

Syllabus

PHYSICAL EDUCATION (Code No. 048)

CLASS–XII (Theory)

Unit No.	Units	No. of Periods	Marks
I	Management of Sporting Events	30	11
II	Children and Women in Sports 12 07	20	10
III	Yoga as Preventive measure for Lifestyle Disease	50	15
IV	Physical Education & Sports for (CWSN)	35	10
V	Sports & Nutrition	10	05
VI	Test and Measurement in Sports	30	06
VII	Physiology & Injuries in Sport	50	15
VIII	Biomechanics and Sports	15	08
IX	Psychology and Sports	12	07
X	Training in Sports	15	19
Practical Lab	Including 3 Practical	56	30
Total	Theory 10 + Practical 3	134 + 56 = 190hrs	Theory 70 + Practical 30 = 100

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

Theory

Max. Marks : 70

Unit No.	Unit Name & Topics	Specific Learning Objectives	Suggested Teaching Learning process	Learning Outcomes with specific competencies
Unit 1	Management of Sporting Events 1. Functions of Sports Events Management (Planning, Organising, Staffing, Directing & Controlling) 2. Various Committees & their Responsibilities (pre; during & post) 3. Fixtures and their Procedures – Knock-Out (Bye & Seeding) & League (Staircase, Cyclic, Tabular method) and Combination tournaments. 4. Intramural & Extramural tournaments – Meaning, Objectives & Its Significance 5. Community sports program (Sports Day, Health Run, Run for Fun, Run for Specific Cause & Run for Unity)	<ul style="list-style-type: none"> To make the students understand the need and meaning of planning in sports, committees, and their responsibilities for conducting the sports event or tournament. To teach them about the different types of tournaments and the detailed procedure of drawing fixtures for Knock Out, League Tournaments, and Combination tournaments. To make the students understand the need for the meaning and significance of intramural and extramural tournaments To teach them about the different types of community sports and their importance in our society. 	<ul style="list-style-type: none"> Lecture-based instruction, Technology-based learning, Group learning, Individual learning, Inquiry-based learning, Kinesthetic learning, Game-based learning and Expeditionary learning. 	After completing the unit, the students will be able to: <ul style="list-style-type: none"> Describe the functions of Sports Event management Classify the committees and their responsibilities in the sports event Differentiate the different types of tournaments. Prepare fixtures of knockout, league & combination. Distinguish between intramural and extramural sports events Design and prepare different types of community

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<p>Unit 2</p>	<p>Children & Women in Sports</p> <ol style="list-style-type: none"> Exercise guidelines of WHO for different age groups. Common postural deformities-knock knees, flat foot, round shoulders, Lordosis, Kyphosis, Scoliosis, and bow legs and their respective corrective measures. Women's participation in Sports – Physical, Psychological, and social benefits. Special consideration (menarche and menstrual dysfunction) Female athlete triad (osteoporosis, amenorrhea, eating disorders). 	<ul style="list-style-type: none"> To make students understand the exercise guidelines of WHO for different age groups To make students aware of the common postural deformities To make students aware of women's sports participation in India and about the special conditions of women. To make students understand menarche and menstrual dysfunction among women athletes. To make them understand about female athlete triad. 	<ul style="list-style-type: none"> Lecture-based instruction, Technology-based learning, Group learning, Individual learning, Inquiry-based learning, Kinesthetic learning, Game-based learning and Expeditionary learning. 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> Differentiate exercise guidelines for different stages of growth and development. Classify common postural deformities and identify corrective measures. Recognize the role and importance of sports participation of women in India. Identify special considerations relate to menarche and menstrual dysfunction. Express female athlete triad according to eating disorders
<p>Unit 3</p>	<p>Yoga as Preventive measure for Lifestyle Disease</p> <ol style="list-style-type: none"> Obesity: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha – Matsyendrasana, Dhanurasana Ushtrasana, Suryabedhan pranayama. Diabetes: Procedure, Benefits & Contraindications for Katichakrasana, Pavanmuktasana, Bhujangasana, Shalabhasana, Dhanurasana, Supta-vajarasana, Paschimottanasana-a, Ardha-Mastendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati. Asthma: Procedure, Benefits & Contraindications for Tadasana, Urdhwahastottansana, Uttan Mandukasan-a, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalabhati, Gomukhasana Matsyaasana, Anuloma-Viloma. 	<ul style="list-style-type: none"> To make students Understand about the main life style disease - Obesity, Hypertension, Diabetes, Back Pain and Asthma. To teach about different Asanas in detail which can help as a preventive Measures for those Lifestyle Diseases. 	<ul style="list-style-type: none"> Lecture-based instruction, Technology-based learning, Group learning, Individual learning, Inquiry-based learning, Kinesthetic learning, Game-based learning and Expeditionary learning 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> Identify the asanas beneficial for different ailments and health problems. Recognize importance of various asanas for preventive measures of obesity, diabetes, asthma, hypertension, back pain and arthritis Describe the procedure for performing a variety of asanas for maximal benefits. Distinguish the contraindications associated with performing different asanas. Outline the role of yogic management for various health benefits and preventive measures.

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	<p>4. Hypertension: Procedure, Benefits & Contraindications for Tadasana, Katichakransan, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasan-a, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi- shodhanapranayam, Sitlipranayam.</p> <p>5. Back Pain and Arthritis: Procedure, Benefits & Contraindications of Tadasan, Urdhawahastootansana, Ardh-Chakrasana, Ushtrasana, Vakrasana, Sarala Maysyendrsana, Bhujandgasana, Gomukhasana, Bhadrasana, Makarasana, Nadi-Shodhana pranayama.</p>			
Unit 4	<p>Physical Education and Sports for CWSN (Children with Special Needs - Divyang)</p> <ol style="list-style-type: none"> 1. Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics) 2. Concept of Classification and Divisioning in Sports. 3. Concept of Inclusion in sports, its need, and Implementation; 4. Advantages of Physical Activities for children with special needs. 5. Strategies to make Physical Activities assessable for children with special needs. 	<ul style="list-style-type: none"> • To make students understand the concept of Disability and Disorder. • To teach students about the types of disabilities & disorders, their causes, and their nature. • To make them aware of Disability Etiquette. • To make the students Understand the advantage of physical activity for CWSN. • To make the students aware of different strategies for making physical activity accessible for Children with Special Needs. 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning. 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • 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>Strategies physical activities accessible for children with special needs</p>

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<p>Unit 5</p>	<p>Sports & Nutrition</p> <ol style="list-style-type: none"> 1. Concept of balanced diet and nutrition 2. Macro and Micro Nutrients: Food sources & functions 3. Nutritive & Non-Nutritive Components of Diet 4. Eating for Weight control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance, and Food Myths 5. Importance of Diet in Sports-Pre, During and Post competition Requirements 	<ul style="list-style-type: none"> • To make the students understand the importance of a balanced diet • To clear the concept of Nutrition – Micro & Macro nutrients, Nutritive & non- Nutritive Components of diet • To make them aware of eating for weight loss and the results of the pitfalls of dieting. • To understand food intolerance & food myths 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning. 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • Understand the concept of a balanced diet and nutrition. Classify Nutritive and Non-Nutritive components of the Diet • Identify the ways to maintain a healthy weight • Know about foods commonly causing food intolerance • Recognize the pitfalls of dieting and food myths
<p>Unit 6</p>	<p>Test & Measurement in Sports</p> <ol style="list-style-type: none"> 1. Fitness Test – SAI Khelo India Fitness Test in school: Age group 5-8 years/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility test, Strength Test (Partial Abdominal Curl Up, Push-Ups for boys, Modified Push-Ups for girls). 2. Measurement of Cardio-Vascular Fitness – Harvard Step Test – Duration of the Exercise in Seconds $\times 100/5.5$ X Pulse count of 1-1.5 Min after Exercise. 3. Computing Basal Metabolic Rate (BMR) 4. Rikli & Jones - Senior Citizen Fitness Test <ul style="list-style-type: none"> • Chair Stand Test for lower body strength • Arm Curl Test for upper body strength • Chair Sit & Reach Test for lower body flexibility • Back Scratch Test for upper body flexibility • Eight Foot Up & Go Test for agility • Six-Minute Walk Test for Aerobic Endurance 5. Johnsen – Methney Test of Motor Educability (Front Roll, Roll, Jumping Half-Turn, Jumping full-turn 	<ul style="list-style-type: none"> • To make students Understand and conduct SAI KHELO INDIA Fitness Test and to make students Understand and conduct General Motor Fitness Test. • To make students to determine physical fitness Index through Harvard Step Test/ Rockport Test • To make students to calculate Basal Metabolic Rate (BMR) • To measure the fitness level of Senior Citizens through Rikli and Jones Senior Citizen Fitness Test. 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning. 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • Perform SAI Khelo India Fitness Test in school [Age group 5-8 years/ (class 1-3) and Age group 9-18yrs/ (class 4-12) • Determine physical fitness Index through Harvard Step Test/Rockport Test • Compute Basal Metabolic Rate (BMR) • Describe the procedure of Rikli and Jones - Senior Citizen Fitness Test

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<p>Unit 7</p>	<p>Physiology & Injuries in Sport</p> <ol style="list-style-type: none"> 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; Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted) 	<p>Understanding the physiological factors determining the</p> <ul style="list-style-type: none"> • Components of physical fitness. • Learning the effects of exercises on the Muscular system. • Learning the effects of exercises on Cardiovascular system. • Learning the effects of exercises on the Respiratory system. • Learning the changes caused due to aging. • Understanding the Sports Injuries (Classification, Causes, and Prevention) • Understanding the Aims & Objectives of First Aid • Understanding the Management of Injuries 	<ul style="list-style-type: none"> • Understanding the physiological factors determining the • Components of physical fitness. • Learning the effects of exercises on the Muscular system. • Learning the effects of exercises on Cardiovascular system. • Learning the effects of exercises on the Respiratory system. • Learning the changes caused due to aging. • Understanding the Sports 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning.
<p>Unit 8</p>	<p>Biomechanics and Sports</p> <ol style="list-style-type: none"> 1. Newton's Law of Motion & its application in sports 2. Types of Levers and their application in Sports. 3. Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports 4. Friction & Sports 5. Projectile in Sports 	<ul style="list-style-type: none"> • Understanding Newton's Laws of Motion and their Application in Sports. • Make students understand the lever and its application in sports. • Make students understand the concept of Equilibrium and its application in sports. • Understanding Friction in Sports. • Understanding the concept of Projectile in sports. 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • Understand Newton's Law of Motion and its application in sports • Recognize the concept of Equilibrium and its application in sports. • Know about the Centre of Gravity and will be able to apply it in sports • Define Friction and application in sports. • Understand the concept of Projectile in sports.

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<p>Unit 9</p>	<p>Psychology and Sports</p> <ol style="list-style-type: none"> 1. Personality; its definition & types (Jung Classification & Big Five Theory) 2. Motivation, its type & techniques. 3. Exercise Adherence: Reasons, Benefits & Strategies for Enhancing it 4. Meaning, Concept & Types of Aggressions in Sports 5. Psychological Attributes in Sports – Self-Esteem, Mental Imagery, Self-Talk, Goal Setting 	<ul style="list-style-type: none"> • To make students understand Personality & its classifications. • To make students understand motivation and its techniques. • To make students about Exercise Adherence and Strategies for enhancing Adherence to Exercise. • To make them aware of Aggression in sports and types. • To make students understand Psychological Attributes in Sports. 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • Classify different types of personality and their relationship with sports performance. • Recognise the concept of motivation and identify various types of motivation. • Identify various reasons to exercise, its associated benefits and strategies to promote exercise adherence. • Differentiate between different types of aggression in sports. • Explain various psychological attributes in sports.
<p>Unit 10</p>	<p>Training in Sports</p> <ol style="list-style-type: none"> 1. Concept of Talent Identification and Talent Development in Sports 2. Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle. 3. Types & Methods to Develop – Strength, Endurance, and Speed. 4. Types & Methods to Develop – Flexibility and Coordinative Ability. 5. Circuit Training - Introduction & its importance 	<ul style="list-style-type: none"> • Making the students understand the concept of talent identification and methods in sports 	<ul style="list-style-type: none"> • Lecture-based instruction, • Technology-based learning, • Group learning, • Individual learning, • Inquiry-based learning, • Kinesthetic learning, • Game-based learning and • Expeditionary learning. 	<p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> • Understand the concept of talent identification and methods used for talent development in sports • Understand sports training and the different cycle used in the training process. • Understand different types & methods to develop -strength, endurance, and speed in sports training. • Understand different types & methods to develop – flexibility and coordinative ability. • Understand Circuit training and its importance.

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GUIDELINES FOR INTERNAL ASSESSMENT (PRACTICAL/ PROJECTS ETC.)

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: Any one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also, mention its Rules, Terminologies & Skills.*

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