



# CBSE

वसुधैव कुटुम्बकम्  
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## SYLLABUS 2023-24 (CODE NO. 048) CLASS-XI & XII

## TABLE OF CONTENT

S. No.	Content	Page No.
1.	Rationale	03
2.	Learning Objectives	04
	<b>Class XI</b>	
3.	Course Structure	05
4.	Course Content	06
5.	Guidelines for internal assessment (Practical/ Projects etc.)	14
	<b>Class XII</b>	
6.	Course Structure	15
7.	Course Content	16
8.	Guidelines for internal assessment (Practical/ Projects etc.)	28
9.	Prescribed Textbooks Class XI & XII	29
10.	Suggested Reading XI & XII	30



## RATIONALE

Sri Aurobindo believed, “For the body to be effective physical education must be rigorous and detailed, far-sighted and methodological. This will be translated into habits. These habits should be controlled and disciplined while remaining flexible enough to adapt themselves to circumstances and to the needs of growth and development of the being”.

Physical education programs at all levels help students develop the knowledge, skills, attitudes, values, and behaviours to initiate and maintain a physically active lifestyle that will continue into and through adulthood. Students are encouraged to use physical activity to develop personal initiative, responsibility, and caring about others and the community.

A positive, supportive environment is essential to the success of the physical education program. This inclusive learning environment allows students to experience positive, challenging, and enjoyable physical activity while learning the benefits and importance of such action. Such an environment accommodates a variety of individual differences such as cultural identity, previous movement experiences, fitness and skill levels, and intellectual, physical, and socio-emotional maturity.

Appropriate instruction in physical education incorporates best practices derived from research and experiences in teaching students. This physical education curriculum sets forth developmental and instructional proper rules in designing, implementing, and evaluating physical education programs.

Therefore, the Physical education committee created a tool, ‘The Physical Education Curriculum’ – which has been researched and designed to provide consistency, coherence, and rigor in the content and process of teaching physical education throughout the schools of the CBSE all over the world.

The Physical education curriculum provides all students with enjoyable and worthwhile learning opportunities where they develop the movement skills and competencies to participate and perform in various physical activities competently, confidently, and safely. It builds students’ motivation and commitment to physical activity and sports within and beyond school. It can encourage students to participate in leadership roles, irrespective of their previous experiences or ability in physical activity. The physical education program also prepares students to develop their careers in physical education and sports. It is one of the dynamic fields, providing numerous opportunities for diverse career options like being a teacher, coach, sports manager, and many more.

Looking into today’s context, physical education is the only subject that not only develops mental, physical, and social attributes among us but also contributes to our overall sense of well-being in our life.

## LEARNING OBJECTIVES

1. Optimum Development of Child's Physical Growth, Including Intellectual Development, Emotional Development, Social Development, Personal Development, and Character Building.
2. Imparting and Development of Positive Approach among Children to opt for Physical Education as a Profession.
3. Developing Management Skills to Understand and Organize Sports Tournaments.
4. Learn and Understand the Motor Abilities like Strength, Speed, Endurance, Coordination, And Flexibility.
5. Acquire knowledge about the Human Body and Its Functioning and Effects on Physical Activities.
6. Understand the Process of Growth and Development and its Positive Relationship with Physical Activities.
7. Develop Socio-Psychological Aspects like Control of Emotions, Balanced Behavior, Development of Leadership and Followership Qualities, and Team Spirit.
8. Learn and Understand the Effect of Physical and Physiological Training on Women Athletes.
9. Develop the Habit of Practicing Yoga Asanas and Pranayama Daily to Minimize Hypokinetic Diseases.
10. Learning about Nutrition and the Importance of a Balanced Diet.
11. Understand the application of Laws and Principles of Physics in Sports and Games.
12. Understanding the Characteristics of Children with Special Needs (CWSN) and Learning the Importance of Physical Activates for them.
13. Learning the procedure and application of different Physical and Physiological tests for different Age Categories.
14. Learning and understanding different Games and Sports.

**CLASS XI**  
**COURSE STRUCTURE**

UNIT NO.	UNIT NAME	NO. OF PERIODS (190 HRS)	THE WEIGHTAGE (MARKS) ALLOTTED
<b>UNIT 1</b>	Changing Trends & Career in Physical Education	15	04 + 04 <b>b*</b>
<b>UNIT 2</b>	Olympic Value Education	10	05
<b>UNIT 3</b>	Yoga	14	06+01 <b>b*</b>
<b>UNIT 4</b>	Physical Education & Sports for CWSN	13	04+03 <b>b*</b>
<b>UNIT 5</b>	Physical Fitness, Wellness	10	05
<b>UNIT 6</b>	Test, Measurements & Evaluation	15	08
<b>UNIT 7</b>	Fundamentals of Anatomy and Physiology in Sports	15	08
<b>UNIT 8</b>	Fundamentals of Kinesiology and Biomechanics in Sports	15	04+04 <b>b*</b>
<b>UNIT 9</b>	Psychology and Sports	13	07
<b>UNIT 10</b>	Training & Doping in Sports	14	07
<b>PRACTICAL (LAB)#</b>	<b>Including 3 Practical</b>	<b>56</b>	<b>30</b>
<b>TOTAL</b>	<b>Theory 10 + Practical 3</b>	<b>134 + 56 = 190hrs</b>	<b>Theory 70 + Practical 30 = 100</b>

**Note: b\*are the Concept based questions like Tactile diagram/data interpretation/case base study for visually Impaired Child.**

**CLASS XI**  
**COURSE CONTENT**

Unit No.	Unit Name & Topics	Specific learning objectives	Suggested Teaching Learning process	Learning Outcomes with specific Competencies
Unit 1	<b>Changing Trends and Careers in Physical Education</b> 1. Concept, Aims & Objectives of Physical Education 2. Development of Physical Education in India – Post Independence 3. Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements 4. Career options in Physical Education 5. Khelo-India Program and Fit – India Program	<ul style="list-style-type: none"> <li>• To make the students understand the meaning, aims, and objectives of Physical Education.</li> <li>• To Teach students about the development of physical education in India after Independence.</li> <li>• To educate students about the development of sports surfaces, wearable gear, sports equipment, and technology.</li> <li>• To make students know the different career options available in the field.</li> <li>• To make them know about the Khelo India Program</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> <li>• Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> <ul style="list-style-type: none"> <li>• Recognize the concept, aim, and objectives of Physical Education.</li> <li>• Identify the Post-independence development in Physical Education.</li> <li>• Categorize Changing Trends in Sports- playing surface, wearable gear, sports equipment, technological</li> <li>• Explore different career options in the field of Physical Education.</li> <li>• Make out the development of Khelo India and Fit India Program.</li> </ul>

<b>Unit 2</b>	<b>Olympism Value Education</b>  1. Olympism – Concept and Olympics Values (Excellence, Friendship & Respect)  2. Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind  3. Ancient and Modern Olympics  4. Olympics - Symbols, Motto, Flag, Oath, and Anthem  5. Olympic Movement Structure - IOC, NOC, IFS, Other members	<ul style="list-style-type: none"> <li>• To make the students aware of Concepts and Olympics Values (Excellence, Friendship &amp; Respect)</li> <li>• To make students learn about Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will &amp; Mind</li> <li>• To make students understand ancient and modern Olympic games.</li> <li>• To make the students aware of Olympics - Symbols, Motto, Flag, Oath, and Anthem</li> <li>• To make students learn about the working and functioning of IOC, NOC and IFS, and other members.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> <li>• Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b>  <ul style="list-style-type: none"> <li>• Incorporate values of Olympism in your life.</li> <li>• Differentiate between Modern and Ancient Olympic Games, Paralympics, and Special Olympic games</li> <li>• Identify the Olympic Symbol and Ideals</li> <li>• Describe the structure of the Olympic movement structure</li> </ul>
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<b>Unit 3</b>	<b>Yoga</b> 1. Meaning and importance of Yoga 2. Introduction to Astanga Yoga 3. Yogic Kriyas (Shat Karma) 4. Pranayama and its types. 5. Active Lifestyle and stress management through Yoga	<ul style="list-style-type: none"> <li>• To make the students aware of the meaning and importance of yoga</li> <li>• To make them learn about Astanga yoga.</li> <li>• To teach students about yogic kriya, specially shat karmas.</li> <li>• To make the learn and practice types of Pran</li> <li>• To make them learn the importance of yoga in stress management.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> <li>• Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> <ul style="list-style-type: none"> <li>• Recognize the concept of yoga and be aware of the importance; of it</li> <li>• Identify the elements of yoga</li> <li>• Identify the Asanas, Pranayama's, meditation, and yogic kriyas</li> <li>• Classify various yogic activities for the enhancement of concentration</li> <li>• Know about relaxation techniques for improving concentration</li> </ul>
<b>Unit 4</b>	<b>Physical Education and Sports for Children with Special Needs</b> 1. Concept of Disability and Disorder 2. Types of Disability, its causes & nature (Intellectual disability, Physical disability). 3. Disability Etiquette 4. Aim and objectives of	<ul style="list-style-type: none"> <li>• To make the students aware concept of Disability and Disorder.</li> <li>• To make students aware of different types of disabilities.</li> <li>• To make students learn about Disability Etiquette</li> <li>• To make the students Understand the aims and objectives Adaptive Physical</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> <li>• Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> <ul style="list-style-type: none"> <li>• Identify the concept of Disability and Disorder.</li> <li>• Outline types of disability and describe their causes and nature.</li> <li>• Adhere to and respect children with special needs by following etiquettes.</li> </ul>



	<p>Adaptive Physical Education.</p> <p>5. Role of various professionals for children with special needs (Counselor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)</p>	<p>Education</p> <ul style="list-style-type: none"> <li>To make students aware of role of various professionals for children with special needs.</li> </ul>		<ul style="list-style-type: none"> <li>Identify possibilities and scope in adaptive physical education</li> <li>Relate various types of professional support for children with special needs along with their roles and responsibilities.</li> </ul>
<p><b>Unit 5</b></p>	<p><b>Physical Fitness, Wellness, and Lifestyle</b></p> <p>1. Meaning &amp; importance of Wellness, Health, and Physical Fitness.</p> <p>2. Components/Dimensions of Wellness, Health, and Physical Fitness</p> <p>3. Traditional Sports &amp; Regional Games for promoting wellness</p> <p>4. Leadership through Physical Activity and Sports</p>	<ul style="list-style-type: none"> <li>To make the students understand the Meaning &amp; importance of Wellness, Health, and Physical Fitness</li> <li>To make students aware of the Components/ Dimensions of Wellness, Health, and Physical Fitness</li> <li>To make students learn Traditional Sports &amp; Regional Games to promote wellness</li> <li>To develop Leadership qualities through Physical Activity and Sports in students</li> </ul>	<ul style="list-style-type: none"> <li>Lecture-based instruction,</li> <li>Technology-based learning,</li> <li>Group learning,</li> <li>Individual learning,</li> <li>Inquiry-based learning,</li> <li>Kinesthetic learning,</li> <li>Game-based learning and</li> <li>Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>Explain wellness and its importance and define the components of wellness.</li> <li>Classify physical fitness and recognize its importance in life.</li> <li>Distinguish between skill-related and health-related components of physical fitness.</li> <li>Illustrate traditional sports and regional games to promote wellness.</li> </ul>

	5. Introduction to First Aid – PRICE	<ul style="list-style-type: none"> <li>To make students learn First Aid and its management skills</li> </ul>		<ul style="list-style-type: none"> <li>Relate leadership through physical activity and sports</li> <li>Illustrate the different steps used in first aid - PRICE.</li> </ul>
<b>Unit 6</b>	<b>Test, Measurement &amp; Evaluation</b> <ol style="list-style-type: none"> <li>Define Test, Measurements and Evaluation.</li> <li>Importance of Test, Measurements and Evaluation in Sports.</li> <li>Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site)</li> <li>Somato Types (Endomorphy, Mesomorphy &amp; Ectomorphy)</li> <li>Measurements of health-related fitness</li> </ol>	<ul style="list-style-type: none"> <li>To Introduce the students with the terms like test, measurement and evaluation along with its importance</li> <li>To Introducing them the methods of calculating BMI, Waist- hip ratio and Skin fold measurement.</li> <li>To make the students aware of the different somatotypes.</li> <li>To make the students learn the method to measure health-related fitness.</li> </ul>	<ul style="list-style-type: none"> <li>Lecture-based instruction,</li> <li>Technology-based learning,</li> <li>Group learning,</li> <li>Individual learning,</li> <li>Inquiry-based learning,</li> <li>Kinesthetic learning,</li> <li>Game-based learning and</li> <li>Expeditionary learning.</li> </ul>	<b>After completing the unit, the student s will be able to:</b> <ul style="list-style-type: none"> <li>Define the terms test, measurement, and evaluation,</li> <li>Differentiate norm and criterion referenced standards,</li> <li>Differentiate formative and summative evaluation,</li> <li>Discuss the importance of measurement and evaluation processes,</li> <li>Understand BMI: A popular clinical standard and its computation</li> <li>Differentiate between Endomorphy, Mesomorphy &amp; Ectomorphy h describe the procedure of Anthropometric</li> </ul>

				Measurement
<b>Unit 7</b>	<b>Fundamentals of Anatomy, Physiology in Sports</b> <ol style="list-style-type: none"> <li>1. Definition and importance of Anatomy and Physiology in Exercise and Sports.</li> <li>2. Functions of Skeletal System, Classification of Bones, and Types of Joints.</li> <li>3. Properties and Functions of Muscles.</li> <li>4. Structure and Functions of Circulatory System and Heart.</li> <li>5. Structure and Functions of Respiratory System.</li> </ol>	<ul style="list-style-type: none"> <li>• The students will learn the meaning and definition &amp; identify the importance of anatomy, physiology, and kinesiology.</li> <li>• Students will understand the main functions and Classification of Bone and the Types of Joints.</li> <li>• The students will learn the Properties and Functions of Muscles.</li> <li>• The students will learn the Structure and Functions of the Circulatory System and Heart.</li> <li>• The students will learn the Structure and Functions of Respiratory System.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game - based learning and Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> <ul style="list-style-type: none"> <li>• Identify the importance of anatomy and physiology.</li> <li>• Recognize the functions of the skeleton.</li> <li>• Understand the functions of bones and identify various types of joints.</li> <li>• Figure out the properties and functions of muscles and understand how they work.</li> <li>• Understand the anatomy of the respiratory system and describe it's working.</li> <li>• Identify and analyses the layout and functions of Circulatory System.</li> </ul>
<b>Unit 8</b>	<b>Fundamentals Of Kinesiology And Biomechanics in Sports</b> <ol style="list-style-type: none"> <li>1. Definition and Importance of</li> </ol>	<ul style="list-style-type: none"> <li>• The students will learn the meaning and definition &amp; identify the importance of Kinesiology and Biomechanics in sports.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> </ul>	<b>After completing the unit, the students will be able to:</b> <ul style="list-style-type: none"> <li>• Understand Kinesiology and Biomechanics with their</li> </ul>

	<p>Kinesiology and Biomechanics in Sports.</p> <p>2. Principles of Biomechanics</p> <p>3. Kinetics and Kinematics in Sports</p> <p>4. Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination &amp; Pronation</p> <p>5. Axis and Planes – Concept and its application in body movements</p>	<ul style="list-style-type: none"> <li>• To make the students learn the principles of biomechanics.</li> <li>• To make the students understand the concept of Kinetics and Kinematics in Sports</li> <li>• To make the students learn about different types of body movements.</li> <li>• To make the students understand the concept of Axis and Planes and its application in body movements.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> <li>• Expeditionary learning.</li> </ul>	<p>application in sports.</p> <ul style="list-style-type: none"> <li>• Explain biomechanical principles and their utilization in sports and physical education.</li> <li>• Illustrate fundamental body movements and their basic patterns.</li> <li>• Learn about the Axis and Planes and their application with body movements.</li> </ul>
<b>Unit 9</b>	<p><b>Psychology and Sports</b></p> <p>1. Definition &amp; Importance of Psychology in Physical Education &amp; Sports;</p> <p>2. Developmental Characteristics at Different Stages of Development;</p>	<ul style="list-style-type: none"> <li>• The students will identify the definition and importance of Psychology in Physical Education and sports.</li> <li>• The students will be able to differentiate characteristics of growth and development at different stages.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture-based instruction,</li> <li>• Technology-based learning,</li> <li>• Group learning,</li> <li>• Individual learning,</li> <li>• Inquiry-based learning,</li> <li>• Kinesthetic learning,</li> <li>• Game-based learning and</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify the role of Psychology in Physical Education and Sports</li> <li>• Differentiate characteristics of growth and development at different stages.</li> </ul>

	<p>3. Adolescent Problems &amp; their Management;</p> <p>4. Team Cohesion and Sports;</p> <p>5. Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness</p>	<ul style="list-style-type: none"> <li>- Students will be able to identify the issues and management related to adolescents.</li> <li>The students will be able to understand the importance of team cohesion in sports.</li> <li>Students will distinguish different Psychological Attributes like Attention, Resilience, and Mental Toughness.</li> </ul>	<ul style="list-style-type: none"> <li>Expeditionary learning.</li> </ul>	<ul style="list-style-type: none"> <li>Explain the issues related to adolescent behavior and Team Cohesion in Sports</li> <li>Correlate the psychological concepts with the sports and athlete specific situations</li> </ul>
<p><b>Unit 10</b></p>	<p><b>Training &amp; Doping in Sports</b></p> <p>1. Concept and Principles of Sports Training</p> <p>2. Training Load: Over Load, Adaptation, and Recovery</p> <p>3. Warming-up &amp; Limbering Down – Types, Method &amp; Importance</p> <p>4. Concept of Skill, Technique, Tactics &amp; Strategies</p>	<ul style="list-style-type: none"> <li>To make the students aware about of concepts and principles of sports training.</li> <li>To make students learn and understand the Training Load, Over Load, Adaptation, and Recovery concepts.</li> <li>To make students Understand the importance of warning up and limbering down exercises.</li> <li>To introduce the terms like Skills, Techniques, Tactics, and Strategies to the</li> </ul>	<ul style="list-style-type: none"> <li>Lecture-based instruction,</li> <li>Technology-based learning,</li> <li>Group learning,</li> <li>Individual learning,</li> <li>Inquiry-based learning,</li> <li>Kinesthetic learning,</li> <li>Game-based learning and</li> <li>Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>Understand the concept and principles of sports training.</li> <li>Summarise training load and its concept.</li> <li>Understand the concept of warming up &amp; limbering down in sports training and their types, method &amp; importance.</li> <li>Acquire the ability to differentiate between the skill, technique, tactics &amp; strategies in sports training.</li> </ul>

	5. Concept of Doping and its disadvantages	students. • To make students aware of the doping substances and their disadvantages in sports.		• Interpret concept of doping.
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### GUIDELINES FOR INTERNAL ASSESSMENT (PRACTICAL/ PROJECTS ETC.)

<b>PRACTICAL (Max. Marks 30)</b>	
Physical Fitness Test: SAI Khelo India Test, Brockport Physical Fitness Test (BPFT)*	6 Marks
Proficiency in Games and Sports (Skill of any one IOA recognized Sport/Game of Choice)**	7 Marks
Yogic Practices	7 Marks
Record File ***	5 Marks
Viva Voce (Health/ Games & Sports/ Yoga)	5 Marks

- ❖ \*Test for CWSN (any 4 items out of 27 items. One item from each component: Aerobic Function, Body Composition, Muscular strength & Endurance, Range of Motion or Flexibility)
- ❖ \*\*CWSN (Children with Special Needs – Divyang): Bocce/ Boccia, Sitting Volleyball, Wheel Chair Basketball, Unified Badminton, Unified Basketball, Unified Football, Blind Cricket, Goalball, Floorball, Wheel Chair Races and Throws, or any other Sport/Game of choice.
- ❖ \*\*Children with Special Needs can also opt any one Sport/Game from the list as alternative to Yogic Practices. However, the Sport/ Game must be different from Test - 'Proficiency in Games and Sports'

**\*\*\*Record File shall include:**

- **Practical-1:** Fitness tests administration. (SAI Khelo India Test)
- **Practical-2:** Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.
- **Practical-3:** Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

**CLASS XII**  
**COURSE STRUCTURE**

UNIT NO.	UNIT NAME	NO. OF PERIODS (190 HRS)	THE WEIGHTAGE (MARKS) ALLOTTED
<b>UNIT 1</b>	Management of Sporting Events	15	05 + 04 <b>b*</b>
<b>UNIT 2</b>	Children and Women in Sports	12	07
<b>UNIT 3</b>	Yoga as Preventive measure for Lifestyle Disease	12	06+01 <b>b*</b>
<b>UNIT 4</b>	Physical Education & Sports for (CWSN)	13	04+04 <b>b*</b>
<b>UNIT 5</b>	Sports & Nutrition	12	07
<b>UNIT 6</b>	Test and Measurement in Sports	13	08
<b>UNIT 7</b>	Physiology & Injuries in Sport	13	04+04 <b>b*</b>
<b>UNIT 8</b>	Biomechanics and Sports	18	10
<b>UNIT 9</b>	Psychology and Sports	12	07
<b>UNIT 10</b>	Training in Sports	15	09
<b>PRACTICAL (LAB)#</b>	<b>Including 3 Practical</b>	<b>56</b>	<b>30</b>
<b>TOTAL</b>	<b>Theory 10 + Practical 3</b>	<b>134 + 56 = 190hrs</b>	<b>Theory 70 + Practical 30 = 100</b>

**Note: b\*are the Concept based questions like Tactile diagram/data interpretation/case base study for visually Impaired Child**

**CLASS XII**  
**COURSE CONTENT**

Unit No.	Unit Name & Topics	Specific Learning Objectives	Suggested Teaching Learning process	Learning Outcomes with specific competencies
Unit 1	<p><b>Management of Sporting Events</b></p> <p>1. Functions of Sports Events Management (Planning, Organising, Staffing, Directing &amp; Controlling)</p> <p>2. Various Committees &amp; their Responsibilities (pre; during &amp; post)</p> <p>3. Fixtures and their Procedures – Knock-Out (Bye &amp; Seeding) &amp; League (Staircase, Cyclic, Tabular method) and Combination tournaments.</p>	<ul style="list-style-type: none"> <li>• To make the students understand the need and meaning of planning in sports, committees, and their responsibilities for conducting the sports event or tournament.</li> <li>• To teach them about the different types of tournaments and the detailed procedure of drawing fixtures for Knock Out, League Tournaments, and Combination tournaments.</li> <li>• To make the students understand the need for the meaning and significance of intramural and extramural</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* Describe the functions of Sports Event management</li> <li>* Classify the committees and their responsibilities in the sports event</li> <li>* Differentiate the different types of tournaments.</li> <li>* Prepare fixtures of knockout, league &amp; combination.</li> <li>* Distinguish between intramural and extramural sports events</li> <li>* Design and prepare different types of community</li> </ul>



	<p>4. Intramural &amp; Extramural tournaments – Meaning, Objectives &amp; Its Significance</p> <p>5. Community sports program (Sports Day, Health Run, Run for Fun, Run for Specific Cause &amp; Run for Unity)</p>	<p>tournaments</p> <ul style="list-style-type: none"> <li>To teach them about the different types of community sports and their importance in our society.</li> </ul>		
<b>Unit 2</b>	<p><b>Children &amp; Women in Sports</b></p> <p>1. Exercise guidelines of WHO for different age groups.</p> <p>2. Common postural deformities-knock knees, flat foot, round shoulders, Lordosis, Kyphosis, Scoliosis, and bow legs and their respective corrective measures.</p> <p>3. Women's</p>	<ul style="list-style-type: none"> <li>To make students understand the exercise guidelines of WHO for different age groups</li> <li>To make students aware of the common postural deformities</li> <li>To make students aware of women's sports participation in India and about the special conditions of women.</li> </ul>	<ul style="list-style-type: none"> <li>Lecture-based instruction,</li> <li>Technology-based learning,</li> <li>Group learning,</li> <li>Individual learning,</li> <li>Inquiry-based learning,</li> <li>Kinesthetic learning,</li> <li>Game-based learning and</li> <li>Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* Differentiate exercise guidelines for different stages of growth and development.</li> <li>* Classify common postural deformities and identify corrective measures.</li> <li>* Recognize the role and importance of sports participation of women in India.</li> <li>* Identify special considerations relate to menarche and</li> </ul>

	<p>participation in Sports – Physical, Psychological, and social benefits.</p> <p>4. Special consideration (menarche and menstrual dysfunction)</p> <p>5. Female athlete triad (osteoporosis, amenorrhea, eating disorders).</p>	<ul style="list-style-type: none"> <li>• To make students understand menarche and menstrual dysfunction among women athletes.</li> <li>• To make them understand about female athlete triad.</li> </ul>		<p>menstrual dysfunction.</p> <p>* Express female athlete triad according to eating disorders.</p>
<b>Unit 3</b>	<p><b>Yoga as Preventive measure for Lifestyle Disease</b></p> <p>1. <b>Obesity:</b> Procedure, Benefits &amp; Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha – Matsyendrasana, Dhanurasana,</p>	<ul style="list-style-type: none"> <li>• To make students Understand about the main life style disease - Obesity, Hypertension, Diabetes, Back Pain and Asthma.</li> <li>• To teach about different Asanas in detail which can help as a preventive Measures for those Lifestyle Diseases.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <p>* Identify the asanas beneficial for different ailments and health problems.</p> <p>* Recognize importance of various asanas for preventive measures of obesity, diabetes, asthma, hypertension, back pain and arthritis</p> <p>* Describe the procedure for performing a variety of asanas for maximal benefits.</p>

	<p>Ushtrasana, Suryabedhan pranayama.</p> <p>2. <b>Diabetes:</b> Procedure, Benefits &amp; Contraindications for Katichakrasana, Pavanmuktasana, Bh ujangasana, Shalabhasana, Dhanurasana, Supta- vajasana, Paschimottanasana-a, Ardha- Mastendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati.</p> <p>3. <b>Asthma:</b> Procedure, Benefits &amp; Contraindications for Tadasana, Urdhwahastottansan a, UttanMandukanan- a, Bhujangasana,</p>			<ul style="list-style-type: none"> <li>* Distinguish the contraindications associated with performing different asanas.</li> <li>* Outline the role of yogic management for various health benefits and preventive measures.</li> </ul>
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	<p>Dhanurasana, Ushtrasana, Vakrasana, Kapalbhati, Gomukhasana Matsyaasana, Anuloma-Viloma.</p> <p>4. <b>Hypertension:</b> Procedure, Benefits &amp; Contraindications for Tadasana, Katichakransan, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasan-a, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi- shodhanapranayam, Sitlipranayam.</p> <p>5. <b>Back Pain and Arthritis:</b> Procedure, Benefits &amp; Contraindications of</p>			
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	Tadasan, Urdhawahastootansa na, Ardh- Chakrasana, Ushtrasana, Vakrasana, Sarala Maysyendrsana, Bhujandgasana, Gomukhasana, Bhadrasana, Makarasana, Nadi- Shodhana pranayama.			
<b>Unit 4</b>	<b>Physical Education and Sports for CWSN (Children with Special Needs - Divyang)</b> 1. Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics) 2. Concept of Classification and Divisioning in Sports. 3. Concept of Inclusion	<ul style="list-style-type: none"> <li>• To make students understand the concept of Disability and Disorder.</li> <li>• To teach students about the types of disabilities &amp; disorders, their causes, and their nature.</li> <li>• To make them aware of Disability Etiquette.</li> <li>• To make the students Understand the advantage of physical activity for</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> * Value the advantages of physical activities for children with special needs * Differentiate between methods of categorization in sports for CWSN * Understand concepts and the importance of inclusion in sports * Create advantages for Children with Special Needs through Physical Activities

	<p>in sports, its need, and Implementation;</p> <p>4. Advantages of Physical Activities for children with special needs.</p> <p>5. Strategies to make Physical Activities assessable for children with special needs.</p>	<p>CWSN.</p> <ul style="list-style-type: none"> <li>To make the students aware of different strategies for making physical activity accessible for Children with Special Needs.</li> </ul>		<ul style="list-style-type: none"> <li>* Strategies physical activities accessible for children with specialneeds</li> </ul>
<p><b>Unit 5</b></p>	<p><b>Sports &amp; Nutrition</b></p> <p>1. Concept of balanced diet and nutrition</p> <p>2. Macro and Micro Nutrients: Food sources &amp; functions</p> <p>3. Nutritive &amp; Non-Nutritive Components of Diet</p> <p>4. Eating for Weight control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance, and</p>	<ul style="list-style-type: none"> <li>To make the students understand the importance of a balanced diet</li> <li>To clear the concept of Nutrition – Micro &amp; Macro nutrients, Nutritive &amp; non-Nutritive Components of diet</li> <li>To make them aware of eating for weight loss and the results of the pitfalls of dieting.</li> <li>To understand food</li> </ul>	<ul style="list-style-type: none"> <li>Lecture-based instruction,</li> <li>Technology-based learning,</li> <li>Group learning,</li> <li>Individual learning,</li> <li>Inquiry-based learning,</li> <li>Kinesthetic learning,</li> <li>Game-based learning and</li> <li>Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* Understand the concept of a balanced diet and nutrition. Classify Nutritive and Non-Nutritive components of the Diet</li> <li>* Identify the ways to maintain a healthy weight</li> <li>* Know about foods commonly causing food intolerance</li> <li>* Recognize the pitfalls of dieting and food myths</li> </ul>

	<p>Food Myths</p> <p>5. Importance of Diet in Sports-Pre, During and Post competition Requirements</p>	<p>intolerance &amp; food myths</p>		
<p><b>Unit 6</b></p>	<p><b>Test &amp; Measurement in Sports</b></p> <p>1. Fitness Test – SAI Khelo India Fitness Test in school:</p> <p>Age group 5-8 years/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test</p> <p>Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit &amp; Reach flexibility test, Strength Test (Partial Abdominal Curl Up, Push-Ups for boys, Modified Push-Ups for girls).</p>	<ul style="list-style-type: none"> <li>• To make students Understand and conduct SAI KHELO INDIA Fitness Test and to make students Understand and conduct General Motor Fitness Test.</li> <li>• To make students to determine physical fitness Index through Harvard Step Test/Rockport Test</li> <li>• To make students to calculate Basal Metabolic Rate (BMR)</li> <li>• To measure the fitness level of Senior Citizens through Rikli and Jones Senior Citizen Fitness Test.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* Perform SAI Khelo India Fitness Test in school [Age group 5-8 years/ (class 1-3) and Age group 9-18yrs/ (class 4-12)</li> <li>* Determine physical fitness Index through Harvard Step Test/Rock- port Test</li> <li>* Compute Basal Metabolic Rate (BMR)</li> <li>* Describe the procedure of Rikli and Jones - Senior Citizen Fitness Test</li> </ul>

	<p>2. Measurement of Cardio-Vascular Fitness – Harvard Step Test – Duration of the Exercise in Seconds <math>\times 100 / 5.5 \times</math> Pulse count of 1-1.5 Min after Exercise.</p> <p>3. Computing Basal Metabolic Rate (BMR)</p> <p>4. Rikli &amp; Jones - Senior Citizen Fitness Test</p> <ul style="list-style-type: none"> <li>• Chair Stand Test for lower body strength</li> <li>• Arm Curl Test for upper body strength</li> <li>• Chair Sit &amp; Reach Test for lower body flexibility</li> <li>• Back Scratch Test for upper body flexibility</li> <li>• Eight Foot Up &amp; Go Test for agility</li> <li>• Six-Minute Walk Test for Aerobic Endurance</li> </ul>			
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	5. Johnsen – Methney Test of Motor Educability (Front Roll, Roll, Jumping Half-Turn, Jumping full-turn)			
<b>Unit 7</b>	<b>Physiology &amp; Injuries in Sport</b> 1. Physiological factors determining components of physical fitness 2. Effect of exercise on the Muscular System 3. Effect of exercise on the Cardio-Respiratory System 4. Physiological changes due to aging 5. Sports injuries: Classification (Soft Tissue Injuries - Abrasion, Contusion, Laceration, Incision, Sprain & Strain;	<ul style="list-style-type: none"> <li>• Understanding the physiological factors determining the components of physical fitness.</li> <li>• Learning the effects of exercises on the Muscular system.</li> <li>• Learning the effects of exercises on Cardiovascular system.</li> <li>• Learning the effects of exercises on the Respiratory system.</li> <li>• Learning the changes caused due to aging.</li> <li>• Understanding the Sports</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<b>After completing the unit, the students will be able to:</b> * Recognize the physiological factors determining the components of physical fitness. * Comprehend the effects of exercise on the Muscular system and cardiorespiratory systems. * Figure out the physiological changes due to ageing * Classify sports injuries with its Management.

	Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted)	Injuries (Classification, Causes, and Prevention) <ul style="list-style-type: none"> <li>• Understanding the Aims &amp; Objectives of First Aid</li> <li>• Understanding the Management of Injuries</li> </ul>		
<b>Unit 8</b>	<b>Biomechanics and Sports</b> <ol style="list-style-type: none"> <li>1. Newton's Law of Motion &amp; its application in sports</li> <li>2. Types of Levers and their application in Sports.</li> <li>3. Equilibrium – Dynamic &amp; Static and Centre of Gravity and its application in sports</li> <li>4. Friction &amp; Sports</li> <li>5. Projectile in Sports</li> </ol>	<ul style="list-style-type: none"> <li>• Understanding Newton's Laws of Motion and their Application in Sports.</li> <li>• Make students understand the lever and its application in sports.</li> <li>• Make students understand the concept of Equilibrium and its application in sports.</li> <li>• Understanding Friction in Sports.</li> <li>• Understanding the concept of Projectile in sports.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* Understand Newton's Law of Motion and its application in sports</li> <li>* Recognize the concept of Equilibrium and its application in sports.</li> <li>* Know about the Centre of Gravity and will be able to apply it in sports</li> <li>* Define Friction and application in sports.</li> <li>* Understand the concept of Projectile in sports.</li> </ul>
<b>Unit 9</b>	<b>Psychology and Sports</b>	<ul style="list-style-type: none"> <li>• To make students understand Personality &amp;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p>

	<ol style="list-style-type: none"> <li>1. Personality; its definition &amp; types (Jung Classification &amp; Big Five Theory)</li> <li>2. Motivation, its type &amp; techniques.</li> <li>3. Exercise Adherence: Reasons, Benefits &amp; Strategies for Enhancing it</li> <li>4. Meaning, Concept &amp; Types of Aggressions in Sports</li> <li>5. Psychological Attributes in Sports – Self-Esteem, Mental Imagery, Self-Talk, Goal Setting</li> </ol>	<p>its classifications.</p> <ul style="list-style-type: none"> <li>• To make students understand motivation and its techniques.</li> <li>• To make students about Exercise Adherence and Strategies for enhancing Adherence to Exercise.</li> <li>• To make them aware of Aggression in sports and types.</li> <li>• To make students understand Psychological Attributes in Sports.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<ul style="list-style-type: none"> <li>* Classify different types of personality and their relationship with sports performance.</li> <li>* Recognise the concept of motivation and identify various types of motivation.</li> <li>* Identify various reasons to exercise, its associated benefits and strategies to promote exercise adherence.</li> <li>* Differentiate between different types of aggression in sports.</li> <li>* Explain various psychological attributes in sports.</li> </ul>
<p><b>Unit 10</b></p>	<p><b>Training in Sports</b></p> <ol style="list-style-type: none"> <li>1. Concept of Talent Identification and Talent Development in Sports</li> </ol>	<ul style="list-style-type: none"> <li>• Making the students understand the concept of talent identification and methods in sports</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lecture-based instruction,</li> <li>▪ Technology-based learning,</li> <li>▪ Group learning,</li> </ul>	<p><b>After completing the unit, the students will be able to:</b></p> <ul style="list-style-type: none"> <li>* understand the concept of talent identification and methods used for talent development in sports</li> </ul>

	<p>2. Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle.</p> <p>3. Types &amp; Methods to Develop – Strength, Endurance, and Speed.</p> <p>4. Types &amp; Methods to Develop – Flexibility and Coordinative Ability.</p> <p>5. Circuit Training - Introduction &amp; its importance</p>	<ul style="list-style-type: none"> <li>• Making the students Understand sports training and the different cycle in sports training.</li> <li>• Making the students Understand different types &amp; methods of strengths, endurance, and speed.</li> <li>• Making the students Understand different types &amp; methods of flexibility and coordinative ability.</li> <li>• Making the students understand Circuit training and its importance.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Individual learning,</li> <li>▪ Inquiry-based learning,</li> <li>▪ Kinesthetic learning,</li> <li>▪ Game-based learning and</li> <li>▪ Expeditionary learning.</li> </ul>	<ul style="list-style-type: none"> <li>* Understand sports training and the different cycle used in the training process.</li> <li>* Understand different types &amp; methods to develop -strength, endurance, and speed in sports training.</li> <li>* Understand different types &amp; methods to develop – flexibility and coordinative ability.</li> <li>* Understand Circuit training and its importance.</li> </ul>
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**GUIDELINES FOR INTERNAL ASSESSMENT  
(PRACTICAL/ PROJECTS ETC.)**

<b>PRACTICAL</b>	<b>(Max. Marks 30)</b>
Physical Fitness Test: SAI Khelo India Test, Brockport Physical Fitness Test (BPFT)*	6 Marks
Proficiency in Games and Sports (Skill of any one IOA recognized Sport/Game of Choice)**	7 Marks
Yogic Practices	7 Marks

Record File ***	5 Marks
Viva Voce (Health/ Games & Sports/ Yoga)	5 Marks

- \*Test for CWSN (any 4 items out of 27 items. One item from each component: Aerobic Function, Body Composition, Muscular strength & Endurance, Range of Motion or Flexibility)
- \*\*CWSN (Children With Special Needs – Divyang): Bocce/Boccia , Sitting Volleyball, Wheel Chair Basketball, Unified Badminton, Unified Basketball, Unified Football, Blind Cricket, Goalball, Floorball, Wheel Chair Races and Throws, or any other Sport/Game of choice.
- \*\*Children with Special Needs can also opt any one Sport/Game from the list as alternative to Yogic Practices. However, the Sport/Game must be different from Test - 'Proficiency in Games and Sports'

**\*\*\*Record File shall include:**

- **Practical-1:** Fitness tests administration. (SAI Khelo India Test)
- **Practical-2:** Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.
- **Practical-3:** Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also, mention its Rules, Terminologies & Skills.

**PRESCRIBED TEXTBOOKS (CLASS XI & XII)**

CBSE Physical Education Class XI Text Book

[https://cbseacademic.nic.in/web\\_material/Manuals/PhysicalEducation11\\_2022.pdf](https://cbseacademic.nic.in/web_material/Manuals/PhysicalEducation11_2022.pdf)



CBSE Physical Education Class XII Text Book

[https://cbseacademic.nic.in/web\\_material/Manuals/PhysicalEducation12\\_2022.pdf](https://cbseacademic.nic.in/web_material/Manuals/PhysicalEducation12_2022.pdf)



### SUGGESTED READING

- Ajmar Singh et.al. (2016). Essentials of Physical Education. Delhi: Kalyani Publication.
- Chakraborty, S. (2007). Sports Management. Delhi: Prerna Prakashan.
- Kamlesh, M. (2005). Methods in Physical Education. Delhi: Friends Publications
- Shaw, D., & Kaushik, S. (2010). Lesson Planing – Teaching Methods and Management in Physical Education. Delhi: Khel Sahitya Kendra.
- Anspaugh, D., & Ezell, G. (2003). Teaching today's Health. USA: Allyn & Bacon.
- Drinkwater, B. (2000). "Women in Sport" Volume VIII of the Encyclopaedia of Sports Medicine.
- Muller, J. (2007). Health, Exercise and Fitness. New Delhi: Sports Publication.
- Pandey, P., & Gangopathyay, S. (1985). Health Education for School Children. Delhi: Friends Publication.
- Jain R, Puri S, Saini N. Dietary profile of sportswomen participating in team games at State/National level. Indian J Pub Health 2008; 52 (3): 153-155.
- Leutholtz B, Kreider RB. Exercise and Sport Nutrition. Nutritional Health. Humana Press, Inc 2001, 207-39.
- Priti RL, Siddhu A. Mapping RDA for energy for Indian sportswomen. PhD Thesis, Lady Irwin College, 1993.
- Satyanarayan K. Sports nutrition: Put back the pep. Nutrition;1991; April
- Clarke, H. D. (1987). Application of Measurement to Physical Education. Englewood Cliffs, Prentic Hall.
- Kansal, D. (2008). Text Book of Applied Measurement & Evaluation & Sports. New Delhi: Sports & Spiritual Science Publications.
- Morrow, J. R. (2000). Measurement and Evaluation in Human performance. Human Kinetics.
- Rikli, & Jones. (2003). Senior Citizen Fitness Test. The Journal for Active Aging.
- Venkat, R. (2020, 09 20). Kunjarani Devi, the first superstar of Indian weightlifting. Retrieved 11 25, 2020, from Olympic Channel:
- Morris, A. (1984). Sports Medicine, Prevention of Athletic Injuries. Iowa: Wm. C. Brown.

- Bahr, R., Mccrory, P., R.F. La Prade, W. M., & Engebretsen, L. (2012). The IOC manual of sports injuries: an illustrated guide to the management of injuries in physical activity. US: Wiley and Sons.
- Adolfsson, P., & et.al. (2018, 08 22). ISPAD Clinical Practice Consensus Guidelines 2018: Exercise in children and adolescents with diabetes. Retrieved 11 25, 2020, from Wiley Online Library: <https://onlinelibrary.wiley.com/doi/full/10.1111/pedi.12755>
- Dhananjay Shaw (2000), Mechanical Basis of Biomechanics, Sports Publication, Delhi,
- Lutlegen, & Nancy, H. (1997). Kinesiology: Scientific Basis of Human Motion. Mc Graw Hill.
- Thompson, & Floyd. (2017). Manual of Structural Kinesiology. Mc Graw Hill.
- Baron. R.A “Psychology” Pearson Education South Asia, New Delhi, 2008.
- Cox. R.H “Sport Psychology: Concepts and Applications” Mc Graw Hill, New York, USA, 2012.
- Jarvis. M “Sport Psychology” Routledge, New York, USA, 2006.
- Weinberg. R.S, Gould. D “Foundations of Sport and Exercise Psychology” Human Kinetics, Champaign. USA, 2003.
- Barrow, H. M., & McGee, R. (2000). Barrow and McGee’s Practical Measurement and Assessment. Lippincott Williams and Wilkins.
- Bompa, T. O., & Buzzichelli, C. (2019). Periodization Theory and Methodology of Training. Human Kinetics.
- Singh, H. (1991). Science of Sports Training. New Delhi: DVS Publications
- Hardayal Singh, “Sports Training: General Theory & Methods” Netaji Subhas National Institute of Sports, 1984.
- Fit India Fitness Protocols. (n.d.). Retrieved 11 25, 2020, from Ministry of Youth Affairs and Sports: <https://yas.nic.in/fit-india-fitness-protocols>
- National Health Mission. (n.d.). Retrieved 11 25, 2020, from Ministry of Health and Family Welfare: <https://nhm.gov.in/>
- NIN/ICMR. Recommended dietary intakes for Indian sports men and women, 1985 National Institute of Nutrition. Dietary guidelines for Indians – A Manual, 1998
- Administration Manual. (2020, 10). Retrieved 11 25, 2020, from Khelo India: <https://schoolfitness.kheloindia.gov.in/UploadedFiles/SampleData/AdminManual.pdf>
- Fit India Fitness Protocols. (n.d.). Retrieved 11 25, 2020, from Ministry of Youth Affairs and Sports: <https://yas.nic.in/fit-india-fitness-protocols>