-

1. Tapa (Austerity)
2. Santosh (Contentment)
3. Sridha (Faith in God and Veda)
4. Dana (Charity)
5. Ishvar Puja (Worship of God)
6. Sravana (Knowledge of philosophy)
7. Japa (Recitation of mantra)
8. Dhyana (Modesty)
9. Lajja (Feeling shame for evil)
10. Mati (wisdom)

According to Bhagavad Gita, there are 11 constituents of Niyama such as:-

1. Sauch (Purity)
2. Japa (Recitation of mantra)
3. Tapa (Austerity)
4. Homa (Chanting of God's name)
5. Sridha (Faith in God)
6. Atithi Satakar (Hospitality)
7. Isha Bhakti (Devotion of God)
8. Tirtha Yatra (Pilgrimage)
9. Paropakar (Service to others)
10. Guru Seva (Serving the Teacher)
11. Santosh (Contentment)

Maharishi Patanjali in his Yoga Sutra has provided five components of Niyamas in one of his sutra mentioned as such:-

1. Shauch or Purity
2. Santosh or Contentment
3. Tapa or Austerity
4. Svadhyaya or self education
5. Ishwar Pranidhan or Meditation on the Divine.

1. Shauch (Purity): Shauch implies the cleanliness and it is the first niyama. It implies both external as well as internal purity. In the words of sage Manu, water purifies the body, truthfulness, the mind, true knowledge the intellect and the soul is purified by knowledge and austerity. It advocates the practices of intellectual purity, purity of speech and of the body. The shauch is of two kinds i.e. (i) external and (ii) internal.

(i) It involves the maintenance of purity and cleanliness related to our body in its both aspects- internal and external.

Cleanliness and purity of body externally is promoted by good habits like bathing, brushing teeth etc. Physical -Internal purity is realized through the practice of (i) Asana (ii) Pranayama (iii) Practicing satkarma like neti, dhoti, vasti, neoli, kapalbhati and tratka and good eating habit.

Purity and Cleanliness related to mind & soul-The deepest and most subtle aspects of shauch is purity of thoughts and feelings. It can be achieved through the yoga practices like pranayama, pratyahara, dharana, dhyana and Samadhi. It can be achieved by riding the body of disturbing emotions like hatred, passion, delusion anger, lust, pride and greed through the practice of Bhakti (adoration)

2. Santosha (Contentment) : It means contentment and satisfaction. It implies to feel content with whatever one earns through honesty and truthfulness. Not to get jealous with others, earning more and more by all means. There is contentment and peace when the flame of spirit does not wave in the wind of desire. This state of mind is about maintaining equanimity through all that life offers.

Santosha also means of being content with one's actions and with what one has, what one is, where one is and with what one has done or what one is doing. It is about our whole outlook on life.

When an individual reaches the state of contentment, he is said to be forwarding towards the path which leads to Moksha. It is well said, "Jab-aava santosha dhansab dhan dhuri sman", So, one should be satisfied with what he earns with God's grace.

3. Tapa (Austerity) : Tapas is described in yoga philosophy as power to stand thirst and hunger, cold and heat, discomforts of place and posture, silent meditation and ritual fasts.

It means endurance. Maharishi Patanjali described this in this way "Tapo dwando Sahnam" - to endure duality of hot-cold joy-sadness, happiness-sorrow, pleasure-pain, heat-cold, hunger-thirst with equanimity. It also maintains that the perfect man is he who practices both mental as well as physical austerity.

There are three types of tapas relating to body, speech and mind. Non-violence is one example of the first category. Speaking truth and using words that do not offend are two of the tapas of speech. Developing a mental attitude whereby one remains tranquil and balanced in joy and sorrow and retains self control are tapas of the mind. Through such tapas an individual, is bound to gain courage and wisdom 'integrity, straight forwardness and simplicity'.

In Bhagavad Gita, it is mentioned that there are three kinds of austerities as :

- I. Austerity of the physical body.
- II. Austerity of Communication and Speech (Mouna)
- III. Austerity of the mind.

In this way by practicing tapasya, the body becomes immune to extensive heat, cold and even poisons and other hardships. In addition, Tapasya also includes control over one's thoughts in order to avoid unnecessary talking.

4. Svadhyaya (Self study) : It means, the self study, the study undertaken by an individual through his own efforts. The study of spiritual books to acquire true & real knowledge, spending time in company of good people, sages, intellectuals and thus exchanging ideas and gaining knowledge. All this contributes in purity of soul which brings purity and truthfulness in one's behaviour. To chant mantras such as Om and Gayatri Mantra. It is introspection.

Actually in case of if we analyse the word Swadhyay, we can easily see that here sva stands for self therefore, swadhyay is actually the study of the self, or self analysis, meaning thereby to get close to one self, that is, to study oneself in a proper way.

Yoga Sutra described that self study ensures union with the desired deity and thus experience a greater height in one's spiritual development.

5. Ishwar-Pranidhana (Meditation on Divine) : Ishwar-Pranidhana, is nothing but a complete self-surrender to God. It means complete submission, yielding and surrender to God by Mansa, Vacha and Karma. It implies worshipping God whole heartedly, spending one's time in prayer, Chanting

mantras, hearing about him. This is meditation on God. It is this stage of the disappearance of the feeling of 'I' and 'mine' meditation and full surrender to God that is characterized with the actual practice of Ishvar Pranidhan.

III. Asanas

The word asana belonging to Sanskrit is derived from the root 'asa'. It means sitting or remaining still in a particular position or posture. Thinking in this way, a sitting or a particular still position or posture employed for doing yoga sadhna may be referred as asana in the world of yoga.

Asanas are regarded as the third limb or 'anga' of the Ashtanga yoga propagated by Maharishi Patanjali. He has defined the term asana in his yoga sutra as 'Sthira sukham asanam' - meaning thereby that the position or posture of the body that allows a sadhak to get continued in his yoga sadhana steadily and comfortably without feeling any unnecessary physical and mental inconvenience or exertion. "If the foundation of the building is not properly laid" says swami sivananda "the superstructure will fall down in no time. Even so if a yogic student has not gained mastery over the asanas, he cannot successfully proceed in his higher course of yogic practices."

Japa and Pranayama could go hand in hand with yoga asanas. Then only does it become real yoga.

IV. Pranayama (Restraint of breath)

The word 'Pranayama' is the combination of the two separate words namely 'Prana' and 'Ayama'. Prana is breath or bio energy in the body. On subtle level, prana represents the pranic energy responsible for life or life force, and 'ayama' means control. So Pranayama is 'control of breath'. One can control the rhythms of pranic energy with the yogic technique named as pranayama and achieve healthy body and mind.

Pranayama, the yoga of breathing, has three stages: Inhalation, Exhalation and Holding the Breath.

The holding of the breath is repeated twice, both after inhalation and exhalation, so that the three stages are expanded into four experiences.

1. Inhale
2. Hold the breath
3. Exhale
4. Hold the breath.

Patanjali has described three kinds of Pranayama as such:-

(1) Puraka (2) Rechaka (3) Kumbhaka

1. Puraka : The process of deep inhalation in Pranayama is known as Purka. In yogic terminology, it has been defined in the Yavalka Smriti as follows "Sucking in the vayu (air) from the atmosphere, through the nose, and making it fill all the nadis (Vessels) in the body is the puraka variety of control of breath."

2. Rechaka: Rechaka is the yogic description for a deep exhalation performed in Pranayama.

Yavalkar Smriti describes Rechaka as: "Rechaka is that kind of breath control in which the air from the body (called prana) is thrown into the atmosphere to the maximum possible extent."

3. Kumbhaka: The state when neither puraka nor rechaka is taking place is known as Kumbhaka.

There are two kinds of Kumbhaka in the words of Mukhtik Upanishad :

When aprana becomes silent i.e. when inhalation is complete and the Prana does not rise i.e. the act of exhalation is withheld, the state of kumbhaka is experienced. Conversely, when the prana becomes silent and aprana does not arise, the state of external kumbhaka comes into being according to the Bhagavad Gita, in the former, the Prana is sacrificed for aprana and in the latter stage aprana is sacrificed for Prana.

According to chhavdogya Upanishad, Prana is the air which goes forward through the nose, while aprana is the air which comes back into the body.

The Pranayama is of eight kinds as:-

- Surya-Bhedana Pranayama (Right nostril breathing)
- Ujjayi Pranayama (Diaphragmatic breath or Loud Breathing)
- Shitkari Pranayama (Teeth Hissing)
- Sheetli Pranayama (Tongue Hissing)
- Bhastrika Pranayama (Bellows)
- Bhramari Pranayama (Bee or Nasal snoring)
- Murchha Pranayama (Swooning)
- Kapala Bhatti Pranayama (Alternate nostril Breathing).

In this way, in its all meaning, Pranayama is said to be the technique or means of putting restraint or exercising control over one's Prana-the vital life force as : Puraka stimulates the system, rechaka throws out vitiated air and toxins, Kumbhaka distributes the energy throughout the body. The movements include horizontal expansion (dairghya), vertical ascension aroha and circumferential extension (visalata) of the lungs and the ribcage.

V. Pratyahara (abstraction of Indriyas or withdrawal)

Pratyahara is the fifth elements among the eight limbs of Patanjali's Ashtanga Yoga. Pratyahara means drawing back or retreat. The word 'ahara' means nourishment and 'praty' means to withdraw from the object.

Hence, Pratyahara means to withdraw or to prevent the sense organs from attachment to external objects. We should have control over our senses rather than being controlled by them. It is why it is well understood as "sensory withdrawal". Throwing the light on the meaning and nature of the term Pratyahara, Patanjali writes, "Savisayasam Prayyog Chittasvarupanukara ivendriyanam Pratyahara", meaning there by that Pratyahara or abstraction is, it were, the imitation by the senses of the mind by withdrawing themselves from their objects.

VI. Dharana (Concentration)

Dharana is the sixth limb of Ashtanga Yoga. The term dharana has been etymologically derived from the verbal root 'dhri' meaning "to hold, carry, or maintain." What is being held on, carried out or maintained is one's attention that is fixed on an internalized object.

Patanjali has stated in his definition of "Dharana that "Desa-bandhas Chittasya dharana "meaning thereby that dharana (concentration) is the confining of Chitta (mind) within a limited area (object of concentration). In fact one's chitta i.e. mind is extremely wavering; to engage it in a particular area is dharana.

The mind will be free within the periphery of this area, but it should not cross the boundary. This exercise is known as dharana. Let us try to illustrate such concept of dharana with an example : A person living in an open place, own a horse. The horse, by his nature, wants to roam around in different direction. To control the horse from such wandering in different directions, it is not possible to tie it up to a particular point so, the man ties a cord of certain length to its neck and then ties the other end of that cord to a hook in the ground. The horse now can freely move in the circle, the radius being the length of the cord, but it cannot go out of that circle. Thus, the person has a control on the horse and also the horse is not at a disadvantage either, as it gains a controlled freedom.

So, in the same situation the mind, which is just like the unbridled horse wants to roam around everywhere. As it is not possible to engage it at a particular point or location.

In the yogic practices of Ashtanga yoga, the practice related to Pratyahara falls prior to dharana. Pratyahara involves withdrawing the senses from external phenomenon. Dharana builds further upon this by refining it further to ekagrata or ekagra Chitta, that is single -pointed concentration and focus. Dharana or concentration in this sense involves what is described as single- pointedness that is, the fixation of mind by and spirit' on a common focal point.

VII. Dhyana (Meditation or Contemplation)

Dhyana is the seventh limb of Astanga Yoga and is immediately followed by the stage of dhyana (Concentration). In the state of Dharana, consciousness is focused on a particular object. When consciousness maintains this attention without altering or wavering in the intensity of awareness, then dharana becomes dhyana or meditation.

In this way having mastered the concentration of the mind, one reaches a point of unwavering stillness, where the mind cannot be distracted. This is dhyana, meditation.

Maharishi Patanjali in his 'Yoga Sutra' has defined Dhyana as "Tatra pratyayaikatanata dhyanam"- meaning thereby that "uninterrupted flow (of mind) towards the object (chosen for meditation) is meditation or contemplation".

According to Thirand Rishi dhyana or contemplation is of three types such as:

- (a) **Sthula-dhyana:** is a meditation upon a particular form, such as one's teacher or a deity, who is visualized in great detail.
- (b) **Jyotirmaya dhyana:** is the contemplation of the Divine as a mass of light either in the lowest psycho-spiritual centre of the body, the muladhara- chakra or in the ujna-chakra.
- (c) **Sukshma-dhyana:** Suksham dhyana is meditation upon the awakened kundalini force, after it has merged with self and exited from the body.

According to Bhakti Sagar, Dhyana has been classified into four distinctive types such as :

- (a) **Padastha dhyana :** In Padastha dhyana, the sadhaka is required to mediate by focusing its attention over the feet of his/her diety. In doing so, he may begin by first mediating on the whole figure of his

diety from head to foot and then choose the feet as the object of his deep meditation. As tool for his meditation he may sit comfortably in a sitting yogic posture like suddhasana or Padamasana, apply the Pranayama technique of Kumbhaka, and then get engaged in chanting 'Om'.

(b) **Pindastha dhyana**:-In this kind of dhyana, the attention is focussed or mediating on the various charka (a red colored lotus of four leaves) located at the base of the spine. Subsequently then, he tries to mediate on the other charkas. In the end sadhaka, mediates on the 7th Charka known as sahastrara charka(a thousand petalled and white or violet colored), located at crown (top) of the head.

(c) **Roopastha dhyana**: In this kind of dhyana, a sadhaka tries to visualize a number of objects and scenes by keeping his attention focused on the centre of the eyebrow just above the nose. In the beginning, he visualizes a circle of the five and then the lamp and the constellation of the stars along with the waves of lightening. He, then further sees various moons and sun with a total illumination of the universe.

(d) **Rupati dhyana**: This kind of dhyana or meditation is regarded best out of all types of dhyana. Here one is required to choose the formless form of the God or Almighty for the purpose of his concentration and the subsequent meditation. The chitta is controlled and united with the Brahma. This is the last stage of dhyana and first stage of Samadhi.

VIII. Samadhi

It is the final or eight limb of Ashtanga Yoga. Samadhi means 'to bring together, to merge', when the personal identity disappears, this is union of object of meditation and the meditator. It is a state of super bliss, joy and merging individual consciousness into universal consciousness. Union between jivatman and paramatman. Union of Shiva and Shakti in sahastra Chakr. Realization of God is the ultimate achievement of human birth.

In the state of Dhyana though there is merging of the three field of consciousness, each kind of consciousness still has independent existence. For example, when we put a spoonful of sugar in a glass of water, both of them unite but for some amount of time, the sugar still has an independent existence. Only when we stir the water with a spoon, the sugar completely dissolves in it and can no longer hold an independent existence. The same thing can be said about dhyana also. When our dhyana becomes so deep that our consciousness vanishes completely and what remains is the consciousness of the object alone.

This state is called as Samadhi. Remember that in Samadhi there is no role for the 'physical' object. What remains is the 'Bhava' or meaning of the object expressed by its Consciousness. Without entering state of dharana, one cannot achieve state of dhyana and Samadhi. According to Patanjali, Samadhi is of two types-(i) Sampragyata Samadhi and (ii) Asampragyata Samadhi.



6

Yogic Diet

6.1 CONCEPT AND TYPES OF DIET/FOOD

1. What is Yogic diet? What are the various types of food as per a Yogi?

Or

Describe the concept and types of yogic diet and its application in modern content.

Ans.

Diet of a Yogi

Diet is the daily intake of food by the human body. The body is a living organism that grows, functions and acts with the help of food. Food is one of the three basic needs of human beings. Foods in general term is used to describe the nutritive material solid, or liquid taken in to the human body. It is a fact that the growth and development of our body depends on the intake of diet. Growth of the body and maintenance of its health is the aim of the diet. It has been truly said, "As the food so the mind, as the mind, so the man."

Bodily fitness depends largely upon the food one eats, but once fitness and control are achieved, a man may eat almost anything and keep fit, So the yog is say, "How often does one see men who ignore all the rules of health and yet retain robust health; how often do we meet cranks who make a lifelong study of health but never achieve a single day of it."

The yogic exercises and activities like yoga postures, mudras, asanas, pranayama, and satkarmas, help us in keeping all of the systems of our body healthy and properly functioning for the needed physical and mental pursuits. In this way, various types of yoga exercises and activities prove quite helpful in the proper maintenance and functioning of the apparatus and mechanism of our body machine. However every machine needs fueling for deriving energy for its smooth and effective running. It is similarly true for the running of our body machine. The better input we will get in terms of the better food as a fuel for our body, the better it will result in terms of its physical, mental and spiritual development and functioning.

The diet of yogi or yogic diet may simply mean the type of diet prescribed or found beneficial to a yogi for getting engaged in his yoga sadhna leading him to realize the functions of yoga i.e. seeking harmony of the body, mind and soul aiming towards the realization of higher goals of life. However, food plays a quite significant role in Yog Sadhana. So, a Sadhak therefore, should be very careful in the selection of the food stuff for his diet. Yoga practitioners need to make use of an adequate diet termed as yogic diet in the domain of yoga to support the subtle goals inherent in the practice of yoga sadhna. Thus, the yogic diet stands for a diet superior in its nature, quality and effects witnessed commonly in the usual well balanced diet. The yogi is concerned with the subtle effect that food has on his mind and astral body. He therefore, avoids foods that are overly stimulating, preferring those that render the mind calm and the intellect sharp capable of seeking harmony with the self, others and the greater self. However, in general a diet of yogic should include the food stuff that is necessary.

- Pure, fresh and clean in all aspects.
- Light in nature, easy to digest, mildly cooling, refreshing and not disturbing to the mind.
- Nourishing and rich in prana -energy and vitality.
- Capable of keeping our thoughts positive, especially when eating or preparing food.

The Yoga sadhak should abandon articles of food detrimental to the practice of yoga. As far as possible, the Rajas and Tamas food stuff should therefore be totally excluded from the yogic diet. In addition to carrying for the right choice of the foodstuff in the schedule of his diet, a yogi should also take note of the manner, method or habit of consuming this diet in the most appropriate way for deriving the desired benefits. The things like following should be taken into consideration by him for this purpose.

- There should be a definite schedule for the intake of the food and need punctuality.
- One should consume food maximum only at two times, the food taken at evening should be quite light and should be taken at least three hours before the sleeping time.
- Milk is an ideal and complete food for sadhak. How it should be a cow milk and not too much boiled and hot.
- One should remain quite cautious in not losing their nutritious value in their processing in terms of washing, baking and cooking etc.
- The Yogis eat to live not live to eat. Therefore, one engaged in yoga sadhana should not resort to the greed of his taste or food sensation. In the matter of food and drinks as a sadhak, you should be a master and not a slave to it.
- In **Gita Lord Krishna** has emphatically declared that "Yoga, the eliminator of woes can be accomplished only by him who is regular and moderate in diet and recreation, regular in performing actions and regular in sleeping and walking."
- A sadhak should always take his food in a clean-quiet and peaceful environment in a pleasant mood.

Types of Food or Diet

The classification of food suggested by **Ayurveda, Bhagavad Gita** and **Yoga Sutra of Patanjali** in the form of **-Sattvic, Rajasic and Tamasic** appears as most suitable and practicable for the purpose here as a yoga student. Food is traditionally classified according to its effect on the body and mind using the three Gunas as:-

1. **Sattava** (the quality of love, light and life)
2. **Rajas** (the quality of activity and passion)
3. **Tamas** (the quality of inertia, darkness and attachment). It is based on the concept of three gunas- Sattvic, Rajas and Tamas, the basic and fundamental qualities and characteristics found in the things of the universe.

Bhagavad Gita, the most comprehensive text on yoga, while categorizing the food into sattvic, rajasic and tamasic emphasizes that a person is found to make the choice of a certain types of food stuff according to his inherent nature sattvic, rajas or tamas. It has been clarified in its three shalokas (available in Sanskrit). These shalokas convey the following facts:-

- (a) Foods which promote longevity, intelligence, health, happiness and delight and which are sweet, bland, nourishing and agreeable are dear to the sattvic people
- (b) Foods that are bitter, sour, saline excessively hot and cold, pungent, dry, burning causing pain, grief and illness are dear to the Rajasic people.
- (c) Foods that are half-cooked, insipid, putrid, stale and polluted and also impure are dear to the Tamasic people.

On the basis of what has been said in the **Bhagavad Gita** and latter on supported by **Maharishi Patanjali** in his **Yoga Sutra** let us throw more light on the nature and effects of these three types of foods or the diet schedules.

1. Sattvic food or diet : Sattvic diet is also called yogic diet. It promotes calmness and clarity of mind and is favourable for spiritual growth. Sattvic diet includes those foods in our diet schedule that nourish our body, make it healthy and strong and contribute towards its vigour, vitality and longevity besides keeping it in a state of peace and calmness. It also helps in calming and purifying the mind, enabling it to function at its maximum potential. Thus a sattvic diet may lead to a perfect health in total harmony with the mind, body and soul by enabling us to get a strong, but peaceful mind in control of a fit body, with a balanced flow of energy between them leading to the pursuits of higher goals of life or it's a state of Psychophysical unity of an individual.

This food is considered to be the ideal and superior, it means one which increases life, intelligence, strength, health, pleasure, love which is tasty, fatty and stable keeps the mind cheerful. As example of the sattvic food stuff, we may name the items like fresh fruits and vegetables, pure fruit juices, milk, pure and naturally sweet curd, butter and cheese, nuts, seeds, sprouted seeds, honey and herb teas, whole meal bread and cereals etc.

2. Rajasic Food or diet : In accordance to its name, this type of food stuff or diet suits to the very nature of the people having rajasic nature and tendencies of leading their life in a luxurious way and careless attitudes. The intake of such diet or foodstuff results in burning and in-comfort to the mouth and digestive organs. It is not easily digestible and includes the vegetarian as

well as non-vegetarian foodstuff. Such types of food or diet schedule is bound to result in destroying the mind-body equilibrium, feeding the body at the expense of the mind. This diet results in getting our body over-stimulated, exciting our passions and making our mind restless and uncontrollable. About this, **Lord Krishna** has concluded in Bhagvad Gita that, "When rajas predominates, a person runs about pursuing selfish and greedy ends, driven by restlessness and desire."

Thus intake of rajasic diet may prove quite detrimental to the harmony of one's body and mind.

3. Tamasic food or diet : In comparison to the sattvic and rajas diets tamasic food or diet is most inferior and degraded in its quality and effects. It is neither beneficial for the mind nor the body. It is devoid of the needed nutrition and energy and is bound to result in the loss of the immune power of the body and clouding of one's reasoning and thinking powers. The intake of tamasic diet may fill on with all the tamasic inclinations, habits, temperament, tendencies and dark emotions like anger, jealousy, envy and greed. This may lead one to the path of un-holiness and destruction ruining him in terms of his physical and mental health and social position. For example of tamasic foods, we may name the items like alcohol, meat, tobacco and other intoxicating substances, as well as the junk food having no nutrition value.

Where a sattvic diet makes a person endowed with sattvic nature, the rajas and tamasic diets may lead him to imbecile with the rajasic and tamasic tendencies. It may eventually exercise a great effect on his psyche and behaviour as cleared by **Lord Krishna** in **Bhagavad Gita** in the following way, "From sattvic, real knowledge develops, from rajasic greed develops, and from tamasic develops foolishness, madness and illusion."

It can be properly concluded that the quality and nature of the food consumed by us plays a quite decisive role in shaping our psyche and directing our behaviour in a particular direction.

