





# **Health and Physical Education Teachers' Guide Grade Eleven**

**2016**

**(To be implemented from 2016)**

**Health & Physical Education Unit  
Department of Science  
Faculty of Science and Technology  
National Institute of Education  
Sri Lanka**

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**Health and Physical Education**  
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### *Message from the Director General ...*

The first phase of the new competency based curriculum, with an 8 year curriculum cycle was introduced to secondary education in Sri Lanka in 2007 replacing the existing content based education system with the primary objective of developing the national level competencies recommended by the National Education Commission.

The second phase of the curriculum cycle to be introduced to grades 7 and 11 starts from 2016. For this purpose, the National Institute of Education has introduced a rationalization process and developed the syllabi for these grades making use of the research based outcomes and the suggestions made by concerned stakeholders. In the rationalization process, vertical integration has been used to systematically develop the competency levels in all subjects from fundamentals to advanced levels using the bottom up approach. Horizontal integration is used to minimize the overlapping in subject content and to reduce content over loading in the subjects to produce a more student friendly and implementable curriculum.

This new Teachers' Guide has been introduced to the teachers with the aim of providing them with the required guidance in the areas of lesson planning, teaching, carrying out activities, measurement and evaluation. These guidelines will help the teachers to be more productive and effective in the classroom. The new Teachers' Guides provide the teachers with the freedom to select quality inputs and additional activities to develop the competencies of the students. These Teachers' Guides are not loaded with the subject content that is covered in the recommended textbooks. Therefore, it is essential for the teacher to use the new Teachers' Guides simultaneously with the relevant textbooks prepared by Education Publications Department to make the Teachers' Guides more effective.

The basic objectives of the rationalized syllabi, the new Teachers' Guides and the newly developed textbooks are to bring about a shift from the teacher centered education system to a student centered system -a more activity based education system in order to develop the competencies and skills of the student body so as to enable the system to produce the required human resources for the world of work. I would like to take this opportunity to thank the members of Academic Affairs Board, the Council of the National Institute of Education and all resource persons who have contributed immensely to develop these new Teachers' Guides.

*Director General*  
*National Institute of Education*

## **Message from the Deputy Director General**

Education from the past has been constantly changing and forging forward. In recent years, these changes have become quite rapid. Past two decades have witnessed a high surge in teaching methodologies as well as in the use of technological tools and in the field of knowledge creation.

Accordingly, the National Institute of Education is in the process of taking appropriate and timely steps with regard to the education reforms of 2015.

It is with immense pleasure that this Teachers' Guide where the new curriculum has been planned based on a thorough study of the changes that have taken place in the global context adopted in terms of local needs based on a student-centered learning-teaching approach, is presented to you teachers who serve as the pilots of the schools system.

An instructional manual of this nature is provided to you with the confidence that, you will be able to make a greater contribution using this.

There is no doubt whatsoever that this Teachers' Guide will provide substantial support in the classroom teaching-learning process at the same time. Furthermore the teacher will have a better control of the classroom with a constructive approach in selecting modern resource materials and following guide lines given in this book.

I trust that through the careful study of this Teachers Guide provided to you, you will act with commitment in the generation of a greatly creative set of students capable of helping Sri Lanka move socially as well as economically forward.

This Teachers' Guide is the outcome of the expertise and unflagging commitment of a team of subject teachers and academics in the field Education.

While expressing my sincere appreciation of this task performed for the development of the education system, my heartfelt thanks go to all of you who contributed your knowledge and skills in making this document such a landmark in the field.

**M.F.S.P. Jayawardhana**  
**Deputy Director General**  
**Faculty of Science and Technology**  
**National Institute of Education**

<b>Guidence</b>	-	Academic Affairs Board-National Institute of Education
<b>Consultancy and supervision</b>	-	Mr. M.S.F.P. Jayawardhana Deputy Director General – National Institute of Education
<b>Subject Leadership</b>	-	Mr. Dhammika Kodituwakku Senior Lecturer – National Institute of Education
<b>Resource Persons</b>		
Mrs. Ayesha Lokubalasooriya	-	CCP FHB -MOH
Ms.Renuka peiris	-	Director,Nutrition & Services,MOES
Mr. Rohana karunaratna	-	Director (Ret), Sports & Physical Education, MOE
Mr. K.U.D. Danawardana	-	Vice President (Rtd), Pasdunrata , NCOE.
Mr. M.H.M.Milan	-	Asst. Director of Education (Rtd)
Mr.P.L.S Samson	-	ISA (Rtd)
Mr.A.G.L.Jayarathna	-	Lecturer, Nilwala, NCOE.
Mr. Mahesh Chandana Weerakoon	-	ISA, Zonal Education Office, Colombo South
Mr. S.N. Wijesinghe	-	ISA, Zonal Education Office, Dehiwala.
Mr.M.M.A.M.K.Munasinghe	-	Asst Teacher, St. Fransis M.V.Kelaniya
Mrs. Padmini Kamal Disnayake	-	ADE, MOE
Mrs. V.P.Weerakkody	-	Asst. Teacher, Dharmashoka V., Ambalangoda.
Mr.Upul Kaldera	-	Asst Teacher, Olaboduwa M.V., Olaboduwa.
Mr. J. N. Prbhath Indika	-	Asst. Teachr , Mahinda Rajapaksha College, Homagma.
<b>Language Editing</b>		- Mrs. Shriyani Thelasinghe - Teacher Services (R)
<b>Cover &amp; Type setting</b>		- Mrs. R.R.K. Pathirana National Institute of Education
<b>Art</b>		- Mrs. Janaka Samaradivakara, ADE, Zonal Education Office, Galewela

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## Introduction

The subject Health and physical Education anticipates the provision of experiences necessary for children to lead a physically, mentally, socially and spiritually effective life through the inculcation of good habits necessary for living. Broadly, the aim here is To produce an active and healthy generation. The subject Health and Physical Education is implemented as a compulsory subject for grades 6 – 9 and as a basket subject for Grades 10 and 11 to achieve this goal.

A competency based syllabus was introduced in 2007 for this subject, that is a part of general education. The syllabus has been revised and introduced in a more developed form. The revision of the syllabus implemented to date, is based on the information derived from researches as well as the information elicited through interviews with doctors, subject experts, subject directors, in-service advisors, teachers and students.

According to this the 13 competencies introduced through the syllabus of 2007 have been reduced to 10 competencies in the new syllabus. Similarly the removal of certain subject areas as well as the introduction of new subject areas have been effected based on the factors acquired when considering contents related to each competency. And the periods allocated for them an effort was made to ensure that an equal number of periods were provided for the two segments of Health and Physical Education. Further a more number of periods than were assigned for the subject in the previous syllabus have been provided in the present syllabus with respect to each competency.

Therefore a learning teaching approach with focus on student centered activities for the further development of competencies in the child has been adopted in order to actualize the aims for the syllabus. Similarly, the role of the teacher needs to be transformed to that of a resource person under transformation role.

The present syllabus as well as the Teacher Instruction Manual will provide guidance to achieve of the aims of the subject Health and Physical Education. By acting accordingly the chances and the ability will be obtained to achieve the objectives. It's yours responsibility.

## 0.1 National goals

1. Based on the concept of respecting human values and understanding the differences between the Sri Lankan multi-cultural society, building up the nation and confirming the identity of Sri Lanka by promoting national integrity, national unity, national coherence and peace
2. While responding to the challenges of the dynamic world, identifying and conserving the National heritage.
3. Creating an environment which comprises of the conventions of social justice and the democratic life to promote the characteristics of respecting the human rights, being aware of the responsibilities, concerning each other with affectionate relationships.
4. Promoting a sustainable life style based on the people's mental and physical well being and the concept of human values
5. Promoting the positive feelings needed for balanced personality with the qualities of creative skills, initiative, critical thinking and being responsible
6. Through education, developing the human resources, needed for the progress of the well being of an individual, the nation as well as the economic growth of Sri Lanka.
7. Preparing the people for the changes that occur in a rapidly changing world by adapting to it and controlling them; developing abilities and potentialities of people to face the complex and unexpected occasions.
8. Sustaining the skills and attitudes based on justice, equality, mutual respect which is essential to achieve a respectable place in the international community.

National Education Commission Report (2003).

## 0.2 Basic Competencies

The competencies promoted through the education mentioned below might help to achieve the above mentioned National Goals.

### (i) Competencies in Communication

This first set of competencies is made up of four subsets - Literacy, Numeracy, Graphics and information communication skills :

Literacy : Carefully listening, Speaking clearly, Reading for comprehension, writing clearly and accurately.

Numeracy : Using numbers to count, calculate, code and to measure, matter, space and time.

Graphics : Making sense of line and form, expressing and recording essential data, instructions and ideas with line, form, colour, two and three-dimensional configurations, graphic symbols and icons

ICT Competencies: Knowledge on computers, and the ability to use the information communication skills at learning or work as well as in the private life

**(ii.) Competencies relating to the Personality Development**

- Generic skills such as creativity, divergent thinking, initiative, decision making, problem-solving, critical and analytical thinking, team work, inter-personal relationships, discovering and exploring
- Values such as integrity, tolerance and respect for human dignity.
- Cognition

**(iii.) Competencies relating to the Environment.**

This is the second set of competencies related to the Social, Biological and Physical Environments.

**Social Environment:** Awareness, sensitivity and skills linked to being a member of society, social relationship, personal conduct, general and legal conventions, rights, responsibilities, duties and obligations.

**Biological Environment:** Awareness, sensitivity and skills linked to the living world, man and the ecosystem, the trees, forests, seas, water, air and life - plant, animal and human life.

**Physical Environment:** Awareness, sensitivity and skills relating to space, energy, fuels, matter, materials and their links with human living, food, clothing, shelter, health, comfort, respiration, sleep, relaxation, rest, wastes and excretion, media of communication and transport.  
*Included here are the skills in using tools to shape and for materials for living and learning.*

**(iv.) Competencies relating to Preparation for the world of work**

Employment related skills to maximize their potential and to enhance their capacity to contribute to economic development; to discover their vocational interests and aptitudes; to choose a job that suits their abilities and; to engage in a rewarding and sustainable livelihood

**(v.) Competencies relating to religion and ethics**

This fourth set of competencies laden with values and attitudes. It is essential for individuals to assimilate values, so that they may function in a manner consistent with the ethical, moral and religious modes of conduct, rituals, practices in everyday living, selecting the most appropriate.

**(vi.) Competencies in Play and Use of Leisure**

Competencies that link up with pleasure, joy, emotions and such human motivations. These find expression in play, sports, athletics and leisure pursuit of many types. These also link up with such values as cooperation, team work, healthy competition in life and work. Here are included such activities as are involved in aesthetics, arts, drama, literature, exploratory research and other creative modes in human living

**(vii.) Competencies relating to ‘Learning to learn’.**

These competencies flow directly from the nature of a rapidly changing, complex and interdependent and crowded world. Whatever one learns, that learning will need updating and review. This requires that one should be aware of, sensitive and skilful in sustained attention, and be willing to persevere and attend to details that matter in a given situation.

**Aims of Health and Physical Education .**

The purpose of this subject is to pave the way for pupils to lead an active, healthy and happy life by developing a set of competencies in them that integrate relevant knowledge attitudes, skills and mental and social abilities.

**In this regard the pupils are provided direction in**

- The study and protection of their wonderful body
- The acquisition of happiness and satisfaction
- Getting to know their needs
- Safeguarding personal health
- Developing their looks
- Maintaining the emotional balance
- Working co-operatively with peers
- Facing challenges encountered in life positively and successfully
- Achieving well being through respect for moral values
- Spending leisure effectively
- making life effective and efficient.

Competencies	Competency level	Contents	Outcomes	Time (Periods)
<b>1.1 Contributes to the building up of a Healthy Society</b>	1.1. Contributes to the maintenance of the Quality of life while promoting health	<ul style="list-style-type: none"> <li>• The Concept of Health Promotion</li> <li>• Approaches to Health promotion (Areas/aspects)</li> <li>• Formulating policies relevant to Health and other areas</li> <li>• Policies relevant to health and other areas               <ul style="list-style-type: none"> <li>• Building up a healthy environment</li> <li>• obtain Community participation</li> <li>• Developing Personal skills</li> <li>• Reorganization of Health services</li> </ul> </li> <li>• Centres of health promotion               <ul style="list-style-type: none"> <li>• Health promoting Home</li> <li>• Health promoting school</li> <li>• Health promoting city</li> <li>• Health promoting services centres</li> </ul> </li> <li>• Evaluation of schools Health promotion               <ul style="list-style-type: none"> <li>• Criteria</li> </ul> </li> <li>• The methods to be applied for promoting Health in schools</li> <li>• Quality of life               <ul style="list-style-type: none"> <li>• Factors effecting quality of life</li> <li>• Criteria that can be used to evaluate personal health conditions.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Explains Health promotion</li> <li>• Lists the approaches of Health promotion</li> <li>• Explains the approaches of Health promotion with examples</li> <li>• Gives one's views while accepting the importance of taking action to promote health</li> <li>• Evaluates school health promotion according to the criteria</li> <li>• Takes action to implement health promotion in school</li> <li>• Explains the factors that affect quality of life</li> <li>• Exhibits preparedness to take action to improve personal health condition</li> </ul>	06

Competency	Competency level	Contents	Outcomes	Time (Periods)
2.0. Fulfills Human needs for a Healthy life	2.1 Fulfills the needs of post early childhood	<ul style="list-style-type: none"> <li>• Main stages of post – early childhood               <ul style="list-style-type: none"> <li>• Adolescence ( 10 – 19)</li> <li>• Youth (20-39 years)</li> <li>• Middle age (40 -59 years)</li> <li>• Elderly age (From 60 years on wards)</li> </ul> </li> <li>• Needs of adolescence               <ul style="list-style-type: none"> <li>• Physical needs</li> <li>• Mental needs</li> <li>• Social needs</li> <li>• Spiritual needs</li> </ul> </li> <li>• Fulfilling the needs of adolescence               <ul style="list-style-type: none"> <li>• Means of fulfilling needs</li> <li>• Problems and challenges arising while fulfilling needs</li> <li>• Solutions for problems and challenges</li> </ul> </li> <li>• Needs of youth               <ul style="list-style-type: none"> <li>• Physical needs</li> <li>• Mental needs</li> <li>• Social needs</li> <li>• Spiritual needs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lists the stages of post – childhood</li> <li>• Understands the needs of adolescence and acts accordingly</li> <li>• Suggests solution for the problems and challenges that arise while fulfilling needs.</li> <li>• Lists the needs of youth</li> </ul>	05

		<ul style="list-style-type: none"> <li>• Fulfilling the needs of youth             <ul style="list-style-type: none"> <li>• Means of fulfilling needs</li> <li>• Problems and challenges arising while fulfilling needs</li> <li>• Solutions for problems and challenges</li> </ul> </li> <li>• Needs of middle age and elderly             <ul style="list-style-type: none"> <li>• Physical needs</li> <li>• Mental needs</li> <li>• Social needs</li> <li>• Spiritual needs</li> </ul> </li> <li>• Fulfilling the needs of middle age and the elderly             <ul style="list-style-type: none"> <li>• Means of fulfilling needs</li> <li>• Problems and challenges arising while fulfilling needs</li> <li>• Solutions for problems and challenges</li> <li>• Contributions of adolescence in fulfilling the needs of elderly</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Suggests solutions for the problems and challenges arise while fulfilling needs.</li> <li>• Lists the needs of middle age and the elderly</li> <li>• Suggests solutions for the problems and challenges that arise while fulfilling needs</li> <li>• Explains ones contribution towards fulfilling the needs of elderly</li> <li>• Exhibits preparedness to fulfill the needs of elderly while accepting that it is another duty.</li> <li>• Explains the contribution of adolescence in fulfilling the needs of elderly.</li> </ul>	
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Competency	Competency level	Contents	Outcomes	Time (Periods)
3.0 Exhibits correct postures to lead a healthy life	3.1 Exhibits static and dynamic postures according to the principles of Biomechanics to ensure a healthy life	<ul style="list-style-type: none"> <li>• Bio-mechanical principles that influence on posture               <ul style="list-style-type: none"> <li>• Inertia</li> <li>• Force</li> <li>• Direction of Force</li> <li>• Momentum</li> </ul> </li> <li>• Bio-mechanical principles influence on physical activities               <ul style="list-style-type: none"> <li>• Dynamic posture                   <ul style="list-style-type: none"> <li>• Walking</li> <li>• Running</li> <li>• Jumping</li> <li>• Throwing</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Explains the the Bio mechanical principles of posture</li> <li>• Explains bio- mechanical principles that influence of physical activities.</li> <li>• Explains the positions of the centre of gravity and balance in dynamic postures</li> <li>• Follows the principles of mechanical science in dynamic postures</li> </ul>	03
	3.2 Manipulates the body and equipment in accordance with the principles of Bio-Mechanics to ensure a health life	<ul style="list-style-type: none"> <li>• Pushing and pulling equipment</li> <li>• Raising and lowering equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Gets accustomed to handle equipment properly</li> </ul>	02

Competency	Competency level	Contents	Outcomes	Time (Periods)
4.0 Spends leisure effectively through the involvement in sports and outdoor activities	4.1. Enjoys playing volleyball	<ul style="list-style-type: none"> <li>• Organized games               <ul style="list-style-type: none"> <li>• Volley ball                   <ul style="list-style-type: none"> <li>• Playing the game</li> <li>• Rules and regulations</li> <li>• Officiating and judging</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Acts conforming to rules and regulations</li> <li>• Enjoys playing volley ball</li> </ul>	04
	4.2 Enjoys playing Netball	<ul style="list-style-type: none"> <li>• Netball               <ul style="list-style-type: none"> <li>• Playing the game</li> <li>• Rules and regulations</li> <li>• Officiating and judging</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Acts conforming to rules and regulations</li> <li>• enjoys playing Netball</li> </ul>	04
	4.3 Enjoys playing Football	<ul style="list-style-type: none"> <li>• Foot ball               <ul style="list-style-type: none"> <li>• Playing the game</li> <li>• Rules and regulations</li> <li>• Officiating the judging</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Acts conforming to rules and regulations</li> <li>• enjoys playing Foot ball</li> </ul>	04
	4.4 Enjoys Outdoor actives	<ul style="list-style-type: none"> <li>• Out door activities               <ul style="list-style-type: none"> <li>• Mountain climbing</li> <li>• Jungle exploration</li> <li>• Jungles craft</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Makes plans for outdoor activities</li> <li>• Enjoys engaging in outdoor activities</li> </ul>	02

Competency	Competency level	Contents	Outcomes	Time (Periods)
5.0 Applies Specific abilities developed through athletics to the tasks of life	5.1. Conforms to rules and regulations in performing daily tasks	<ul style="list-style-type: none"> <li>• Athletics</li> <li>• Rules and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Explains the general rules of athletics</li> </ul>	04
	5.2 Uses running for the effective performance of daily tasks	<ul style="list-style-type: none"> <li>• Running               <ul style="list-style-type: none"> <li>• Short distance running exercises                   <ul style="list-style-type: none"> <li>• Start</li> <li>• Techniques</li> </ul> </li> <li>• Long distance running                   <ul style="list-style-type: none"> <li>• Start</li> <li>• Techniques</li> </ul> </li> <li>• Start</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Runs short distance following the appropriate techniques</li> <li>• Engages in running exercises</li> <li>• Runs long distance following the appropriate techniques</li> </ul>	02
	5.3 Applies skills of hurdle running where necessary for the efficient performance of daily tasks	<ul style="list-style-type: none"> <li>• Hurdles</li> <li>• Training exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Exhibits Hurdle running</li> </ul>	02
	5.4 Applies jumping when necessary for the efficient performance of daily tasks	<ul style="list-style-type: none"> <li>• Triple Jump               <ul style="list-style-type: none"> <li>• Approach run</li> <li>• Hop</li> <li>• Step</li> <li>• Jump</li> </ul> </li> <li>• Training exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Involves in activities related to oneself triple jump</li> </ul>	02

5.5 Applies throwing when necessary for the efficient performance of daily tasks

- Javelin throw
- Three step method
  - Preparation
  - Approach run
  - Pulling javelin backwards
  - Cross Step
  - Power position
  - Release
  - Follow through
- Training exercises
  - Rules and regulations

- Involves in activities related to three steps Methods Javelin throw
- Acts Conforming to rules and regulations
- Acts Safely

02

Competency	Competency level	Contents	Outcomes	Time (Periods)
6.0 Acts socially in conformity with the rules, regulations and ethics of sports	6.1. Performs socially through contributing for the management conforming to rules, regulations and ethics of Sports	<ul style="list-style-type: none"> <li>• Sports Organization structure               <ul style="list-style-type: none"> <li>• Managers</li> <li>• Followers</li> </ul> </li> <li>• Qualities of sports managers and followers</li> <li>• Tasks in sports Organization in the school as a sports manager               <ul style="list-style-type: none"> <li>• Resource management</li> <li>• Physical Fitness Programmes</li> <li>• Inter House sports competitions</li> <li>• Sports training activities Sports/Physical education day</li> <li>• Outdoor activities</li> <li>• Other Sports competitions</li> <li>• Sports clubs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Explained the functions and duties of a Manager and the follower</li> <li>• Lists the qualities of a sports manager</li> <li>• Contributes to organize sports activities in school</li> </ul>	04
	6.2 Acts Socially in the Management of Schools inter house sports meet	<ul style="list-style-type: none"> <li>• Organizing inter house sports meet               <ul style="list-style-type: none"> <li>• Organizing Tournaments                   <ul style="list-style-type: none"> <li>• Knockout system</li> <li>• League system</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Assists in the organization of inter house games competitions according to the knock- out method</li> </ul>	02



		<ul style="list-style-type: none"><li>• Interaction between food and environment</li><li>• Discoloring</li><li>• Oil rancidity</li> <li>• effects of food spoilage<ul style="list-style-type: none"><li>• Wastage of Food</li><li>• Economic loss</li><li>• Causing of diseases</li><li>• Loss of quality</li></ul></li><li>• Adulteration of food</li><li>• Problems arising from adulteration<ul style="list-style-type: none"><li>• Affect Health condition</li><li>• Loss of nutrients</li><li>• Economic problems</li></ul></li><li>• Identification of adulteration</li><li>• Food poisoning<ul style="list-style-type: none"><li>• Agents responsible for food poisoning<ul style="list-style-type: none"><li>• Bacteria</li><li>• Toxins</li><li>• Chemical substances</li></ul></li></ul></li><li>• Acting to prevent food poisoning ,</li><li>• Allergy</li></ul>	<ul style="list-style-type: none"><li>• Explains the adverse effects of food spoilage</li> <li>• Explains the problems arising from adulteration</li> <li>• States the agents responsible for food poisoning</li><li>• Selects Food carefully</li></ul>	04
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	<p>7.2 Consumes healthy food for a healthy life</p>	<ul style="list-style-type: none"> <li>• Selection of food fit for consumption             <ul style="list-style-type: none"> <li>• Natural food</li> <li>• Processed Food</li> <li>• Instant food</li> </ul> </li>   <li>• Facts to be considered while identifying food suitable for consumption             <ul style="list-style-type: none"> <li>• Composition of components</li> <li>• SLS Symbol</li> <li>• Date of expiry</li> <li>• Date of manufacture</li> <li>• Outward appearance</li> <li>• Smell</li> <li>• Nutritious value</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Suggests opinions while accepting the need of selecting suitable food for consumption</li>   <li>• Lists the facts to be considered when selecting food</li>   <li>• Gives opinions while accepting that food should be selected with responsibility</li> </ul>	
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Competency	Competency level	Contents	Outcomes	Time (Periods)
8.0 Adapts an efficient life style maintaining the wonders of the body	8.1. Maintains the wonder of the systems that assist directly in movements	<ul style="list-style-type: none"> <li>• The systems that assist directly in movement and their wonders</li> <li>• Muscular system               <ul style="list-style-type: none"> <li>• Contraction and relaxation</li> <li>• Fiber ratio and performance in sports activities</li> </ul> </li> <li>• Skeletal system               <ul style="list-style-type: none"> <li>• Protective action and endurance action</li> <li>• Acting as levers</li> </ul> </li> <li>• Nervous system               <ul style="list-style-type: none"> <li>• Motor and sensory actions</li> <li>• Reflex arc</li> <li>• Conditioning</li> </ul> </li> <li>• Factors that obstruct the wonders</li> <li>• Protection of the wonder of systems</li> <li>• Wonder of providing energy for movement</li> <li>• Methods of energy supply               <ul style="list-style-type: none"> <li>• Anaerobic method</li> <li>• Aerobic Method</li> </ul> </li> <li>• Wonderful participation of systems when exercising</li> </ul>	<ul style="list-style-type: none"> <li>• Explains the structure and functions of muscular system</li> <li>• Explains the functions of the skeletal system</li> <li>• Explains the functions of the skeletal system as levers, with examples</li> <li>• Explains the functions of the Nervous system</li> <li>• Names the factors that obstruct the wonderful Functions of the systems that contributor of movement</li> <li>• Gives opinions while accepting the necessity of Protecting these systems</li> </ul>	08

<p>9.0 Takes action to maintain fitness for healthy life.</p>	<p>9.1. Takes action to maintain fitness related to motor skills</p> <p>9.2 Maintains interpersonal relationship for the sake of psycho – social wellbeing</p>	<ul style="list-style-type: none"> <li>• Fitness programmes related to motor skills                             <ul style="list-style-type: none"> <li>• Balance</li> <li>• Power</li> <li>• Agility</li> <li>• Co-ordination</li> <li>• Speed</li> <li>• Reaction speed</li> </ul> </li> <li>• Interpersonal relation ship                             <ul style="list-style-type: none"> <li>• Groups related to the family</li> <li>• Peer groups</li> <li>• Other groups</li> </ul> </li> <li>• Importance of inter personal relation ship</li> <li>• Negative and positive influences of different groups on interpersonal relation ship                             <ul style="list-style-type: none"> <li>• Media</li> <li>• Peer groups</li> <li>• Others</li> </ul> </li> <li>• Student contribution in order to improve interpersonal relation ship</li> <li>• Self realization</li> <li>• Empathy</li> <li>• Communication skills</li> <li>• Taking correct decisions</li> <li>• Logical Thinking</li> <li>• Creativeness</li> </ul>	<ul style="list-style-type: none"> <li>• Explains the methods of supplying energy for movements</li> <li>• Explains the functions of the muscular , skeletal and nervous systems during exercising</li> <li>• Makes plans for physical fitness programmes</li> <li>• Engages is physical fitness programmes</li> <li>• Suggests ideas while accepting the importance of inter personal relation ship</li> <li>• Names the Factors that Obstruct interpersonal relationship.</li> <li>• Gives opinions while accepting the necessity of acting with a responsibility when keeping interpersonal relationship.</li> <li>• Lists the skills needed to improve cordial interpersonal relation ships</li> <li>• Involves oneself in activities that improves interpersonal relation ship further</li> </ul>	<p>06</p> <p>04</p>
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**Competency: 10.0 Leads a happy life successfully facing obstacles of daily life**

Competency	Competency level	Contents	Outcomes	Time (Periods)
10.0 Leads a happy life successfully facing the obstacles of day to day life	10.1 Acts towards wellbeing by identifying the challenges of adolescence	<ul style="list-style-type: none"> <li>• Adolescence</li> <li>• Changes in adolescence                             <ul style="list-style-type: none"> <li>• Physical changes</li> <li>• Mental changes</li> <li>• Social changes</li> </ul> </li> <li>• Factors that influence these changes                             <ul style="list-style-type: none"> <li>• Hormone activity</li> <li>• Social environment</li> </ul> </li> <li>• Facing the challenges of adolescence successfully                             <ul style="list-style-type: none"> <li>• Potential of youth</li> <li>• Employing potentials positively</li> <li>• Banned stimulant drugs</li> <li>• Harm that can result from banned stimulant drugs</li> </ul> </li> <li>• Pregnancy in adolescence                             <ul style="list-style-type: none"> <li>• Complications caused to mother and child</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and names the areas that change during adolescence</li> <li>• Understands the reasons for the changes in adolescence</li> <li>• Exhibits preparedness to face the challenges of adolescence successfully</li> <li>• Identifies the potentials of adolescence and act accordingly</li> <li>• Explains the adverse effects of banned stimulant drugs</li> <li>• Identifies sexually transmitted</li> </ul>	04

	<p>10.2 Takes action to avoid sexually transmitted diseases</p>	<ul style="list-style-type: none"> <li>• Rules related to pregnancy</li> <li>• Prevention from adolescent pregnancy</li> <li>• Harm that can result from banned stimulant drugs</li>   <li>• Sexually transmitted diseases             <ul style="list-style-type: none"> <li>• General Symptoms</li> <li>• Prevention of infection</li> </ul> </li> <li>• Prevention from sexually transmitted diseases             <ul style="list-style-type: none"> <li>• HIV/AIDS                 <ul style="list-style-type: none"> <li>• Risk</li> <li>• Female</li> <li>• Male                     <ul style="list-style-type: none"> <li>• Biologically</li> <li>• Economically</li> <li>• Culturally</li> </ul> </li> </ul> </li> </ul> </li> <li>• Student contribution for the prevention of infection</li> </ul>	<p>diseases</p> <ul style="list-style-type: none"> <li>• Names the organs of the body get affected by this disease</li> <li>• Accepts the importance of preventing sexually transmitted diseases and suggests opinions</li> <li>• Explains one's contribution on preventing sexually transmitted diseases.</li> <li>• Exhibits preparedness to take action to avoid sexually transmitted diseases</li> </ul>	<p>04</p>
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## **SCHOOL POLICIES AND PROGRAMMES**

The subject Health and Physical Education has been so planned as not to confine it purely to the classroom. Numerous programmes have been suggested in order to make the actualization of the expected competencies interesting, meaningful and effective. The following programmes that call for child leadership and participation can be implemented in the school.

- Health Education Programmes
  - **Health Education programme I**
    - Inspection of personal hygiene. (Physical organs/ clothes/garments)
    - Healthy school environment (Physical/ social)
    - Canteens of healthy schools
    - Healthy food habits. (selection of food/ consumption habits)
    - School health services (Clinics/Immunization programmes)
    - Community health services (Presentation of epidemic diseases/ wholesome nourishment)
  - **Health Education Programme II**
    - Health promotion Programs
    - Health Day
    - Health Societies
    - Health/Fitness inspections
  - **Health Education Programme III**
    - First aid services
    - St John's Ambulance Services
    - Soukyadaí Services
    - Red cross Society
  - **Physical Education Programme**
  - Health Education Programme I
    - Physical fitness programmes (Education Circular 1995/18)
    - Mach past training
      - Display training
      - Drill
      - Gymnastics
      - Aerobics
  - **Physical Education Programme II**
    - Physical /Fitness promotion programs
      - Physical Education Day
      - Sports societies
      - Colours award
  - **Physical Education Programme III**
    - School sports meets
      - Athletics, Volleyball, Netball, Foot ball and Compulsory games.
      - Others Indoors as well outdoor games
      - Physical Exercises
      - Inter house Games
      - Competitions of Festivals

- Physical Education Programms IV
  - Week end and Vacation programs
    - Outdoor camps
    - Mountain climbing
    - Hikes
    - Cycling tours
    - Jungle craft
    - Mariner’s compass and map related hikes
    - Walks
  
- Physical Education programma V
  - Group activities
  - Cadetting
  - Scouting

It is the responsibility of the teachers teaching physical education to decide on the level of which the programmes above should be implemented according to the size and facilities available in the school. For the conveniences of implementation it would be meaning full to get the participation of the other members of the staff and the student council, by including the slected programmes in the annual plan of the school. It will be easy to make use of the resources of the school as well as the guidance of the school principal.

By implementing programmes according to a plan, it will be possible to involve students in activities right through the year. According to this, the talented students can be identified and involved in continuous developmental activities to the actualization of the final aims. Similarly, students can be provided the oppourtunity to maintain their physical fitness and incase their physical appeared by organizing inter house sports to ensure the participation of a majority of students. As a result of all this, the future generation will be provided with the opportunity of living in a healthy society.

In the implementation of the learning teaching process the teaching of the entire parts of the subject content should be done by a teacher with **both practical as well as theoretical knowledge**.

#### **Learning Teaching Methodology**

In deciding on the teaching methodology relevant to this syllabus, attention should be paid to the planning of learning- teaching activities that facilitate development of competencies in students based on activities.

Learning is the implementation of permanent behavioral changes in an individual. Teaching is the attempt made to bring about a permanent behavioral change in an individual. Similarly, the behavioral change brought about through learning can be through formal, non formal and informal means, Accordingly the teacher in ones teaching task, should concentrate on formal and non formal means.

In both the aspects learning and teaching described above the two main essential factors are teaching strategies and teaching techniques you, who are teacher in the system would have taught various subjects in various grades and have had various experiences but you would have experienced that you had never all subjects in all grades in the same way. As such every teacher would have some experience using different teaching methods.

Teaching techniques can be classified into several groups according to their usage. Methods of teaching vary in terms of their being individual teaching methods, group teaching methods and mass teaching methods. Out of these in the implementation of this syllabus lectures and discussion, exhibitions, brain storming, group teaching, simulation, project method assignments, role play, practical activities, various field trips, wall newspapers, explorations etc are learning teaching methods that can be used.

Whatever the teaching methodology you use more effective results can be realized through the incorporation and implementation of aspects of Engagement, Exploration, Elaboration, Assessment and Evaluation.

In teaching the practical and theoretical subject areas relived to this syllabus, it is necessary that attention is paid to more appropriate methods for the purpose. Similarly in the selection of the teaching methodology you use, attention needs to be paid to the nature of the lesson, aim of the lesson, nature of the students, grade level, resources, environmental factors etc.

Similarly, in the use of learning teaching methodologies the transmission role and the transaction role are still much in evidence. When considering the evidence, deterioration of thinking, skills personal skills and social skills there is a need to emphasize that there should be some development in the learning- teaching methodology used.

In the implementation of this syllabus developed with a competency base, the teacher aspire to the role of a resource person who intervenes to bring the student to accomplish is the preparation of an environment replete with material necessary for learning as well as other facilities, keeping close observation of how students learn, identification of student abilities and inabilities, provision of necessary feedback and feed forward to ensure the progress of student as well as carrying the

learning teaching task beyond the classroom. The teacher's role incorporating the above is the transformation role of the teacher.

While it will be possible to achieve the aims expected through this syllabus by acting in accordance with the above, it should also be kept in mind that this is your responsibility.

#### For Practical Activities in Physical Education

Several points to be kept in mind when studying this competency – based Teacher's Handbook provided to you by the National Institute of Education. Common activities with respect to each lesson in physical education have not been introduced in order to provide opportunities for your creative skills. In the learning –teaching process of physical Education there is a standard pattern that should be followed are,

- Summoning students to the grounds
- Positioning students in class formation
- Health Inspection
- Warming up exercises
- Stretching exercises
- such, material is listed in this hand book for your convenience.
- Now let us consider exercises
- Physical Fitness exercises
- Learning – teaching methodology
- Conducting a recreation game
- Cool down exercises
- Informing about future lessons
- Dismissal

These patterns followed in practical activities different from the theoretical classroom teaching only in that the practical part is left out.

You will be attended a time interval of 30-45 minutes in order to implement all this. In a class the number of students may also vary. Nevertheless in the process of developing this syllabus the following assumptions were made for the purpose of generalization

That in a class the normal period lasts 45 minutes

That in number of students in a class is 40

That in most schools, sports equipment are limited and that substitute equipment can be used.

That our country does not enjoy, regular weather pattern

That the minimum number of periods implemented a term is 3b

That this subject cannot be divided as 'Health' and "Physical Education" and that both those parts have to be taught by the same teacher.

That, at the rate of 3 periods a week, this subject is assigned over 90 periods a year. By Circular No. 2006/9 you are assigned an extra period, should more periods than this be required, additional periods can be used for this since it is possible to know the amount of time assigned for each period at the beginning of the school term, it is necessary that you organize your learning – teaching process accordingly, before the learning teaching activity you should necessarily assemble the necessary material, All such marerials is listed in this teacher guide for your convenience.

- Now let us consider how the learning – teaching process is implemented according to the standard pattern
- Summoning students to the grounds
 

It is best that students go to the grounds in single file from the class

  - Placing students according to a class pattern.
    - Position the students according to pattern created by you. It is best that this pattern is changed on different days.
  - Inspection of students health
 

Inspection of student's hair, teeth, and cloths while inquiring about their health should be compulsorily done. While student who are not capable of getting involved in practical activities should be located in suitable place they should be made to participate as support resources or judges whenever possible.
  - Warming up exercises
 

Although it is not possible to prescribe a fixed pattern to stretching exercises, it's possible to provide students with exercises for every part of the body. It is your responsibility to select suitable stretching exercises and involve your students in activities based on them
- Exercises for the development of physical fitness.
 

You can select physical fitness exercises as you wish. Here you should pay special attention to the selection of exercises that suit the activities you propose to implement that day.
- Conducting an recreation game.
- Every child exhibits a great desire to play competitive games for pleasure. Making use of this mentality of children involve them in appropriate, recreation games so as to confirm the activities taught day to day.
- Cool down exercises
 

Select several cooling down exercises, as suitable and implement them spend about one minute on this.
- Announcing about future lessons
 

Make use of this opportunity it is necessary convey some information to the students about the lesson to be implemented the next day.
- Dismissal
 

Implement a dismissal activity created by you and dismiss the class. In order to prevent monotony utilize different methods of dismissal. It is essential that safety is ensured when students are involved in practical activities

The subject content for certain activities have been provided as an annexed at the end of the activity, for the use of the teacher. Where necessary get the students to note down important points.

## Quality Inputs

The Education of its children opens the path to the development of a country. As such a classroom environment replete with various equipments is essential for active education, in order, to produce an active student. Given below is a list of quality inputs necessary for Health and Physical Education for Grade 6

It will be possible to obtain some of the permanent material here from other sections of the school. Alternated material that can be used in place of permanent equipment can be identified according to the activities involved. Never the less, if permanent equipment can be introduced to the students, it would serve a most important purpose. Anyway it will be necessary for the teacher to decide on the volume of equipment in term of the resources in the school, number of students in classes and the methodology used by the teacher.

Computer

Overhead projector

Cassette player to play music on

Transparencies

A cassette recorded with music to beats

Matters

Cross bars for high jumps

Landing matters

A take off board for long jumps

A shot - put

Discus

Javelin of different weights

Strips of wood of the size of a javelin

Netball posts

Netballs

Volleyball nets

Hurdles

Relay batons

Badminton nets

Baseball (elk) bats

Stop watches

Lime, sand, chaff, sawdust

Medicine balls

Typing papers

Bristol boards

Demy papers

Pens/Pencils

Marker pens

Meter measures/foot rulers

Pastels

Scissors  
Rods 1.2 m in length  
Bandages  
Triangular bandages  
Strips of wood  
Cotton wool  
Carpets  
Whistles  
Measuring tapes/tapes measure  
Weighing scales  
Skipping ropes  
Plastic cones  
Rubber balls of various sizes  
Fool balls  
Starting blocks  
Foot ball goal posts  
Spherical stones of the size of a putt shot  
Lime for marking  
Burned engine oil or substitute material  
Netball place names in two colours

Pictures or model diagram on CD's of

- The Food triangle
- The Food square
- The Food pyramid
- Different systems
  - o Digestive system
  - o Respiratory systems
  - o Circulatory system
  - o Reproductive system

**General Instructions on Planning the Learning – teaching Process**

General abilities important for the life of students are represented in the competencies and competency levels in the Health and Physical Education curriculum, Therefore the learning teaching process should be so planned as to develop these competencies for this purpose focus your attention on the instructions below.

- Always direct students to discover information outside the lecture method
- For this purpose direct student to explore along several factors that in relation to competencies
- Through this plan and implement activities for the development of thinking skills, social skills and personal skills in students.
- For this purpose always implement appropriate learning teaching methodologies with respect to each competency.
- In all activities utilize suitable methodologies for the involvement of the students
- Similarly, plan for the development of special abilities as well as general abilities at each competency level.
- When planning activities, be concerned the needs of one's school, needs of the region as well as the needs of the country.
- Every time quality inputs are necessary, use substitute material. Where such inputs are not available.
- When planning activities study class texts, the teachers Instructions Manual used earlier and the handbooks on athletics, Netballs & Football as well as other manuals relevant to each grade.
- In the course of the activity, pay attention always to the provision of feedback and feed forward.
- In practical activities endeavor to implement all the parts that normally Health and Physical Education lesson contains.

**First Term**  
**Competecny, Competency Level and Periods**

<b>Competecny</b>	<b>Competency Level</b>	<b>Periods</b>
<b>1.0 Contributes to the building up of a Healthy Society</b>	1.1. Contributes to the maintenance of the Quality of life while promoting health	06
<b>2.0. Fulfills Human needs for a Healthy life</b>	2.1 Fulfills the needs of life occasions after the childhood	05
<b>3.0 Exhibits correct postures to lead a healthy life</b>	3.1Exhibits static and dynamic postures according to the principles of Biomechanics to ensure a healthy life	03
<b>4.0 Spends leisure effectively through the involvement in sports and outdoor activities</b>	4.1. Enjoys playing volleyball	04
	4.2 Enjoys playing Netball	04
	4.3 Enjoys playing Football	04

**Competency 1.0** : **Contributes to the building up of a Healthy Society**

**Competency level 1.1** : Contributes to the maintenance of the Quality of life while promoting health

**No. of Period** : **06**

- Learning outcomes** :
- Explains the term 'Health promotion'.
  - Lists out the approaches to health promotion.
  - Explains the approaches to health promotion with examples.
  - States facts about acting towards health promotion while accepting the importance of it.
  - Evaluates the health promotion in the school according to the criteria.
  - Acts towards the uplifting of health promotion in the school.
  - Explains the factors affecting integrity.
  - Demonstrates the readiness in uplifting the personal health status.

**Instructions for planning teaching learning process :-**

**Step 01** - • **Make a discussion on the concept of health promotion as per given below.**

Health promotion is empowering a person to a position where he is capable of controlling the social, economical and environmental factors affecting the status of health of an individual, the family and the community while developing it.

- **Direct the students to collect information/facts under the following topics related to health promotion of schools in Sri Lanka.**
    - History.
    - related rules, regulations and circulars.
    - Philosophy and mission.
    - Strategies.
    - Actions, committees and the composition of the committees.
    - Evaluation process.
  - Make an elaboration highlighting the following points.
- History** :
- School Medical Inspection - (SMI) was initiated in 1918 according to a request made by the educational authorities with a view to uplift the health status of Sri Lankan school children.

- World school medical service was initiated in 1920.

- School Medical Inspection was conducted for all the children in schools which had less than 200 students whereas it was provided to cover the students of grades 1, 4, 7 and 10 in rest of the schools with the leadership of Medical Officers of Health.
- Public Health Inspectors - (PHI) conducted the School Sanitation Survey annually where places of disease occurrences and accidents were identified and preventive actions were carried out.
- School health promotion is done to cover the areas of providing school health services, awareness programmes and preparation of the environment.
- "School Health Promotion Programme" was implemented as a pilot project from the year 2002 and it was introduced as a national programme since 2007.
- Health Promotion of students lead to the development of the country and special attention was focussed on it.
- Health Promotion is merely not health education and it is only a part of it where capabilities of individuals are being empowered in health promotion.

Rules and regulations related to school health promotion in Sri Lanka:

- Providing information about health is compulsory through syllabi from grades 1 through 9.
  - Grades 1- 5 environment related activities.
  - Grades 6 - 9 health and physical education.
- It is compulsory to provide health facilities and there are norms related to those.
  - Wells - securely protected.
  - Action to establish one lavatory for 50 students.
  - A school environment free from accidents.
  - Implementing dengue control programmes.
  - Prohibition of the sale/consumption of food which are harmful for health.
  - Prohibition of bringing and consuming cigarettes, alcohol and drugs.

Circulars related to these :

1. School health promotion programme - 2007/21 Education Ministry.
2. Consumption and sale of food within the school premises.- 2010/03 Education Ministry.

3. Dengue control programme.
4. Providing iron tablets and folic acid tablets for school students.
5. Drugs prevention programme

Philosophy and the mission :

Philosophy - A healthy and active students generation

Mission - Providing opportunities to obtain maximum benefits out of educational prospects available, through empowering the competencies that are needed for health promotion of school children, their families and the community.

Strategies/areas:

1. Formulation of health promotion policies.  
Making policy decisions to identify health issues in the school to take suitable action to eliminate or minimize them.  
Ex:-
  - Supply of clean drinking water.
  - Maintaining a healthy school canteen.All the stakeholders should be aware of and in agreement with these policies.
2. Developing competencies needed for health promotion.  
It is expected to cause a change in behaviour by health and developing healthy habits, where development of psycho-social competencies are expected through the syllabi, additional reading materials, workshops etc, in order to face the challenges in day to day life.  
Ex:-
  - Conducting debates.
  - Conducting group games/activities
3. Creating an environment conducive for health promotion.  
It is expected to develop physical, mental and social aspects where special emphasis should be made for the following aspects as well.

Physical environment	Mental environment	Social environment
<ul style="list-style-type: none"> <li>• Supply of clean drinking water.</li> <li>• Sufficient toilet facilities.</li> <li>• Building classrooms with proper light and ventilation.</li> <li>• Proper disposal of waste and sewage.</li> <li>• Home gardening.</li> <li>• Free from harmful and dangerous things for children.</li> </ul>	<ul style="list-style-type: none"> <li>• Not being ashamed/disgraced.</li> <li>• Free from violence</li> <li>• Provide counselling</li> <li>• Equal treatment for all the students</li> <li>• Free from mental stress</li> </ul>	<ul style="list-style-type: none"> <li>• Protect the democratic nature.</li> <li>• Prospects for group work.</li> <li>• Good student - teacher relationships</li> <li>• Spend free time productively/ presence of suitable programmes.</li> </ul>

4. Develop community relationships for health promotion.

Relationship between the school and the society should be beneficial for both the parties. It is expected to implement community health promotion by the school where the contribution of the community should be obtained by the society for school health promotion as well.

- Ex:-
- Conducting dengue control programmes in outside organizations by the school.
  - Conducting shramadhana in schools by the community.

5. Providing services necessary for health promotion/reorganizing.

Providing services necessary for school community, maintaining the school medical examination continuously, providing services identifying new needs and efficient provision of current services if there are shortcomings.

**Step 02**

- Provide opportunity to the students to study the circular 2007/21 issued by the Ministry of Education on school health promotion.
- Direct the students to collect information on following areas accordingly.
  - Health promotion committee of the school.
  - Status of sanitation facilities.
  - Status of the school canteen.
  - Implementation of morning body exercise programme.
  - Evaluation of body fitness.

- Direct the students to discuss on the status related to the school.
- Advise students to evaluate the school according to the criteria given in annex 1.1.1.
  - Advise students to select the group from the marks obtained into which the school falls according to the health promotion certification.
    - 60 - 69 marks - bronze award level
    - 70 - 79 marks - silver award level
    - Over 80 marks - gold award level

**Step 03**

- Divide the class into four groups.
- Direct them to compile information related to actions to be taken in health promotion strategies.

Strategy	Prevailing condition	Nature of change	Actions to be taken
i. Healthy policies ii. Environment conducive for health iii. Contribution of community iv. Knowledge and competency development iv. Reorganizing health services			

- Provide opportunity for group presentations.
- Insist on the responsibility of the students in having a health promoted school.

**Step 04**

Explain the measures taken in health promotion at national level as per given below.

Strategy	Activities
<ul style="list-style-type: none"> <li>• Health policies</li> </ul>	Supplying free health services(hospitals). Conducting free daily medical clinics for mothers and providing necessary advice. Give immunizations (at proper times) giving instructions to breast feed the until six months, conducting medical examinations and observing all students of grades 1, 4, 7 and 10. School dental services for children below 13 years of age, presence of policies on the font size, use of colours in printing books for various age groups, decisions on suitable furniture and height of boards for various age groups, providing health services for adolescents, food act, regulation of suitable food consumption by food consumer protection act.

Strategy	Activities
	<p>Providing sanitary facilities - establishing toilets in public places for children.</p> <p>Changing the composition of chemical fertilizer and popularizing organic fertilizer.</p> <p>Acting on maintaining a clean environment - dengue control programmes in home gardens.</p> <p>Providing drinking water facilities, tube wells, water from fountains and bowsers. Environmental conservation through conserving natural forests. Introducing waste management methods. .</p> <p style="text-align: center;">3R     - Reduce           - Reuse           - Recycle</p>
<ul style="list-style-type: none"> <li>• Community contribution</li> </ul>	<p>Minimizing use of pesticides, conducting shramadhana campaigns, promotion of various associations, payment of income taxes properly to maintain transport activities of institutes (CSR), supporting maintenance activities of public places, schools/hospitals/places of religious worship, sunday schools etc.</p>
<ul style="list-style-type: none"> <li>• Knowledge, competency development</li> </ul>	<p>Knowledge on health, from scholl TV, radio, newspapers, special messages, propagated free of charge, awareness from house to house by PHI,</p>
<ul style="list-style-type: none"> <li>• Organizing and obtaining health services.</li> </ul>	<p>Health workshops, clinics.</p> <p>Health clinics at village level, free immunization activities.</p> <p>Conducting special clinics in the event of epidemic situations.</p> <p>Eye clinics, setting up targets like (Vision 2020), sight for all in the year 2020. Introducing special methods of transplanting body parts and providing services. Providing relief services for patients. Acting in groups working in different areas together to make necessary changes for the situations in events which need special financial aid.</p> <p>Ex:- Minimizing the increase of kidney patients, identifying and treating, providing clean drinking water, minimize use of fertilizer, providing facilities and making awareness. Use of websites on creating awareness, about health issues and emergency calling systems.</p>

- Step 05**
- Direct students to compile information on the challenges faced in health promotion of the society using the society related to the school.
  - Ask them to design plans of action to make a healthy society around the school.

Action	Responsible institute	Expected role of that institute

- Give them an opportunity to obtain assistance through the ongoing programmes of identified institutes.  
Ex:- Video clips, leaflets, etc,

- Step 06**
- Direct students to get the contribution of the community.
  - Divide the students into groups and ask them to prepare a report on the actions that could be taken to health promotions in various places as per given below.
    - Health promoted home
    - Health promoted school
    - Health promoted cities
    - Health promoted service stations
  - Allow them to study the prepared report.
  - Give an opportunity to address parent - teachers meeting/school development society on "Let's contribute for health promotion. Guide them to use video programmes or computers in this regard.
  - Motivate students to include the shortcomings of the school and the expected changes to be done in their presentations. Direct students to use leaflets/video programmes/computers in this regard.
  - Support the school health promotion by obtaining help from the parents in the changes to be made in the school.

- Step 07**
- Introduce what is the quality of life as per given below.
    - Development of characteristics to lead a joyful and exciting life by increasing the life span through minimizing the possibility of catching diseases and disorders.

- The philosophy of the Health Ministry is to develop the quality of life of the people living in the society.
- Discuss about the factors affecting the quality of life as per given below.
  - Increasing the capability for immunization thereby preventing the communicable diseases. Therefore;
    - the efficiency of engaging in work increases.
    - increase in the life span. Sri lankan males 73 years, females 76 years.
    - the trends towards non communicable diseases decreased.
  - Proper physical exercises and controlling mental stress is important in this regard.
  - Acting adhering to high quality moral principles.
  - Development of peace in mind and be happy
  - Simple lifestyle
- Discuss about the criteria for the evaluation of individual health status.
  - Body mass index
  - Proper waist measurement
  - Fitness of the body
  - Memory power
  - Ability to get diseases and disorders
  - Activeness
  - Pleasant appearance
  - Hygiene and level of good habits
  - Interpersonal relationships
- Direct each and every student to prepare a report about him/her according to this.
- Help them to identify actions to be taken to develop their own health status.
- Provide feed back and feed forward while engaging in activities
- Use the first chapter of the next book for learning teaching process according to the necessity.

- Basic key concepts :**
- Health promotion
  - Health promotion of the school
  - Health promotion certification

- Quality inputs :**
- Health promotion and related circulars
  - Evaluation sheets
  - Diagrams
  - Video tapes
  - criteria of school health promotion.

**Instructions for assessment and evaluation :-**

- Inquire about the knowledge about the health promotion and school health promotion from the students.
- Ask the students to compile facts on the advantages that could be enjoyed by an individual in creating a health promoted environment.
- Direct the students to identify actions to be carried out to increase the level of health promotion in the school and ask them to review progress on this regard.
- Evaluate the implementation of school health promoting steps by identifying them.
- Ask the students to engage in the following activities to raise awareness of the community about a health promoted environment.
  - leaflets
  - posters

**Competency 2.0. : Fulfills Human needs for a Healthy life**

**competency level 2.1 : Fulfills the needs of life occasions after the childhood**

**No. of Period : 05**

- Learning outcomes :**
- Listout the stages in life after childhood.
  - Acts through identifying the requirements of adolescents.
  - Suggests solutions for problems and challenges in fulfilling the needs of the adolescence
  - Listout the needs of youth
  - Suggests solutions and challenges in fulfilling the needs of youth.
  - Listoutthe needs of mid aged people and elders.
  - Suggests solutions for problems and challenges in fulfilling the needs of mid aged people and elders.
  - Describes the contribution on fulfilling the needs of elders.

### **Instructions for the planning of teaching learning process**

- Step 01 -**
- Recall about the subject matter learnt in grade 10 on pre-natal stage to childhood.
  - Make a discussion on the stages in life after the childhood as per given below.
    - Adolescence (10 - 19 years)
    - Youth (20 - 39 years)
    - Mid aged (40 - 59 years)
    - Elders (above 59 years)introduce respectively.
  - Make a discussion on the existence of various needs at different stages of life from childhood. Make a discussion with the students that these are,
    - physical needs
    - mental needs
    - social needs
    - spiritual needs
- Step 02**
- Allow students to identify the change of needs according to each and every stage through activities.
  - Direct students to compile information related to the change of needs according to the stage as per given below.
  - Use the annexe 2.1.1 for elaboration

Stage	Need			
	Physical	mental	Social	Spiritual
Adolescence				
Youth				
Mid aged				
Elders				

- Step 03**
- Divide the class into groups and direct them to prepare a report on the following information when fulfilling the needs of each stage.
    - Importance of fulfilling the needs according to the stages.
    - Challenges and issues raised during the fulfilling of needs.
    - Solutions for such challenges and issues.

- Step 04**
- Advise students to collect information on the duties and responsibilities of adolescents in fulfilling the needs of elders.

Need	Action	Way by which the contribution is made

- Make an elaboration in relation to annex 2.1.1.

**Basic key concepts :**

- Life stages
- Needs

**Quality inputs :**

- Newspaper articles related to timely incidents
- Video clip

**Instructions for assessment and evaluation :**

- Inquire about the students perception about the needs of different stages.
- Evaluate the importance of fulfilling the needs of the stages of life after the childhood by a group assignment.
- Evaluate the sensitivity of adolescence on the needs of elders.

## Annexe 2.1.1

## Information sheet

Stage	Need	Obstructions raised in fulfilling needs	Solutions for problems
Adolescence (10 – 19 years)	<ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Exercise</li> <li>• Protection</li> <li>• Leisure</li> <li>• Education</li> <li>• Affection</li> <li>• Peer group company</li> <li>• Sexual needs</li> </ul>	<ul style="list-style-type: none"> <li>• Economic status</li> <li>• Restlessness</li> <li>• Ignorings</li> <li>• Devotion of time only to education</li> <li>• Not having sex education</li> <li>• Engaging in unsuitable acts according to the age.</li> <li>• Unsuitable relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Success in education</li> <li>• Time management</li> <li>• Obey parents and elders</li> <li>• Drive towards sports activities</li> <li>• Company of good friends</li> <li>• Being a pleasant individual</li> </ul>
Youth (20 – 39 years)	<ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Exercise</li> <li>• Leisure</li> <li>• Higher education</li> <li>• Employment</li> <li>• Housing</li> <li>• Affection</li> <li>• Sexual needs</li> </ul>	<ul style="list-style-type: none"> <li>• Economic status</li> <li>• Without proper education</li> <li>• High competition and restlessness</li> <li>• Unemployment</li> <li>• Lack of understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Uplifting the level of education</li> <li>• Steer life with a purpose and to win challenges</li> <li>• Time management</li> <li>• Acting with understanding</li> <li>• Finding employment opportunities</li> </ul>
Mid aged (40 – 59 years)	<ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Exercise</li> <li>• Leisure</li> <li>• All the members of the family living together</li> <li>• Promotions in employment</li> <li>• Strong economy</li> <li>• Fulfilling the needs of children</li> </ul>	<ul style="list-style-type: none"> <li>• No proper time management</li> <li>• Undesirable economic status</li> <li>• Problems in employment</li> <li>• Various disease conditions</li> <li>• High engagement in activities</li> <li>• Expatriot children</li> <li>• Sexual problems</li> </ul>	<ul style="list-style-type: none"> <li>• Making a sound economic status</li> <li>• Proper time management</li> <li>• Creating well mannered children</li> <li>• Sacrifices made for the well-being of children.</li> <li>• Taking proper medical treatment, engaging in exercise</li> <li>• Directing towards the enjoyment of aesthetics</li> </ul>
Elders (over 59 years)	<ul style="list-style-type: none"> <li>• Affection</li> <li>• Nutrition</li> <li>• Leisure</li> <li>• Engage in religious activities</li> <li>• Treatments for various disease conditions.</li> <li>• Medicines</li> </ul>	<ul style="list-style-type: none"> <li>• Economic status</li> <li>• Disregard from children</li> <li>• Expatriot children</li> <li>• Various disease conditions</li> <li>• Various emotional problems</li> </ul>	<ul style="list-style-type: none"> <li>• Excessive engagement in religious activities</li> <li>• Being occupied in some act</li> <li>• Understanding the reality</li> <li>• Controlling emotions</li> <li>• Reading religious books.</li> </ul>

**Competency 3.0. : Exhibits correct postures to lead a healthy life.**

**Competency level 3.1 : Exhibits dynamic and static postures according to the principles of biomechanics to ensure a healthy life.**

**No. of Period : 03**

**Learning outcomes :**

- Explains the bio-mechanical principles that affect on dynamic postures.
- Engages in dynamic postures with an understanding of bio-mechanical principles.

**Instructions for the preparation of learning teaching process :-**

- Step 01**
- Comprehend that the main objective of this lesson is to provide an understanding for the students on the bio-mechanical principles that affect dynamic postures.
  - Before awakening about the bio-mechanical principles of dynamic postures, it is important to make comprehension on basics of those principles.
  - Educate the students regarding the bio-mechanical principles with the examples in sport and physical education.
  - Refer the annexe 3.1.1 for the relevant examples.
    - Inertia
    - Force
    - Direction of force
    - Momentum
  - Describe to the students, that the property of a body that resists any change to its motion equivalent to its state of rest or motion is called as inertia. Inertia depends on the mass of a body.
  - Describe the to students, an effect that can change the state of rest or motion of an object is called as force.
  - Describe to the students, the quantity of motion is called as momentum and it depends on the mass and velocity of the object.
  - Educate the students regarding the bio-mechanical principles of walking, running and throwing as follows.
- Step 02**
- Walking could be described as a continuous process of losing and regaining balance. In walking the inner edges of the feet move forward in a straight line in order to move the centre of gravity of the body above the supporting base .

- Momentum change is directly proportional to the force applied. In running the increase of force applied from the hind leg increases the forward acceleration. Explain these facts to the students.
- Step 03**
- Explain the following facts about running and take off to the students
  - In jumping events factors such as take off speed, take off angle and take off height affect the length or the height of the jump.
  - In throwing events factors such as throwing speed, throwing angle and throwing height affect the distance attained by the throwing instrument.
  - Refer chapter 3 of the new textbook and previous Teacher's Instruction Manual for the teaching process.

- Basic key concepts :**
- Inertia, force, direction of force, momentum, take off/ release speed, take off/ release angle, take off/release height

**Instructions for the assessment and evaluation :**

- Inquire about the bio-mechanical principles given below.
  - Inertia
  - Force and direction of force
  - Momentum
- Inquire how bio-mechanical principles are applied in dynamic postures of walking, running, jumping and throwing.

## Annexe 3.1.1

## Information sheet

**Inertia**

- The property of a body that resists any change to its state of rest or motion is called as inertia.
- A player is trying to lift up a load in figure 3.1.1. Think that player has lifted the bar with a certain load. Then, for the second time if he lifts with some additional weights, player feels difficult to lift the bar than earlier. So we can decide that the bar with additional weights is more reluctant to motion.



fig. 3.1.1



fig. 3.1.2

- In the second time inertia of the weighted bar has increased. That is to say, the load is more reluctant to motion. Thus the player has to apply more force.
- Think, a player stops a rolling football towards him and later he stops a rolling shot put as well. (fig. 3.1.2) Player feels more difficult to stop the shot put. Difficulty to stop a moving object is also called the inertia of it. Inertia of the shot put is more than the inertia of the football. So it is more difficult to stop the rolling shot put.

**Force**

- An effect that can change the state of motion or rest of an object is called as force.
- A weight lifter push the bar when he lifted up the load from the shoulder. But he pull the bar when he lifted up the load from the ground. (fig. 3.1.3) We can identify pushes and pulls in sports activities.
- The single term Force is used for pushes and pulls.



fig. 3.1.3



fig. 3.1.3

- An athlete rests on the starting block for the sprinting start. It needs an effect to change this resting posture. This effect is a force which breaks the stationary situation. The reaction force of the push given by the athlete on the starting block is used for this. (fig. 3.1.4)



fig. 3.1.4

- A cricket batsman puts a force on a ball by hitting the bat to change the direction of motion of the ball. (fig. 3.1.5)
- A cricket fielder catches the ball which come towards him. He puts a force on the ball by his hands to stop the motion of the ball. (fig. 3.1.6)



fig. 3.1.5



fig. 3.1.6

- A player gets force for motion activities by contraction of muscles. (fig. 3.1.7)
- A player should put the force on the shot put to move it when a throw. The force should be applied to the direction which it has to be moved. (fig. 3.1.8)



fig. 3.1.7



fig. 3.1.8



fig. 3.1.9

- When an athlete jumps vertically upwards, reaction force of pressure applied on the ground acts vertically upwards. That is, the force acts to the direction of motion.(fig 3.1.9)
- A force has a magnitude and a direction. The magnitude can be indicated by the length of a line drawn to a scale and the direction can be indicated by an arrow head.
- During an event of passing a ball between two players, figure 3.1.10 shows a situation where one player is catching the ball thrown by the other player.. The catcher will feel difficulty when he stops the motion of the ball.
- This difficulty may change upon the followings.
  1. Changing the speed of ball motion
  2. Changing the weight of ball
- According to that we can say, quantity of the ball motion depends on it's mass and velocity.

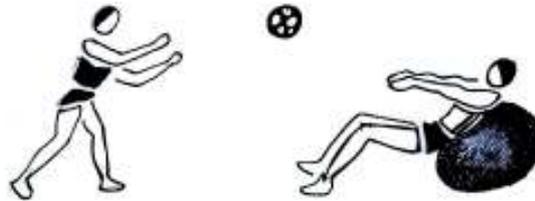


fig. 3.1.10

- To measure the quantity of motion we use the mass x velocity accumulation. It is called as Momentum.
- Momentum = mass x velocity

**Competency 4.0 :** Spends leisure effectively through the involvement in sports and outdoor activities.

**Competency level 4.1 :** Enjoys playing volleyball

**Number of periods :** 04

- Learning outcomes :**
- List out the skills of volleyball.
  - Enjoys by playing volleyball.
  - Acts according to the rules and regulations.
  - Works with the team spirit.

**Instructions for the preparation of learning teaching process :**

- Step 01 :**
- Remind about the skills of volleyball learnt in grade 06.
  - Let the students to play volleyball for sometime.
  - **Lead a discussion by highlighting following factors.**
    - The game volleyball is created with a combination of several skills.
    - There is a set of standard rules and regulations internationally recognized.
    - Two referees are needed to control the game.
    - School matches are conducted according to the relevant age groups.
- Step 02 :**
- Group the students appropriately.
  - Ask the students to prepare a knock out draw to conduct a friendly tournament among the teams.
  - Conduct a tournament according to the draw.
  - To start a game, law of positioning will apply.
  - The way of positioning is “W” system to start the game for beginners.

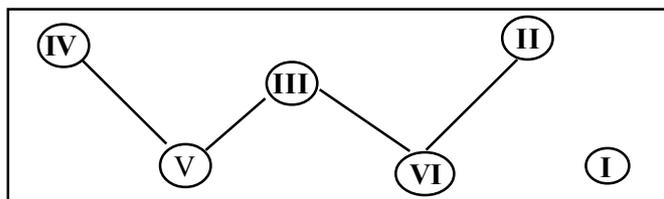


Fig. 4.1.1

- Step 03** :
- Use students as the referees while conducting the tournament.
  - Advise them to apply the rules and regulations that they learnt so far.
  - If foul occurs, stop the game describe the foul and explain the rule.
  - The first team who scores 10 points will win the game.
  - Explain the following rule of positioning during the game.

### **Rule of positioning in volleyball.**

#### **The initial order of the team**

- For a game there should be 6 players on court.
- At the start the order players stand on the court is the order of play and this order should be kept till the round is over.
- Before the commencement of every round the coach should provide the 2<sup>nd</sup> referee or the scorer the order of play duly signed by him.
- Excepting the Libero player the other players who are not in the line up sheet are considered as reserves.
- After handing over the line up sheet it cannot be changed again and if necessary permission is granted to do a formal substitution.

#### **Positioning**

- While serving all the other players of both teams should be positioned according to the line up sheet

#### **Players position in the following manner**

- The players close to the net are the front players and their places are front left No. 4, front middle No. 3, front right No. 2
- The other three are rear players and their places are back left No. 5 back centre No. 6, back right No. 1.

#### **The link between players and positions**

- Every rear player should be close to the middle line but behind the front players.
- The places of players are considered valid by the position of their sole of the foot and as mentioned below.
  - The sole of the front player should be ahead of the sole of the back player with him but slightly close to the middle line.
  - The sole of the side player should be more to the side line from the sole of the middle player.

- After a service the players are free to play on his court or on the free zone.

#### **Foul Positioning**

- When serving - the other players not in their proper places.
- Even if there is an error in positioning during a foul service it is taken to task first.
- After a service if a foul is committed it is ignored but the incorrect positioning is considered a foul.

#### **Results due to Foul Positioning**

- A point and service grant to the opponents as the penalty.
- Players should change in to the correct positioning

#### **Changing places**

- Changing places means adhering to the order of play and service according to the order list.
- The team not served before should move one place clock wise before the service is taken. The player in place No. 2 should move to No. 1 place to serve and No. 1 should move to No. 6.

#### **Fouls in Changing Places**

- Foul in changing places means, changing places without adhering the order. The penalty is
- Fouled team loose the ball.
- The players move to the correct places.
- Apart from that the scorer should remove the points scored after the foul and inform and leave the score of the other team as it is.
- If the foul committed cannot be accurately decided the score will not change but the team will loose the ball.

**Step 04** : • **Lead a discussion by highlighting following factors after the tournament.**

- Player positions has numbered in volleyball.
- "W" formation is used to receive the service.
- Changing places is doing according to clockwise.
- Line up and changing places should be done according to the above rule.

**Basic term concepts** : Libero player, Clockwise

**Quality inputs** : A play ground  
Volleyballs  
A rule book

**Instructions for the assessment and evaluation :**

- Evaluate the exhibiting of skills.
- Evaluate the comprehension on rules in refereeing.
- Evaluate the comprehension on hand signals.
- Evaluate the team work, leadership and followership qualities.
- Evaluate the acts according to the rules and regulations.

**Competency level 4.2** : **Enjoys playing netball.**

**Number of periods** : 04

**Learning outcomes** :

- List out the skills of netball.
- Enjoys by playing netball.
- Acts according to the rules and regulations.
- Works with the team spirit.

**Instructions for the preparation of learning teaching process :**

**Step 01** :

- Remind about the skills of netball learnt in grade 06.
- Let the students to play the netball for sometime.
- **Lead a discussion by highlighting following factors.**
  - The game netball is created with a combination of several skills.
  - There is a set of standard rules and regulations recognized internationally.
  - Two umpires are needed to control the game.
  - School matches are conducted according to the relevant age groups.

**Step 02** :

- Group the students as appropriately.
- Ask the students to prepare a knock out draw to conduct a tournament among the teams.
- Conduct a friendly tournament according to the draw.
- Give the time as required.
- Give a chance to every student to umpire the matches.
- Advise them to apply the rules and hand signals that they learnt so far.
  - Explain the rules when necessary.
  - Make attention on following rules and regulations as well.

**Start of the game**

- Positioning of the players in both teams are as follows. Letters of one team is shown in the box According to the starting rule players must stay in their own goal thirds except the center players.(Fig.4.2.1)

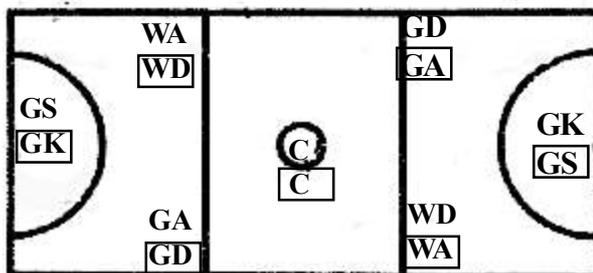


fig. 4.2.1

- The following should be observed before start of the game.
  - Prepare two teams with 7 in a team. 12 players can register in a team and there should be minimum of 05 players to start the game.
  - All should wear bibs.
  - To identify the two teams two colours should be worn.
  - To start the match the captains of the two teams should toss a coin.
  - The winner of the toss choose the side or the ball.
  - The players take their positions on court with the signal of the umpire.

#### **Start of the game**

- The center with the ball stand with both feet inside the centre circle.
- Till the umpire blow the whistle no player can enter the center court.
- When all the payers are in their positions the game start with the umpire's whistle.
- The first pass should be inside the center court
- Center pass will pass by one team after the other team after scoring each point. Sides will change after the time out. Change places and substitutions are not permitted in intervals.
- Time durations in each age groups are as follows.
  - U 15 - 10 min, 3 min interval, 10 min.
  - U17 - 15 min, 3 min interval, 15 min.
  - U 19 - 20 min, 3 min interval, 20 min.

- There are 04 quarters in national and international matches.
  - 1<sup>st</sup> quarter – 15 min – 3 min interval
  - 2nd quarter – 15 min – 5 min interval
  - 3rd quarter – 15 min – 3 min interval
  - 4th quarter – 15 min
- Teams should change their sides after the each quarter. Organizers can conduct 20 min half with 05 min interval if,
  - one team has two or more matches in a day or
  - Insufficient time duration

### **Rules and regulations**

- Here are some rules and regulations which may important to you. Refer the rules and regulations of netball for further studies.
- Penalties for the fouls in netball.
  - Free pass
  - Penalty pass
  - Penalty pass or Penalty shot
  - Throw in
  - Toss up

### **Free pass**

- Fouls done by the player with the ball without harming the opponents. A shooter cannot shoot a free pass though it offered within the goal circle.

### **Instances offer a free pass**

#### **FOOTWORK**

- A player may receive the ball with one foot grounded, or jump to catch and land on one foot, and then:-
- step with the other foot in any direction, lift the landing foot and throw or shoot
- before this foot is regrounded;

#### **Fouls in footwork**

- drag or slide the landing foot;
- hop on either foot;
- jump from both feet and land on both feet unless the ball has been released before landing.

**Fouls in ball controlling**

- roll the ball to another player;
- throw the ball and play it before it has been touched by another player;
- toss the ball into the air and replay it;
- drop the ball and replay it;
- bounce the ball and replay it.
- replay the ball after an unsuccessful shot at goal unless it has touched some part of the Goalpost.
- Pass the ball by kneeling or lying
- Hold the ball more than 03 seconds
- Insufficient distance between the passing players (short pass)
- Pass the ball over one third of the court
- Take the support of the goalposts to receive the ball.
- A player entering a prohibited area for her.
- Catch the center pass without coming to the middle part and coming to the middlepart before whitsle.

**Fouls in players**

- In illegal substitution or team change

**Taking the free pass**

- A free pass is awarded to the opponent team when the above fouls are done by a player. When a Free Pass is awarded, the ball may be thrown by any opponent player allowed in that area, where foul occurred. (Fig. 4.2.2)



Fig. 4.2.2

**Penalty pass**

- move into the path of an opponent who is committed to a particular landing position;
- push, trip, hold or lean on an opponent or use other forms of physical contact;
- place a hand or hands on a ball held by an opponent
- knock or remove the ball from the possession of an opponent;
- while holding the ball push it into an opponent;

**Penalty pass or penalty shot**

- Above contacts in the goal circle
- Obstruct with less than 0.9m by stretched arms
- Hit and hold the hand or hands on the ball with being closely.
- Move or hit the goal posts to obstruct the shooting.



(Fig.4.2.3)

### Taking the penalty pass or penalty shot

- A player penalised for obstruction or contact stands beside and not to impede this player in any way. The penalised player may not move from this position or take part in play until the Penalty Pass or Shot has left the hands of the thrower.(Fig.4.2.3)

### Throw in

- ball goes out of Court the player who received the ball while any part of that player was touching the ground, object or a person outside the Court.
- the ball touching the ground, object or a person outside the Court.(Fig. 4.2.4)

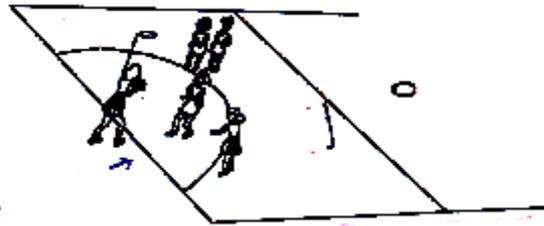


Fig.4.2.4

### Taking the Throw in

- stand outside the Court and place one or both feet behind the point where the ball crossed the line and concern the foot work and 03 seconds rule.

### Toss up

- opposing players gain simultaneous possession of the ball with either or both hands.
- opposing players simultaneously knock the ball out of Court.
- opposing players are involved and the Umpire is unable to determine the last player to touch the ball before it goes out of Court.
- opposing players are simultaneously offside, one in possession of or touching the ball.
- opposing players make simultaneous contact affecting the play.

- after an accident the Umpires are unable to say who had the ball, or the ball was on the ground when play stopped.

### Taking the toss up

- On Court between the two opposing players concerned at the point where the incident occurred.
  - The two players shall stand facing each other and their own goal ends with arms straight and hands to sides, but feet in any position. There shall be a distance of 0.9m (3 feet) between the nearer foot of each player concerned. They shall not move from that position until the whistle is blown.
  - The Umpire shall release the ball midway between the two players from just below the shoulder level of the shorter player's normal standing position.
  - Umpire shall flick the ball vertically not more than 600 mm (2 feet) in the air as the whistle is blown. (Fig. 4.2.5)

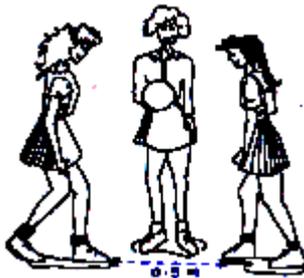
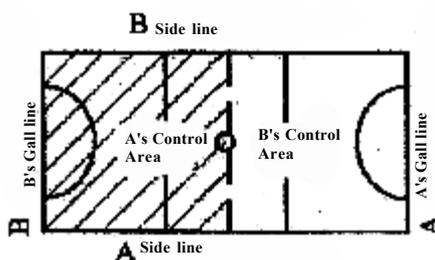


Fig. 4.2.5

### Umpire the match

- There shall be two Umpires who shall have control of the game and give decisions.
- Before the start of play:-
  - (i) Umpires will check that the Court, Goalposts and the ball conform to the rules of the game;
- Off the Court, the Umpires will inspect players for sharp adornments, jewellery,
- uniforms and the correct length of fingernails.
- keep 3m outside the Court to secure a clear view of play,umpire or to take a Toss Up.
- Toss between the both captains and inform its result to the umpires and scorers.
- Umpire the own half of each umpire.
- Check the readiness of scorers and time keepers.
- Check the positioning of players.



- Umpires should separate their area according to the above figure.
- Northern half will be controlled by the umpire who won the toss.
- Use hand signals for more explanation of decisions.
- Provide feed back and feed foward while engaging in activities.

**Basic term concepts :** Rules and regulations ,Umpire

**Quality inputs :** A netball court  
Netballs  
A whistle

**Instructions for the assessment and evaluation :**

- Ask about the rules and regulations of netball as suitable.
- Evaluate the skills of umpiring.
- Evaluate the following and implementing the rules and regulations.
- Evaluate working as a team

**Competency level 4.3: Enjoys playing football.****Number of periods** : 04

- Learning outcomes** :
- List the skills of foot ball
  - Enjoys by playing football.
  - Acts according to the rules and regulations.
  - Exhibits the skill of decision making.

**Instructions for the preparation of learning teaching process :**

- Step 01** :
- Remind about the skills of football learnt in grade 06.
  - Let students to play football for sometime.
  - **Lead a discussion by highlighting following factors.**
  - The game football is created with a combination of several skills.(Attacking,Defending,Goal keeping etc.)
  - There is a set of standard rules and regulations recognized internationally.
  - One head referee and two assistant referees are needed to control the game.
  - School football matches are conducted according to the relevant age groups.
- Step 02** :
- Group the students as appropriately.
  - Ask the students to prepare a knock out draw to conduct a football tournament among the teams.
  - Give the certain time period for each match.
  - Instruct them about the team positioning at the beginning of the match.
- :
- Use students to refereeing the matches.
  - Advise them to apply the rules and regulations that they learnt so far.
  - If foul occurs, stop the game describe the foul and explain the rule.
  - The team who scored highest number of goals will win the game and bring forward of the draw.

**Step 02**

- Ask them to apply the following rules when playing football.(From rule 08 to 17)
- Provide feed back and feed foward while engaging in activities
- Advise them to use the hand signals learnt in grade 10 for the refereeing.

**Law 08 – Start of the game : Kick off**

- the kick-off is taken by the other team, after a team scores a goal.
- all players must be in their own half of the field of play
- the opponents of the team taking the kick-off are at least 9.15 m (10 yds) from the ball until it is in play
- the ball must be stationary on the centre mark
- the referee gives a signal
- the ball is in play when it is kicked and moves forward
- the kicker must not touch the ball again until it has touched another player

A kick-off is a way of starting or restarting play:

- at the start of the match
- after a goal has been scored
- at the start of the second half of the match
- at the start of each period of extra time, where applicable

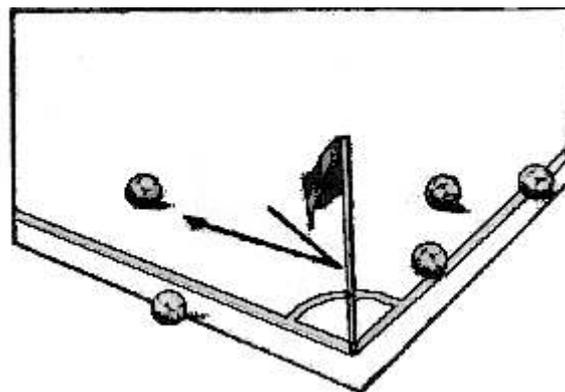
**Law 09 – Ball in play and not in play**

fig. 4.3.1

The ball is out of play when:

- it has wholly crossed the goal line or touch line whether on the ground or in the air
- play has been stopped by the referee

The ball is in play at all other times, including when:

- it rebounds off a goalpost, crossbar or corner flag past and remains in the field of play
- it rebounds off either the referee or an assistant referee when they are on the field of play (fig.4.3.1)

#### **Law 10 – Goal scored**

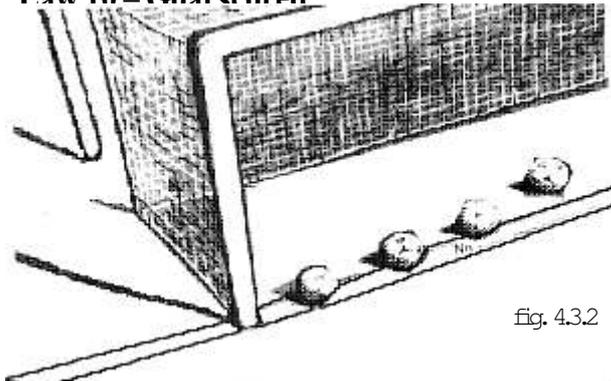


fig. 4.3.2

- A goal is scored when the whole of the ball passes over the goal line, between the goalposts and under the crossbar, provided that no infringement of the Laws of the Game has been committed previously by the team scoring the goal.(fig.4.3.2)

#### **Law 11 – Off side**

A player is in an offside position if:

- he is nearer to his opponents' goal line than both the ball and the second-last opponent

A player is not in an offside position if:

- he is in his own half of the field of play or
- he is level with the second-last opponent or
- he is level with the last two opponents

There is no offside offence if a player receives the ball directly from:

- a goal kick
- a throw-in
- a corner kick

### **Law 12 – Fouls and misconducts**

- A direct free kick is awarded to the opposing team if a player commits any of the following offences in other area and if penalty area will award a kick from the penalty mark.
- kicks or attempts to kick an opponent
- trips or attempts to trip an opponent
- jumps at an opponent
- charges an opponent
- strikes or attempts to strike an opponent
- pushes an opponent
- holds an opponent
- handles the ball deliberately (except for the goalkeeper within his own penalty area)

### **Law 13 – Free kick**

- |                     |                       |
|---------------------|-----------------------|
| 1. Direct free kick | 2. Indirect free kick |
|---------------------|-----------------------|
- all opponents must be at least 9.15 m (10 yds) from the ball  
The ball must be stationary when the kick is taken and the kicker must not touch the ball again until it has touched another player.
  - if a direct free kick is kicked directly into the opponents' goal, a goal is awarded
  - if a direct free kick is kicked directly into the team's own goal, a corner kick is awarded to the opposing team
  - if an indirect free kick can not be kicked directly into the opponents' goal to score a goal

### **Law 14 – Penalty kick**

- the goal keeper and kicker can only remain in the penalty area.
- The ball must be placed on the penalty mark.
- The player taking the penalty kick must be properly identified
- The defending goalkeeper must remain on his goal line, facing the kicker, between the goalposts until the ball has been kicked.
- The player taking the penalty kick must kick the ball forward
- If any extra time needed for the penalty kick the time should be added to that half.

**Law 15 – Throw in**

- A throw-in is awarded to the opponents of the player who last touched the ball when the whole of the ball crosses the touch line, either on the ground or in the air.
- At the moment of delivering the ball, the thrower faces the field of play has part of each foot either on the touch line or on the ground outside the touch line
- holds the ball with both hands and delivers the ball from behind and over his head
- delivers the ball from the point where it left the field of play

**Law 16 – Goal kick**

- Goal kick is awarded when the whole of the ball, having last touched a player of the attacking team, passes over the goal line, either on the ground or in the air
- the ball is kicked from any point within the goal area by a player of the defending team
- opponents remain outside the penalty area until the ball is in play
- the kicker does not play the ball a second time until it has touched another player
- the ball is in play when it is kicked directly beyond the penalty area

- **Law 17 – Corner kick**

- A corner kick is awarded when the whole of the ball passes over the goal line, either on the ground or in the air, having last touched by a player of the defending team.
- Law of off side is not govern for the corner kick.

**Step 04 :**

- Conduct a summarization discussion about following factors after the tournament.
  - About laws of the game
  - About time durations
  - About infringements and sanctions

**Basic term concepts :**

- Skills of the game
- Rules and regulations
- Umpiring

- Quality inputs** :
- A football field of play
  - Whistle
  - Footballs
  - Goal posts
  - Lime powder
  - Books of laws of the game

**Instructions for the assessment and evaluation :**

- Ask about laws of the game football.
- Ask about the skills of football.
- Evaluate the students who refereeing accurately.
- Evaluate the students who plays football accurately.
- Evaluate the qualities of leadership, followership and cooperation etc.

**Third Term  
Competecny, Competency Level and Periods**

<b>Competecny</b>	<b>Competency Level</b>	<b>Periods</b>
<b>5.0 Applies Specific abilities developed through athletics to the tasks of life</b>	5.4 Applies jumping when necessary for the efficient performance of daily tasks	02
	5.5 Applies throwing when necessary for the efficient	02
<b>8.0 Adapts an efficient life style maintaining the wonders of the body.</b>	8.1. Maintains the wonder of the systems that assist directly in movements	08
<b>9.0 Takes action to maintain fitness for healthy life.</b>	9.1. Takes action to maintain fitness related to motor skills	02
	9.2 Maintains interpersonal relationship for the sake of psycho – social wellbeing.	05
<b>10.0 Leads a happy life successfully facing the obstacles of day to day life</b>	10.1 Acts towards wellbeing by identifying the challenges of adolescence,	04
	10.2 Takes action to avoid sexually transmitted diseases	04

**Competency 5.0 :**                   **Applies specific abilities developed through athletics to tasks of life.**

**Competency level 5.4 :**           Applies jumping when necessary for the efficient performance of daily tasks.

**Number of periods :**           02

**Learning out comes :**

- Exhibits the Tripal jump postures accurately.
- Show out the skill of sequential jumping series.
- Safely lands after a jump.

**Instructions for the preparation of learning teaching process :**

**Step 01 :**

- Lead a discussion by highlighting following factors.
- Triple jump contains with 03 jumps as hop,step and jump.
- This is a horizontal jump according to the classification of athletics.
- Engage the students in free running over the obstacles within a marked area. The landing should be by the take off foot in here. (fig. 5.4.1)

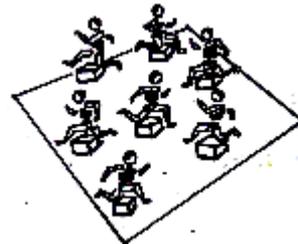


fig. 5.4.1

- Engage the students in following activities to practise the triple jump. Demonstrate the activities before engaging the students.
- Put the steps on markings, according to the jumping sequence of hop, step and jump. (fig. 5.4.2)

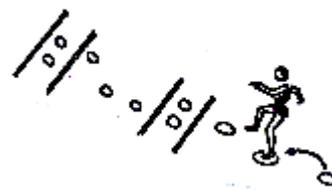
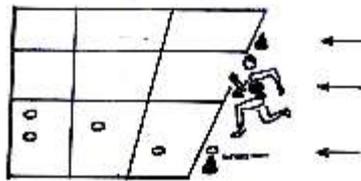


fig. 5.4.2



- According to the figure 5.4.3 use marked line frame to do the hop, step and jump after a short approach run.

fig. 5.4.3

- Do the hop, step and jump after a 7-9 step approach run. Land as same as to the long jump pit.
- Use the take off board here. (fig. 5.4.4)



fig. 5.4.4

- Do the above activity using a take off board.( fig. 5.4.5)



fig. 5.4.5

- Give feedbacks and feed forwards during activities.

**Basic term concepts :** Triple jump, hop, step, jump

**Quality inputs :**

- Ground markings
- Long jump pit
- Small obstacles like cardboard boxes

**Instructions for assessment and evaluation :**

- Evaluate the cheerful participation on practical activities of triple jump.
- Evaluate the accurate exhibit of hop, step and jump with correct coordination.

**Competency level 5.5:**      **Applies throwing when necessary for the efficient performance of daily tasks.**

**Number of periods :**      02

- Learning out comes :**
- Exhibits the accurate postures of javelin throw.
  - Shows the skill improvement of javelin throw by engaging in practices.
  - Explains the correct posture of throwing an object over the head.
  - Works safely when engaging in activities.

**Instructions for the preparation of learning teaching process :**

- Step 01 :**
- **Lead a small discussion by highlighting following factors.**
    - Throwing an object over head is used at some situations in day to day life.
    - Javelin throw has created upon that.
    - Javelin throw is an event among the four throwing events in athletics.
  - Engage students in the following activity regarding the javelin throw.

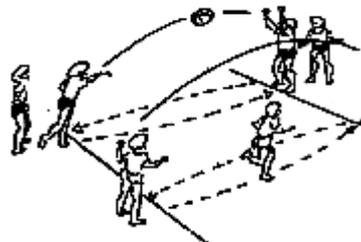


fig. 5.5.1



fig. 5.5.2

- Make the students stand in two rows as in figure 5.5.1 with the gap in between the two lines. Ask first student to throw the ball over the head to the opposite and he/she run to the end of their own row.
- Engage the students in following activities for the practice of javelin throw. Demonstrate the activities before engaging the students on those.
- Throw a light ball over head by one hand.(fig. 5.5.2)

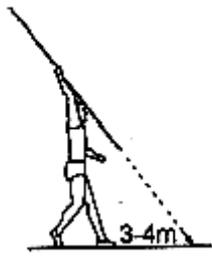


fig. 5.5.3

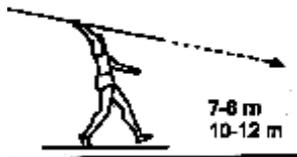


fig. 5.5.4

- Drag back the javelin over head and throw it rapidly to 3 -4 meters forward by focusing its point to the ground.(fig. 5.5.3)

- Do the above activity by bending the body back and throw some far than above.(fig. 5.5.4)
- Throw the javelin according to the 3 step method.(fig. 5.5.5)



fig. 5.5.5

- Educate the students about the rules in annexe 5.5.1 during the activities.
- Give the feedbacks and feed forwards during activities.

**Basic term concepts :** • Javelin throw event

- Throwing events, 3 step method

**Quality inputs :**

- Javelin
- A field of javelin throw

**Instructions for assessment and evaluation :**

- Evaluate the accurate exhibit of javelin throw.
- Evaluate the cheerful participation on practical activities.
- Evaluate the comprehension about rules and regulations.

**Annex 5.5.1**

**Information Sheet**

**Some rules of javelin throw**

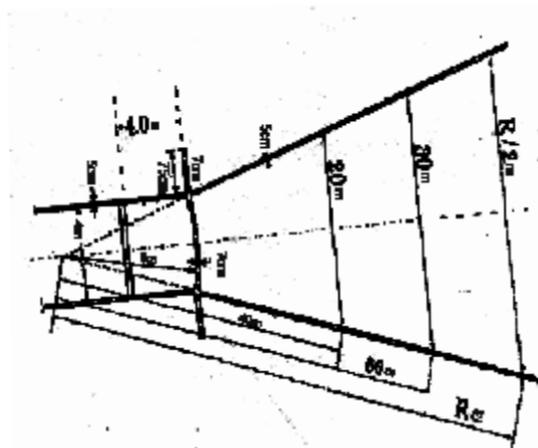
**International weight standards of javelin**

Girls Women Youth Junior Senior	Boys Youth 16 -17 years	Men Junior 18- 19 years	Men Senior
600 g	700g	800 g	800g

**Weight standards for school Competitions**

	<b>U – 15</b>	<b>U – 17</b>	<b>U-19</b>	<b>U – 21</b>
<b>Boys</b>	600 g	600 g	800 g	800 g
<b>Girls</b>	600g	600g	600g	600g

2. Throwing area of javelin (fig 5.5.6)
3. Minimum length of running track of the javelin throw should be 30m. If possible should be 33.5m. Angle of the landing area is close to 29° within the lines.
4. Grip of the javelin should be at the begirt part of it. The throw should be over the shoulder and over the upper part of the hand as well. Unauthorized throwing methods are not allowed
5. The point of the javelin should land first before any part of the javelin touches the ground to consider as a correct throw.
6. It is not allowed to turn the back of the athlete to landing area before releasing the javelin during the throwing process.



**Competency 8.0 : Adapts an efficient life style maintaining the wonders of the body**

**Competency Level 8.1: .Maintains the wonder of the systems that assist directly in movements**

**No of Periods : 08**

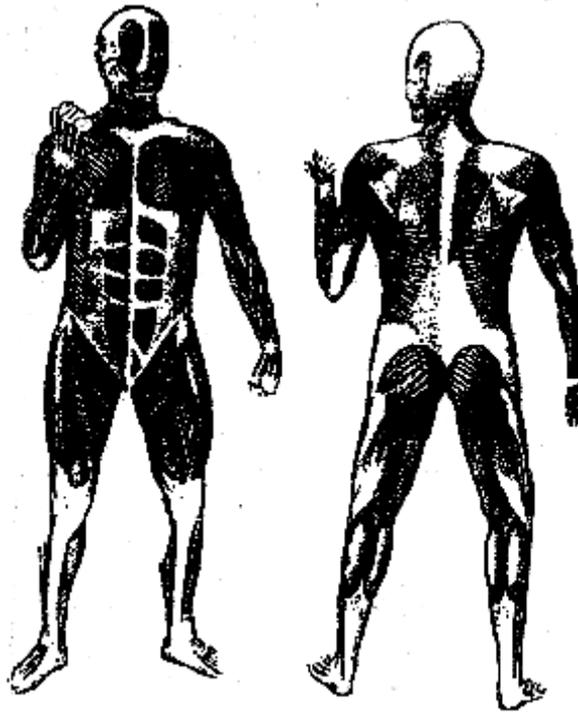
**Learning outcomes :**

- Explains the design and the activity of the muscle system.
- Describes the activity of the skeletal system.
- Give examples for the instances where skeletal system acts as levers.
- Describes the activity of the nervous system.
- Names the factors that obstruct the exquisiteness of systems which contribute in movement.
- Presents ideas on the importance of protecting the exquisiteness of these systems while accepting it.
- Describes the methods of supplying energy for the movements.
- Explains the involvement of muscles, bones and nervous system in the process of exercise.

**Instructions for planning teaching learning process :-**

**Step 01**

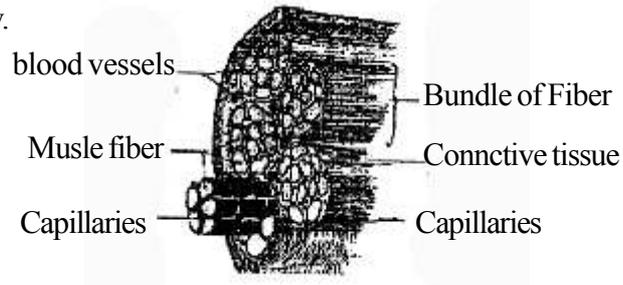
- Instruct Advise all the students to place the palm on the biceps of the right hand.
- Instruct Advice them to bend and extend the right hand several times.
- Explain that muscles, bones and nervous system are involved in the hand movement.
- Show that these three systems are involved in every bodily activity.
- Provide an understanding about the systems as per the information given below.
- Discuss following facts using a digram of skeletal muscle system
- There are 656 skeletal muscles
- They contribute to all voloutary motions.
- Apart from skeletal muscles there are tow types of other muscles.



- There are 3 kinds of muscles according to its structure and task.
  - Voluntary muscle, skeletal muscles, striated muscle.
  - Unstriated muscles, involuntary muscles, smooth muscle. smooth muscle.
  - Cardiac Muscle.
  
- Introduce the characteristics and locations of these three types of muscles given in the table below.

	<b>(Skeletal Muscle)</b>	<b>(Smooth Muscle)</b>	<b>(Cardiac Muscle)</b>
Qualities	<ul style="list-style-type: none"> <li>• Contract rapidly</li> <li>• Contract rhythm</li> <li>• Get exhausted</li> <li>• Can be activated voluntarily</li> </ul>	<ul style="list-style-type: none"> <li>• Contract rhythmically</li> <li>• Functions slowly</li> <li>• Does not fatigue</li> <li>• has one involuntary nerve supply</li> </ul>	<ul style="list-style-type: none"> <li>• Contract rhythmically</li> <li>• Does not fatigue</li> <li>• Function slowly</li> <li>• hasan involuntary nerve supply</li> </ul>
Locations	<ul style="list-style-type: none"> <li>• Limbs</li> <li>• Diaphram</li> <li>• Tongue</li> </ul>	<ul style="list-style-type: none"> <li>• Arteries and veins</li> <li>• uterus walls</li> <li>• Wall of the alimentary canal</li> </ul>	<ul style="list-style-type: none"> <li>• Only inheart</li> </ul>

- Explain that the basic building unit of a muscle is muscle fibre (muscle cell).
- Show that a large number of muscle fibers are bound together as bundles by connective tissues.
- Describe that a skeletal muscle is designed by an aggregation of a number of such muscle fiber bundles as per the diagram given below.



- Introduce that there are two types of muscle fibers according to their activity and they are named as follows.
  - (1) Fibers with slow activity ( Red fibre )  
Slow Twitch fibre (STF)/Type - I
  - (2) Fibers with rapid activity ( White fibre )  
Fast Twitch fibre (FTF)/Type - II
- The differences between red fibre and white fibre are described as per the table given below.

Special features	Fast acting fibers/ white fibers	Slow acting fibers/ red fiber
Oxidative ability	Low	High
Contraction time	Low	High
Capillary connections	Low	High
Fat deposition	Low	High
Energy supply for a longer duration	Low	High

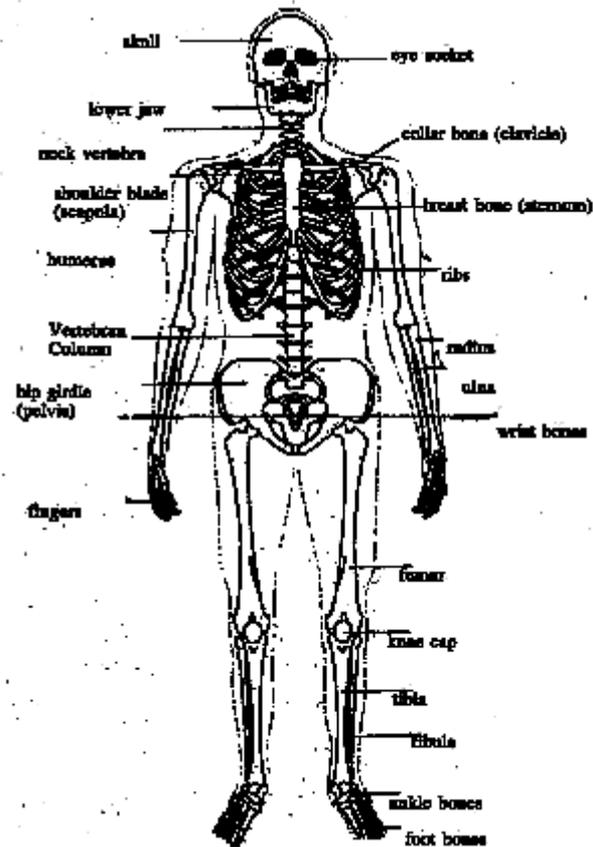
- Show that there are both red fibers and white fibre in a skeletal muscle.
- Show that in athletes who have high proportion of fast acting fibre (white fibers)(FTF) are capable of obtaining higher results in events with rapid activity like short distance running, jumping, throwing.
- Show that in athletes who have high proportion of slow acting fibre (red fibers)(STF) are capable of obtaining higher results in events like long distance running which require high endurance.
- State that the proportions of muscle fibre could be known by medical examinations.
- Identifying the muscle fiber proportions pave way to provide better sports training activities.

- Show that the muscle fiber proportions are determined by birth and formal training may cause major changes as per given below.
  1. Increase in the cross sectional area of fibers.
  2. Increase in the amount of capillaries around the fibers.
  3. Development in the process of ATP production and storage
  4. Increase in the number of the motion units of movement.
- State that a force is developed by contracting muscles and it helps for movements.
- Insist that the functions performed by the muscular system given below.
  1. Helping the body movements by contraction and relaxation
  2. Heat generation - It is important to maintain a constant body temperature by the enormous heat generated during muscular activity.
  3. Storage function - A large amount of glycogen granules present in the muscles.

**Step 02** • Describe the wonders of the muscular system as per given below.

- The wonders of the muscular system can be maintained by observing following practices.
  - Presence of different types of muscles in various locations of the body which are adapted to perform an array of functions.
  - Functions could be performed easily by the ability of contraction and relaxation of the muscles.
  - Muscles are attached to bones by very strong ligaments.
  - Connection of bones with tendons in a joint helps free movement
  - Ability to store nutrients and utilize it to supply energy when needed
  - Necessity of nerve impulses for contraction and relaxation of a muscle
  - Ability of showing movements due to relaxation and contraction of muscles.
  - Special muscles in the face helps to show the fine emotions like laughing, crying, joy and sorrow.
- Explain that the wonders of the muscle system could be protected by following undermentioned behaviours.
  - Engage in exercises
  - Using correct postures in instances like walking, running, sitting, weight lifting.
  - Consuming nutritious food.
  - Relax whenever necessary
  - Protect from accidents.
  - Take necessary measures to protect cardiac muscles.

- Step 03** - • Provide an understanding on the skeletal system by showing a large scale picture of skeletal system and using the picture given below.



- **Skeletal System**
  - Bones of the skeletal system can be categorised as follows according to the shape of them.
    - Long Bones - hand and feet
    - Short Bones - skull, ribs, shoulder blades, hip bones
    - Flat Bones - fingers
    - Irregular Bones - vertebrae, bones of the palm and feet
- **Functions of the skeletal system**
  - Provide a proper shape
  - Bearing the body
  - Protect internal organs
  - Combining the muscles by ligaments facilitate the movements.
  - Produce red and white cells in the bone marrow
  - Store minerals like  $Ca^{++}$

- Explain that skeletal system provides protection to delicate body organs using the table given below.

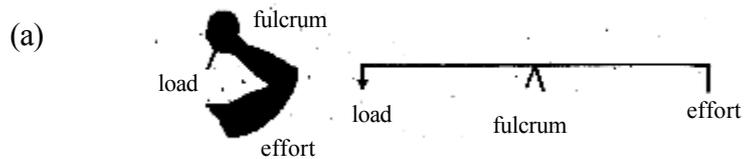
<b>Protected organ</b>	<b>Bones that provide protection</b>
1. Brain 2. Spinal cord  3. Heart  4. Lungs  5. Organs of digestive system like liver, stomach, esophagus, pancreas,	1. Skull made up of flat bones 2. Vertebrae formed by informal bones 3. Ribs and shoulder flaps formed by flat bones 4. Ribs and shoulder flaps formed by flat bones 5. Ribs and shoulder flaps formed by flat bones

- Explain that the skeletal system bear many organs in different systems apart from bearing skeletal muscles in the muscular system.
- Explain that the joints are important for the movements in the skeletal system with the information about the joints given below.
- **Hinge Joints**
  - Moves like the hinges of a door
  - Range of movement is not more than 180°  
Eg. Joint at the elbow, knee and fingers
  - These joints assist the action of putting the shot.
- **Ball and Socket Joint**
  - Part of a ball moves freely in a matching socket to it.
  - The range of movement is 360°  
Eg- shoulder joint and hip joint
  - When bowling in cricket shoulder joint moves in this way
- **Pivot Joint**
  - Located in the place where atlas vertebra joins with axis vertebra. Important for to move the head up and down and to both sides.
- **Gliding Joint**
  - Ankle and wrist consists of this type of joints. Through the joints at the phalanges and toes are of this type the range of movement is not so wide. It can move forward and back, left and right only.

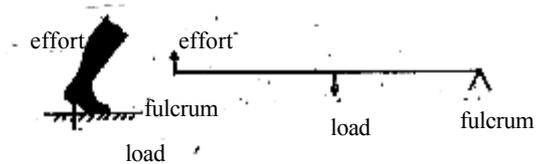
**Step 04**

- Recall the knowledge about levers studied in science lessons
  - Lever is a rod that can be rotated around a fixed point.
  - Explain that the action of the rod in a lever is performed by bones in human movements.
  - With following diagrams make awareness about the levers that act in movements related to sports and others

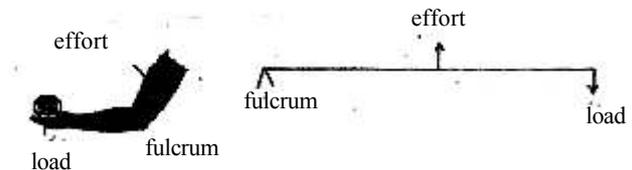
(1) Class I levers



(2) Class II levers



(3) Class III levers



- **Explain the wonders of skeletal system with the following information.**
- Obtaining a protection for the brain by the thick curved skeleton
- Eyes are protected by the presence of cavities
- Range of movement has increased due to ball joints in arms.
- Phalanges of the fingers make it easy to grip something firmly.
- Sliding bones in the carpal give the ability to special movements.
- Pelvic girdle of women has adapted to bear a fetus during pregnancy.
- Thoracic cage provides protection to important organs like heart, lungs.

- Strong, long and stocky tibia to bear the body weight.
- Cartilages between the joints provide protection to bones.
- Skeletal system adapted to perform functions like movement, support and protection.
- Ability of bones to heal in the event of fracture.
- Production of red blood cells in the marrow inside the bones.
- Show that hindrances for the wonders of the skeletal system could occur due to reasons given below.
  - (1) Abnormalities that occur during pregnancy
  - (2) Accidents
  - (3) incorrect postures
  - (4) Nutrition deficiencies
- **Describe that the exquisiteness of the muscular system can be maintained by observing the following practices.**
  - Engage in exercises
  - Obtain calcium rich food
  - Maintain correct postures
  - Prevent from accidents

- Step 05**
- Explain that responding to external stimuli using eyes, ear, skin, nose and tongue is common to all of us.
  - Introduce that the nervous system performs the above task.
  - Use the following diagram and a large diagram of the nervous system to explain.

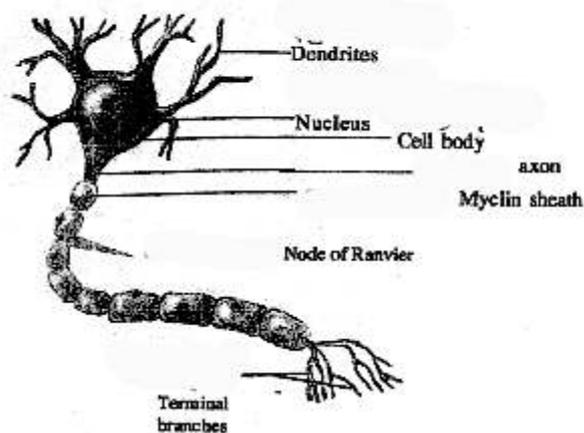


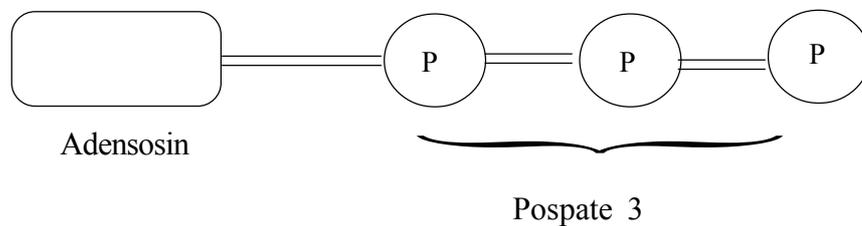
fig 8.1.7

- Nervous system could be divided in to two parts as per given below.
    1. Central Nervous System
    2. Peripheral Nervous System
  - Show that the nervous system is composed of specialized cells and these cells are called nerve cells or neurons.
  - These nerve cells or neurons could be classified into three types given below.
    1. Sensory Nerves
    2. Motion Nerves
    3. Intermediate Nerves
  - Show that some stimulus should be transmitted from a receptor to effector by nerve fibre made up of neurons.
  - State that impulses that are transmitted from a sense organ to the central nervous system is done by a sensory nerve and it is called the motion process.
  - State that impulses that are transmitted from central nervous system to effector is done by a motion nerve and it is called the sensory process.
  - Show that there are two types of responses we make and they are called as per given below.
    1. Voluntary responses - intentional responses.
    2. Involuntary responses - unintentional responses.
  - Explain that involuntary responses are reflex actions.
  - Show that the setting up of neurons to perform a reflex action is called a reflex arc.
  - Explain that spinal cord is the center for a lot of reflexes whereas brain acts on a few reflexes.
  - Show that there are reflexes which is generated through experiences apart from the innate reflexes and they are called conditioned reflexes.
  - Generation of new reflexes as above is called conditioning.
  - Insist that complex sports skills could be developed easily and accurately by engaging in formal training and sports activities through the development of conditioned reflexes and ensure such reflexes.
- **Describe the exquisite actions of nervous system given below.**
    1. Ability to acquire senses from the external environment.
    2. Ability to transform stimuli from the external environment into electrical impulses.
    3. Ability of the nerve fibers to transmit the impulses to the effectors within a very short period of time.

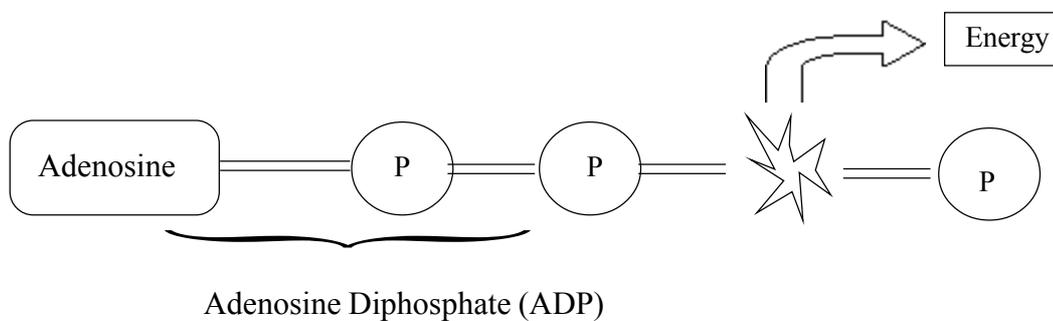
4. Ability to respond without intention.
5. Ability to form conditioned reflexes.
6. Ability of the brain to control bodily activities and to retain memory.

• **Show that measures should be taken to protect the nervous system as per given below.**

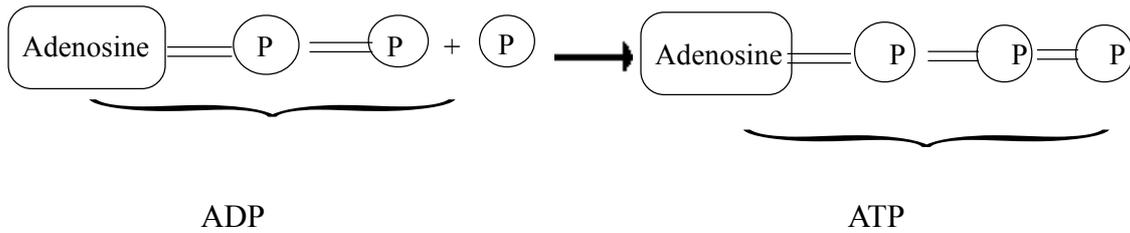
1. Obtain a nutritious meal.
  2. Obtain adequate relaxation and sleep.
  3. Engage in daily exercises.
  4. Leading a stress free life.
  5. Acting to protect eyes, ears, nose, tongue and skin.
  6. Refrain from the habits of alcohol, drugs and smoking.
  7. Leading a happy life.
  8. Maintain recreational activities.
- Describe the supply of energy for movement as by the information given below.
  - Each fibre consists of actin and myosin filaments made of protein. Muscle contraction take place when these filaments glide on each other. This movement need energy. The energy is supplied by Adenosin Try Phosphate (ATP) stored in the muscles.



With the break of the last group of phosphate energy is released. This energy supplied to the Action and Myosin filaments to glide upon.



The chemical combination left after the last phosphate group is released from Adenosine Triphosphate is called Adenosine Diphosphate. When ATP is used continually it will come to an end. If further energy supply is needed ADP molecules should be converted into ATP molecules. A Phosphate group combine with ADP and make an ATP molecule. Energy is needed to produce ATP in this way.



There are two systems that provide energy to form ATP

1. Anaerobic System
2. Aerobic System

### Anaerobic System

Glycogen stored in the muscle is necessary to supply energy in this system. When the muscles are engaged in vigorous activity this system functions. Energy is released when glycogen turns into lactic acid and carbondioxide.

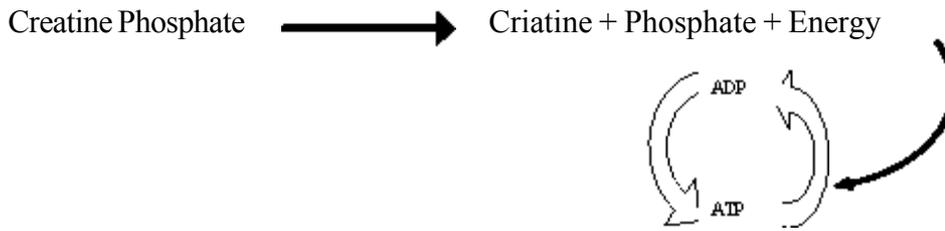


This energy converts ADP into ATP rapidly



This is called the lactic acid system. As this does not need oxygen it is called the anaerobic system. But this system can provide energy for a short period only because the muscle becomes fatigue as the lactic acid is accumulated in the muscle. This enters the blood stream . At rest it combines with oxygen to break down.

This system is applied to supply energy to events like 400 m. Similarly it is useful at the speeding of the latter part of 800 and 1500 m event. If an untrained athlete slows down in a 400m race it is due to the accumulation of lactic acid.

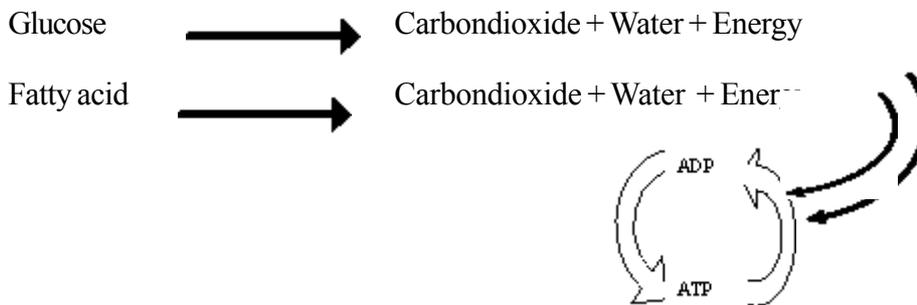


This methodology is known as creatin phosphate method or CP method. It is also an anaerobic method as oxygen is not used in this method. Time taken to supply energy is very short in this method whereas the speed at which the energy is supplied is also greater than the lactic acid method. Creatin and phosphate generated by this method combine together by taking oxygen in the air to make creatin phosphate again during relaxation

The basic energy supply method to most of the athletic events that need explosive strength such as 100 meters, 200 meters, 100x meters 4 relays and the rapid and speedy activities like high jump, long jump, triple jump, shot put, discus throw and hammer throw is the creatin phosphate method. (This method is also called anaerobic alactic method.)

**Aerobic Respiration**

In this method stored glycogen transform into glucose to produce energy. Fat molecules also contribute to this process. What really happens is glucose or fat molecules combine with oxygen and oxidation takes place to release energy. This energy contribute to transform ADP to ATP again. Carbon dioxide and water released as waste.



If more energy is needed from this method more food and more oxygen is essential.

This method is named so because energy is supplied by using oxygen.

This systems supply energy to events like marathon, 10,000 m and similar activities that consumes lot of time duration.

### **Step 07 : The wonderful contribution of the muscular system during exercise**

- Presence of nerves connected with muscles to obtain messages(impulses) for the movement of contraction and relaxation of muscles.
- Presence of energy supply methods needed for muscular action.
- Changes in the energy supply methods according to the intensity and the capacity of exercises.
- Presence of large and strong muscles in places where high activity and excessive forces are needed.
- Ability to develop flexibility and elasticity of muscles through training.
- Muscles become fatigued to prevent causing injury to muscles during heavy and strenuous activities.
- Ability to increase the density of blood capillaries
- Ability to increase the number of mitochondria in cells
- Ability of prolong the time taken for the production of lactic acid in muscles.
- Ability to remove the lactic acid produced in muscles rapidly.
- The action of muscles is essential for the movements of joints
- Occurrence of enlargement and strength of the cardiac muscle by long term training exercises.
- Can select the suitable event according to the percentage of muscle fibre (Slow twitch fibres and Fast twitch fibres)

### **Wonder of the skeletal system during exercise**

- Presence of strong and long bones as lower limbs and upper limbs to hold the weight of the body.
- Presence of small bones at the wrist and ankles to increase the range of movement.
- Increase of range of movement in the upper limbs by the presence of a ball and socket joint of the shoulders.
- Ability to walk and run efficiently due to the curvature in the feet.
- Ability to perform movements efficiently due to the shape of the vertebral column.
- The natural formation of the atlas vertebra provides the head a large range of movement.
- Presence of muscles connected to bones for movement.
- Presence of ligaments covering joints and fluids in the joints helps to easy and safe movement.
- Ability to absorb shock by the joints in the feet.
- Presence of fingers with a wide range of movement.

**Wonder of the nervous system during exercise**

- Ability to act immediately according to different impulses.
- Ability of coordination between nerves and muscles to respond to a stimuli quickly.
- Provide the ability to change positions instantly during activities.
- Thirst to provide the lost water content by sweating during exercise
- Unconsciousness to provide oxygen to the body again when the oxygen supply to the brain is decreased during exercise. (to get the body in to the same plane)

- Basic key concepts :**
- Skeletal muscles
  - Smooth muscles
  - Heart muscles
  - Relaxation
  - Muscle fibers
  - Contraction
  - Levers
  - Neurons
  - Receptors
  - Reflexes
  - Conditioning
  - Adenosine tri phosphate
  - Creatin phosphate
  - Effector
  - Impulse
  - Responses

- Quality inputs :**
- Large scale diagrams of bones, muscles and nervous system.
  - Books that include the descriptions of the related systems.

**Instructions for assessment and evaluation**

- Inquire about the activities of the systems that contribute in movement.
- Evaluate the protective action taken to safeguard the exquisiteness of systems which help for movement.
- Inquire about the action of individuals that obstruct the exquisiteness of the systems which helps in movement.

## **Competency 9.0 : Takes action to maintain fitness for healthy life.**

### **Competency Level 9.1: . Takes action to maintain fitness related to motor skills**

**No of Periods : 02 .**

- Learning outcomes :**
- Defines the term fitness related to movement skills.
  - Engages in activities to develop fitness related to movement skills.

### **Instructions for planning teaching learning process:**

- Step 01**
- Understand that the main objective of this competency level is engaging students in activities with a view to develop their fitness factors related to the skills of movement.
  - Explain to the students about the fitness factors related to the skills of movement.
  - Introduce the fitness factors related to the skills of movement.
    - Power
    - Agility
    - Coordination
    - Balance
    - Speed
    - Reaction speed
  - Explain that the fitness factors should be developed in order to perform acts of movement precisely and efficiently in sports as well as in day to day activities.
  - Engage the students in practical activities to develop their fitness factors related to the skills of movement.
  - Introduce 'power' as the ability to use energy rapidly/speedily in an activity.
  - Show some instances of the importance of power in sports. Ex:- take off at long jump, playing a dash in volleyball.
  - Engage students in some fitness activities to develop power.
 

Ex:-

    - Jumping over some boxes by single foot, both feet.
    - Throwing a ball in a high speed using one hand, both hands.
  - Show some instances of the importance of agility in sports. Ex:- Running forward ignoring the opponents in a game of rigger, a goal keeper changing the direction of movement rapidly according to the direction of the ball coming into him.

- Engage students in some fitness activities to develop agility.
  - Shuttle run
  - Zig zag run
- Introduce coordination as the combined ability to use the perceptions like hearing and vision with body organs to perform activities smoothly and accurately.
- Show some instances of the importance of coordination in sports. Ex:- Engaging in marching activities according to the orders given. Passing the ball to another member of the team by protecting from opponents in netball.
- Engage students in some fitness activities to develop the ability of coordination. Ex:- Aerobic type exercises.
- Introduce balance as the ability to maintain equilibrium of the body during static and dynamic postures.
- Show some instances of the importance of balance in sports. Ex:- In weight lifting, maintaining the balance of the body while leaping over a hurdle in athletics.
- Engage students in some fitness activities to develop the ability of coordination. Ex:- Walking on a cross bar with balance, jumping up and turning at 180° degrees and landing in a balanced state.
- Introduce speed as the ability to perform a movement activity within a short period of time.
- Show some instances of the importance of balance in sports. Ex:- Approach run during a long jump, Striking the ball very hard in elle.
- Engage students in some fitness activities to develop the ability of speed. Ex:- running 30 meters at a high speed, running at a high speed in the same position.
- Introduce reaction speed as the ability to respond rapidly for some external stimulus.
- Show some instances of the importance of reaction time in sports. Ex:- Start of a short distance running event, Fielding close to the wicket in the game of cricket.
- Engage students in some fitness activities to develop the ability of reaction speed. Ex:- Meeyo- meeyo game, start of running in different posture according to different signals.
- Give feed backs and feed forwards to the students when they are engaged in activities.
- Instruct them to engage in developmental activities related to movement skills in school as well as at home.
- Refer information given in chapter 9 of the new text book and the previous Teacher's Instructional Manual for teaching process.

- Basic key concepts :**
- Activities related to movement skills, power, agility, coordination, balance, speed, reaction speed.

**Instructions for assessment and evaluation :**

- Inquire about the fitness factors related to movement skills.
- Inquire about the instances of importance of fitness factors when engaged in sports as well as in the day to day activities.
- Evaluate the participation, enthusiasm, accuracy etc, in practical activities.
- Evaluate the qualities like leadership, obeying orders, followership, participation.

**Competency 9.0 : Takes action to maintain fitness for healthy life.**

**Competency Level 9.2: . Maintains interpersonal relationship for the sake of psycho – social wellbeing**

**No of Periods : 02 .**

- Learning outcomes :**
- Identifies and states the groups with which the inter personal relationships should be maintained.
  - Presents ideas on the importance of maintaining good inter personal relationships.
  - Differentiates between the good and the bad effects made by the media.
  - Demonstrates the readiness in maintaining good inter personal relationships.

**Instructions for planning teaching learning process :**

- Step 01**
- Present the events to the students as per given below.
    - One of the students in your class becoming first in G.C.E (O/L) examination.
    - An accident occurs to a companion.
  - Inquire about the feelings of the students in such situations.
  - Lead a discussion highlighting following points.
    - One will get the same feeling as if a friend/a family member/the country achieves victory.
    - One will get sad feeling as if a friend/a family member/the country runs into danger.
    - Such feelings of sorrow/joy/pain arise because of the relationships between each other.
    - Acting in such a sensitive manner is empathy.
    - Inter personal relationships should be developed in this regard.
- Step 02**
- Explain good inter personal relationships as per given below.
  - Positive mutual relationships that arise between two or a few individuals is called good inter personal relationships.
  - Give opportunity to the students to listout the groups that inter personal relationships should be maintained in day to day life.

- Ensure the following facts together with the students presentations.

Groups related to family	Groups related to school	Peer groups	Other groups
Parents	Teachers	Friendly groups	Youth societies
Brothers and sisters	parents	Sports groups	Religious societies
Elders	Students	Cadets	Aesthetic societies
Relatives	Friends in school	Scouts	Economic societies
Neighbours	Elders in school	First aid	Political organizations
.....	Student leaders	Debating	Community institutes
.....	Well-wishers	Exhibition	Private classes
.....	.....	Drama	Communication media
.....	.....	.....	.....
.....	.....	.....	.....

- Step 03 :**
- Provide an opportunity to the groups to compile facts on the importance of maintaining interpersonal relationships.
  - Provide an opportunity for students' presentations.
  - Make an elaboration highlighting the following facts together with the students presentations.

**Some reasons for maintaining inter personal relationships.**

- To identify and understand individuals.
- To provide support to each other.
- To identify personal abilities, affections, skills and behaviours.
- To know the social rituals, formalities and rules and regulations.
- To learn and get to know about human and the world.
- For intellectual development.
- To identify issues, solve and make decisions.
- To explore, observe, investigate.
- For effective communication.
- To adapt experience accordingly and share them.
- For peace, affection and protection for all.
- To understand society and to live in harmony.

- Step 04:**
- Divide the class into three groups.
  - Assign the following three groups related to inter personal relations to the groups.
    - Media
    - Peer groups
    - Others
  - Advise them to collect information on the good and bad effects caused by the above three groups for inter personal relationships.

- Ensure the following facts together with the students presentations.

<b>Good effects by media</b>	<b>Good effects by peer groups</b>	<b>Good effects by other groups</b>
Obtain information Obtain new knowledge Impart creations Develop communication skills Develop logical ability Recreation....  <b>Bad effects</b> False information Scenes that agitate state of mind Nonsense programmes Disrupt education Publicize alcohol/ cigarettes	Get used to leadership and followership Flexibility Companionship/ group feeling/affection/protection/respect Identifying ideas of others Identify social issues and acting on them  <b>Bad effects</b> Get used to alcohol and cigarettes Get into dangerous acts Get into abusive acts Formation of gangs	Get used to imitation Motivate for self study Learn traditions and rituals Identify various social classes Obtain new knowledge Obtain affection/ protection  <b>Bad effects</b> Get used to alcohol and cigarettes Get into abusive acts Get used to erroneous acts

- Step 05 :**
- Divide the class appropriately.
  - Provide following opportunities to the students.
    - Getting a tsunami warning while at the beach.
    - A relative falling ill for a longer duration.
    - Displaced in the jungle unable to find the way.
    - An unknown person fainting on the road.
  - Provide opportunity to the students to present the way they will act in such situations by a role play.
  - Lead a discussion on the competencies that are important in demonstrating the inter personal relations accordingly.
    - Selfunderstanding
    - Empathy
    - Communication skills
    - Making right decisions
    - Logical thinking
    - Creativity

- Basic key concepts :**
- Empathy
  - Inter personal relations
  - Peer groups

- Quality inputs** :
- Cards that include various events
  - Demy sheets/marker pens

**Instructions for assessment and evaluation :-**

- Inquire about the groups that inter personal relationship should be maintained.
- Inquire about the importance of having inter personal relationships.
- Inquire about the good and the bad effects of inter personal relationships with media and peer groups.
- Evaluate the groups skills/leadership/followership.

**Competency 10.0 : Leads a happy life successfully facing the obstacles of day to day life**

**Competency Level 10.1 : Acts towards well being by identifying the challenges of adolescence**

**No of Periods : 04 .**

**Learning outcomes :**

- Identifies and names the changes of adolescence.
- Identifies the causative factors for the changes in adolescence.
- Show the readiness in achieving the challenges in adolescence.
- Acts through identifying the abilities of adolescence.
- Describes the harmful results in using alcohol, cigarettes and prohibited stimulants.

**Instructions for planning teaching learning process :**

- Step 1 -**
- Prepare two students a day before the expected date to perform the role play given in annex 10.1.1.
  - Let them perform the role play.
  - Show them that these type of events frequently occur during a certain specific stage of life and it is called the adolescence.
  - Indicate that according to World Health Organization the adolescence falls between the age of 10 - 19 years.
  - Reveal that changes occurs in adolescence is affected by the factors given below.
    - Inheritance
    - Environment
    - Development
    - Nutrition
  - **Assert that adolescence is a very important stage of life as per the reasons given below.**
  - A transition period from childhood to adulthood.
  - Become future citizens
  - Become the resource of a country
  - Being in a period of rapid changes in physical, mental and social status.
  - Being in a time of preparing to take responsibilities
  - Being in a time of directing towards explorations and experimentation.

- Step 02**
- Reveal that adolescence is a stage in which a lot of physical and psycho-social changes occur.
  - Explain the physical and psycho-social changes that occur during this period as per the table given below.
  - Physical changes that occur during adolescence

<b>Boys</b>	<b>Girls</b>
<ul style="list-style-type: none"> <li>• Increase in height and weight</li> <li>• Growth of muscles</li> <li>• Broadening of shoulders</li> <li>• Protruding of larynx</li> <li>• Hoarseness in voice</li> <li>• Growth of hair on the face</li> <li>• Growth of hair on arm pits, chest, hands and feet</li> <li>• Growth of hair on genital area</li> <li>• Growth of genitals</li> <li>• Pimples appear on face</li> <li>• Increased perspiration</li> <li>• Production of sperms</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in height and weight</li> <li>• Growth of breasts and complexion</li> <li>• Growth of hair on arm pits and genital area</li> <li>• Growth of muscles in arms</li> <li>• Increase in the size of genitals</li> <li>• Broadening of hip</li> <li>• Pimples appear on face, increased perspiration</li> <li>• Presence of vaginal discharges</li> <li>• Onset of menstrual cycle</li> </ul>

**Psycho-social changes that occur during adolescence**

- Development of thinking ability
- Concern about the thyself and the body
- Interest in engaging in common affairs and revolutionary acts.
- Believing the role models
- Try to experiment with new things
- Interest on doing dangerous acts
- Motivation towards doing new creations
- Interest in ensuring the individual identity
- Try to make decisions on their own
- Interest to demonstrate their skills and to win appreciation
- Interest to fight for the social justice
- Concern about the members of opposite sex
- Interest to engage in love affairs
- Directing towards sexual behaviours
- Interest in the company of adult society

- Interest to make broader social relations
- Interest to work in association with others
- Directing towards aesthetic activities
- Interest to protect self respect
- Interest to act against the authority of the adults
- Show that the activity of hormones leads to the above mentioned physical changes.
- Reveal that due to the activity of the hormonal hormone secreted by the pituitary gland, sex hormones mentioned below are secreted by ovaries of the girls and testicles of the boys.

Males	Testicles	Hormone testosterone
Females	Ovaries	Hormone progesterone, Oestrogen

- Explain that secondary sexual characteristics of boys and girls stated above arise due to the activities of these hormones.
- Explain that a rapid growth or an abrupt growth takes place with the puberty which occur due to the activity of hormones.
- Increase in growth of girls occur between 9-12 years whereas in boys it occur between 12 - 14 years.
- Reveal that the social environment in which adolescent is living affects heavily on the initiation of psycho-social changes, quoting examples.

- Step 03**
- Show that the adolescence is a stage that is faced with various problems and challenges by quoting the issues and challenges as per given below.

#### **Issues and challenges faced during adolescence**

- Issues of development and the appearance
- Nutritional issues
- Issues due to the secondary sexual characteristics
- Issues due to sexuality
  - False beliefs
  - Sexual abuse
  - Pregnancies
- Issues created due to mob activities ( including drugs, alcohol, smoking...)
- Issues created by the media interferences

- Issues of formal education pressures and examinations
- Issues of obtaining employment
- Lead a discussion about alcohol, drugs, cigarettes and illegal stimulant medicines with a special emphasis as a major challenge faced by the present day adolescence nowadays.
- Explain the effects of these carefully.
- Another strong issue faced by the youth in the adolescence are pregnancies.
- Explain that the physical and psycho-social changes mentioned below leads to such pregnancies.

Physical	Psyco-social
<ul style="list-style-type: none"> <li>• Sexual stimulation</li> <li>• Development of body due to the action of sex hormones</li> </ul>	<ul style="list-style-type: none"> <li>• Attraction for the opposite sex</li> <li>• Interest in starting love affairs</li> <li>• Interest in takeing upper hand among others</li> <li>• Interest in approaching adulthood</li> <li>• Interest in doing new things</li> <li>• Concern about the body</li> </ul>

- Explain the physical and psycho-social problems caused due to unwanted pregnancies.
- **Explain the actions that have to be taken in order to overcome the challenges during the adolescence successfully as per the information given below.**
  - Development of thinking abilities - Pay attention to develop responsible decision making, creative thinking, analytical thinking, logical thinking.
  - Show the need fof directing towards aspects like drama, art, poetry, music by utilizing the skills such as group affinity and aesthetic abilities.
  - Explain about the direction towards shramadhana, exploratory activities, experiments, innovations with good guidance.
  - Discuss about the direction towards sports and self defence activities through the development of physical skills.
  - Reveal the importance of obtaining an accurate knowledge about the bodily activities. Discuss about the puberty, menstruation, ejaculation of semen , etc, in this regard.
  - Explain the importance of following the steps given below on decision making as adolescents.
    - Identifying the challenges accurately.
    - Listing out the alternative course of actions.
    - Enquiring the short and long term results of each and every alternative.

- Match the alternatives with social values.
- Evaluate
- Step 4 :**
  - Explain the potential of the adolescents as per given below.
    - Creativity and exploratory nature
    - Bravery
    - Aesthetic trends
    - Unselfishness
    - Commitment and interest in social service
    - Being a role model
    - Being self respectable
    - Being against injustice and legitimate
    - Being democratic
    - Fairness
  - Reveal the importance of using the potentials of adolescents optimistically and the way it could be done as per given below.
    - Drawing them for social activities.
    - Drawing them for religious activities.
    - Direction towards sports clubs, sports teams
    - Associating with aesthetic activities(music, drama)
    - Direction towards self defence activities.

**Basic key concepts :**

- Spermatogenesis
- menstrual circle
- Potentials
- heirdity
- pregnancy
- Stimuli

**Quality inputs :**

- Flip chart containg information relevant to the competency

**Instructions for assessment and evaluation :**

- Inquire about the physical and psycho-social changes during the adolescence.
- Inquire about the factors affecting the physical and psycho-social changes during the adolescence.
- Inquire about the challenges to be faced during the adolescence.
- Inquire about the potential of the adolescence.
- Inquire about the ways of using the potential of the adolescents with a positive attitude.

***Annex 10.1.1***

Amith who met with an accident while getting down from a moving bus comes to school with a great difficulty. Amith is scared for being late to school meets Jeevan.

- Jeevan - Hello Amith...got very late. Both of us will be punished today.
- Amith - Why did you get late? I got late as I was injured while doing a wrong thing.
- Jeevan - A friend suggested to go on roaming. Thinking that he'll be angry I also went with him. If my mother get to know this I will be scolded.
- Amith - I don't go anywhere without informing my mother. I make decisions after thinking about my mother and father if any friend suggest anything.
- Jeevan - We would even be rounded up by police in just a moment. Luky escape. I will never do like this. Tell me how to make decisions in such events as such.

**Competency Level 10.2 : Takes action to prevent getting infected from sexually transmitted diseases**

**No of Periods : 04.**

- Learning outcomes :**
- Identifies sexually transmitted infections.
  - Explains that biological, economical and cultural influences occur due to sexually transmitted diseases.
  - Present ideas about the importance of preventing sexually transmitted diseases while accepting the fact.
  - Explains the contribution of an individual in preventing the sexually transmitted diseases.
  - Demonstrates the readiness in taking preventive action from sexually transmitted diseases.

**Instructions for planning teaching learning process :-**

- Step 01 -**
- Insist that sexually transmitted diseases are diseases which are transmitted from an infected person to another by unsecure sexual behaviour.
  - Introduce about the following sexually transmitted diseases to the students.
    - Gonorrhoea
    - Genital Herpes
    - Syphilis
    - Candida
    - Genital Warts
    - HIV/AIDS
- Step 02**
- Group the students and instruct them to explore on sexually transmitted diseases under the topics given below.
    - Symptoms related to infections
    - Prevention from sexually transmitted infections
    - Effects brought about by the sexually transmitted infections;
      - Biological
      - Economical
      - Cultural
- Step 03 -**
- Allow the students to make presentations of their findings.
  - Make an elaboration according to the information given as per annex 10.2.1.

**Basic key concepts :** • HIV/AIDS, sexually transmitted diseases

**Quality inputs :** • Books with information on sexually transmitted diseases  
• CD's

**Instructions for assessment and evaluation :-**

- Inquire about sexually transmitted diseases.
- Describe the symptoms of sexually transmitted diseases.
- Inquire about HIV/AIDS.
- Inquire about the steps to be taken in order to prevent sexually transmitted diseases.
- Write a newspaper article on the risks of being infected by sexually transmitted diseases.

**Annexe 10. 2. 1**

**Information Sheet**

**Symptoms of sexually transmitted diseases**

- Yellow coloured viscous secretions from the penis (Gonorrhoea, Chlamydia)
- Irritating feeling when urinating
- Pain during urination (Gonorrhoea, Chlamydia)
- Irregular pattern of menstrual cycle
- Yellow coloured viscous secretions from the vagina (Gonorrhoea, Chlamydia)
- Irregularities in menstrual periods (Gonorrhoea, Chlamydia)
- Warts in the genital areas (Genital warts)
- Pain in the lower part of the abdomen (Gonorrhoea, Chlamydia)
- Wounds around genital areas/ wounds within the genitals (Herpes, Syphilis)
- Eczema in the body (HIV/AIDS, Syphilis)
- Fever and joint pains (HIV/AIDS, Syphilis)
- Blindness of the child during pregnancy (Gonorrhoea)
- Still births, miscarriages (Syphilis)
- Infertility (Gonorrhoea, Chlamydia)

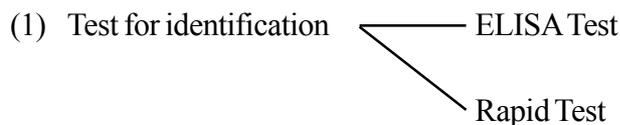
**HIV / AIDS**

HIV (Human Immuno-deficiency) Virus when entered in to the body that person becomes HIV infected. Afterwards HIV decreases the immunity of the body. HIV destroy CD<sub>4</sub> cells (a type of lymphocytes) which protects the immunity thereby weakening the immunity which in turn result in various diseases. HIV infection which reduces the immunity that pave the way to a variety of diseases is called AIDS(Acquired Immunity Deficiency Syndrome).

- AIDS condition is like an iceberg floating in the sea. Although the tip of the iceberg seen with the naked eye is small, the greater part of the bulk is under water. Same as the HIV infected persons in the society are very high related to the number of identified AIDS patients. The reason for this is majority of the HIV infected persons take about 8 - 10 years to become AIDS conditions.

At present two kinds of HIV viruses are identified. They are HIV – 1 and HIV – II . Both can cause AIDS.

- HIV cannot live in normal environment for long. It needs living cells to become alive. Therefore it does not exist in air, water or food. It lives only in the cells of an infected person. An infected persons blood contain a lot of viruses.
  - Seminal fluid of males
  - Secretions from the vagina and cervix
  - Breast milk also contain a lot of viruses
  - This virus is found in minute quantities in saliva, tears, sweat, faeces and urine.
  - HIV infected persons do not show any symptoms for a long time (8 -10 years). Therefore we cannot identify them through external appearance.
  - The best way to find an infected person is to test blood to identify antibodies for HIV. Two tests are done in this regard. Namely, test to identify and test to confirm.



ELISA Test, Rapid Test : This is the basic blood test. When it is positive the confirmation test will be done.

Western Blot Test – This is the confirmation test. Every blood sample that gives a positive (+) results for the Elisa Test and Rapid Test are subjected to this test.

**Importance of HIV test**

- By realizing that one is HIV infected enables to take ART (Anti - Retroviral Treatment) at proper time.
- This increases the quality of life of the infected person while it extends the life time.

- Taking proper treatment at correct time decreases the virus levels in blood thereby decreasing the infection being transmitted to another person. Spread of disease could be prevented further by identifying infected persons through HIV test.
- Attending to an HIV test is a matter of importance if one had experienced unsecure sex.
- HIV tests could be taken from all the sexually transmitted disease clinics in government hospitals with utmost confidentiality.
- The immune system active in the body kills the germs that enter the body. It prevents the cause of diseases. The leucocytes of the blood play a major role in this regard.
- But after getting infected with HIV, immune system is weakened. Therefore tendency to cause other diseases is high.

### **Symptoms of AIDS**

Any kind of germ that is entered to the body of an AIDS patient can cause a severe disease condition. Symptoms show according to the germ that is infected.

- Tuberculosis - symptoms
- Pneumonia - symptoms
- Chronic diarrhea - symptoms
- Heavy loss of body weight within a short period of time. In addition patient shows various other symptoms.  
Loss of body weight (about 10% loss of body weight within a month)
- Fever extending for more than a month
- Diarrhea extending for more than a month

### **HIV Spread like this**

- Having unprotected sexual behaviour with an infected person  
(More than 90% are infected by this way in Sri Lanka. Homosexuals and bisexuals could be infected)
- There is a risk of infection of about 45 % from an infected mother to child.
  - During pregnancy
  - During delivery
  - Through mother's milk
  - By infected blood samples (In Sri Lanka 1 is infected by this method)
  - By common using of unsterilised needles to pierce the body

Please get into the habit of finding out whether the equipment used for shaving, cutting hair, blood transfusion, injecting etc. are sterilized. If not take your own equipment.

HIV will not spread by the following methods.



Shaking hands



Mosquitoes



Playing together



kissing



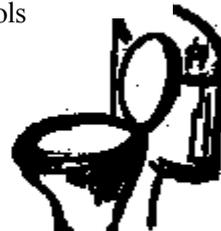
Spit flarn when sneezing



Through things used



Swimming pools



Toilets

HIV virus cannot live outside the body. To be infected virus should be with a high concentration. Spit and blood at the tip of a mosquito sting contain only a minute quantity of virus. Fluid in the secretions of genital organs or blood contains high concentration.

**To get prevented from some sexually transmitted diseases.**

- Abstain from sexual relations until marriage.
- Control the sexual relations only to the married partner after marriage.
- Identify the risk situations in the society and get protected.
- Maintain a strong family unit.
- Take proper treatment if there are sexually transmitted infections. Abstain from sexual activity during that period.

**People who have a high tendency to get infected with HIV**

- Males and females engaged in sex trade.
- People who are engaged in sexual relations with more than one person.
- People who are engaged in homo sexual relations
- People who have sores, eczemas and wounds in genitals.
- People who have other sexually transmitted diseases.
- People who share intra venous drug injections.
- Children born to HIV infected mothers

**To prevent the spread of HIV infections:**

- When HIV get into a body, it multiplies and produces antibodies. The the greatest risk is disease could not be identified by a blood test in between the first two weeks to three months after infection. This is called the 'window period'.
- Infection of HIV in males was greater as three times than females in Sri Lanka as well as in the world at the time infection was identified. But at present there is a trend that number of males and females infected are the same in Sri Lanka as well as in the world.
- The risk of being infected by the virus is higher in females than males according to the biological characteristics. Presence of thin films of mucous and the ability to bear seminal fluid within the vagina for a longer duration increases the possibility of infection from threefold to ninefold. Similarly the presence of more viruses in seminal fluid than the vaginal secretions tend to increase the high risk of infection in females. Furthermore, the lack of support given by the partners to take preventive measures also accounts for high risk of infection.
- Women getting infected with HIV creates a lot of problems within the family units as well as in the society.
- When a woman get the infection, risk of the newborns getting the infection and both father and mother being ill followed by their death resulting the children to become orphans are some social issues.

- HIV infected mother should not give her milk to the child and should give clean alternative food to the child. These alternative infant foods are also expensive and it also creates problems.
- A person who get to know that he/she is infected with HIV would experience various emotions. Fear, hatred, suspicion, fright, shyness, feeling of being isolated from the society, afraid of losing the job or education will cause heavy mental stress. Such a mental environment will lead to a collapse in the immune system thereby getting into AIDS situation very quickly.
- They would be able to live longer if they are provided with good hope and give them the opportunity, acceptance and rights to live as normal people in the society.