

**Scheme of subjects (with Course ID)**

**Scheme of B.Sc. Sports Science**

**(Scheme UG A4: Undergraduate Programmes (Interdisciplinary))**

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Total Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
<b>Core Course(s)</b>														
CC-ID1	<b>Organisation and Administration in Physical Education</b>	<b>240/ SS/CC4ID1</b>	3	-	2	3	-	1	4	25	50	5	20	100
CC-ID2	<b>Theory of Games</b>	<b>240/ SS/CC4ID2</b>	3	-	2	3	-	1	4	25	50	5	20	100
CC-ID3	<b>Sports Medicine</b>	<b>240/ SS/CC4ID3</b>	3		1	3		2	4	25	50	5	20	100
<b>Minor/ Vocational Course(s)</b>														
MIC-	One from the pool		3	-	1	3	-	2	4	25	50	5	20	100
<b>Multidisciplinary Course(s)</b>														
AEC-	One from Pool								2					75
<b>Ability Enhancement Course(s)</b>														
VAC-4	One from Pool								2					50
<b>Total Credits</b>									<b>20</b>					<b>600</b>

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240/SS/CC401

### Semester-4

Name of Subject: <b>Organisation and Administration in Physical Education</b>	<b>Maximum Theory Marks: (25+50)</b>
Subject Code: <b>240/ SS/CC4ID1</b>	<b>Maximum Practical Marks: (5+20)</b>

**Objective:** - To enable students to acquire knowledge, skills, and competencies related to the efficient organization and effective administration of physical education and sports programs. The course aims to develop leadership, planning, and managerial abilities essential for running physical education activities in educational and sports institutions.

**Overall Learning Outcomes:** By the end of this course, students will be able to:

1. Understand the basic principles and practices of organization and administration in physical education.
2. Plan, manage, and supervise sports events and physical education programs effectively.
3. Maintain administrative records and facilities properly.
4. Develop time tables, budgets, and layouts for sports infrastructure.
5. Demonstrate leadership qualities and apply management techniques in educational and sports settings.

#### Course Contents:

<b>UNIT-I(Principles of Organisation and Administration)</b>	
<ul style="list-style-type: none"><li>• Definition, Need, and Importance of Organisation and Administration in Physical Education</li><li>• Principles of Organization: Unity of Command, Span of Control, Flexibility, and Delegation</li><li>• Administrative Structures at School, College, University, and National Levels</li><li>• Role And Qualities of Physical Education Administrators</li><li>• Relationship Between Administration, Supervision, and Leadership</li></ul>	
<b>UNIT-II (Planning and Supervision)</b>	
<ul style="list-style-type: none"><li>• Meaning And Types of Planning: Short-Term, Long-Term, and Strategic Planning</li><li>• Time-Table Preparation for Physical Education Periods and Co-Curricular Activities</li></ul>	

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<ul style="list-style-type: none"> <li>• Supervision: Meaning, Objectives, Types (Direct, Indirect, Democratic), and Techniques</li> <li>• Qualities of an Effective Supervisor in Physical Education</li> </ul>	
<b>UNIT-III (Budget, Records, and Office Management)</b>	
<ul style="list-style-type: none"> <li>• Meaning and Principles of Budgeting in Physical Education</li> <li>• Types of Budgets: Line-Item, Performance, and Program Budgets</li> <li>• Preparation and Maintenance of Essential Records: Attendance, Stock, Progress Reports, Injury Register</li> <li>• Office Management: Filing, Correspondence, and Use of Technology in Administration</li> <li>• Fundraising and Sponsorships for Sports Programs</li> </ul>	
<b>UNIT-IV (Facilities, Equipment, and Event Organization)</b>	
<ul style="list-style-type: none"> <li>• Principles for The Layout and Maintenance of Indoor and Outdoor Sports Facilities</li> <li>• Guidelines for Selection, Purchase, and Maintenance of Equipment and Supplies</li> <li>• Event Management: Planning, Staffing, and Execution of Sports Events</li> <li>• Preparation of Facilities for Tournaments and Mass Demonstrations</li> <li>• Safety Measures and Risk Management in Physical Education Programs</li> </ul>	

**Instruction for Examiners/ Paper Setters:**

The question paper will be divided into two parts: **Part-A and Part-B. Part-A: (Compulsory – 10 Marks) Question 1 shall be compulsory and consist of short-answer type questions (2.5 marks each) from all four units, covering 5 sub-questions in total. Part-B: (60 Marks)** Part-B shall contain **8 long-answer type questions (15 marks each). Two questions must be set from each unit, ensuring representation from all four units.** Students must attempt **one question from each unit (total 4 questions)** in Part-B. **It is mandatory** for examiners to set **two versions** of the question paper: one in **English** and one in **Hindi**.

**SUGGESTED READINGS:**

1. Bucher, C. A., & Krotee, M. L. (2002). *Management of Physical Education and Sport*. McGraw-Hill.
2. Sharma, V. M. (2000). *Organisation and Administration in Physical Education*. Reliance Publishing.
3. Voltmer, E. F., & Esslinger, A. A. (1979). *The Organization and Administration of Physical Education*. Prentice Hall.

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4. Singh, A. (2006). *Organisation and Administration of Physical Education*. Kalyani Publishers.
5. Kamlesh, M. L. (2006). *Management and Administration of Physical Education*. Friends Publications.
6. Yadvender, S. (2010). *Organisation and Administration in Physical Education*. Sports Publications.
7. Dashi, B. N. (2003). *School Organization, Administration and Management*. Neelkamal Publications.

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240/SS/CC402

Name of Subject: <b>Theory of Games</b>	<b>Maximum Theory Marks: (25+50)</b>
Subject Code: <b>240/ SS/CC4ID2</b>	<b>Maximum Practical Marks: (5+20)</b>

**Objective:** - To equip students with the theoretical knowledge and technical understanding of four major team games of India—**Football, Hockey, Volleyball, and Kabaddi**. The course emphasizes the history, rules, skills, tactics, officiating, and strategies of each game while also providing practical learning and performance evaluation through field experience.

**Overall Learning Outcomes:** After completing this course, students will be able to:

1. Understand the historical development, rules, and technical aspects of major Indian team games.
2. Demonstrate knowledge of fundamental skills, advanced techniques, and tactical strategies.
3. Apply rules and officiating methods in competitive situations.
4. Develop lesson plans for teaching and coaching team games.
5. Exhibit practical competency in skill execution and team play through structured activities.

**Course Contents:**

<b>UNIT-I (Foundations of Team Games)</b>	
<ul style="list-style-type: none"> <li>• Meaning and Importance of Team Games in Physical Education</li> <li>• General Classification of Team Games and their Educational Value</li> <li>• Common Terminologies Used Across Team Games</li> <li>• General Principles of Attack and Defence</li> <li>• Leadership and Teamwork in Sports</li> </ul>	
<b>UNIT-II (Football And Hockey)</b>	
<b>Football</b>	
<ul style="list-style-type: none"> <li>• History and Development in India</li> <li>• Fundamental Skills: Kicking, Passing, Trapping, Heading, Dribbling, Shooting</li> <li>• Basic Rules, Systems of Play, and Officiating (With Signals)</li> </ul>	

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<ul style="list-style-type: none"> <li>• Ground Marking and Equipment</li> </ul> <p><b>Hockey</b></p> <ul style="list-style-type: none"> <li>• History and Development in India</li> <li>• Basic Skills: Dribbling, Passing, Hitting, Scooping, Stopping</li> <li>• Rules and their Interpretations, Fouls, and Penalties</li> <li>• Ground Dimensions, Equipment, and Responsibilities of Officials</li> </ul>	
<b>UNIT-III (Volleyball and Kabaddi)</b>	
<p><b>Volleyball</b></p> <ul style="list-style-type: none"> <li>• Evolution and International Status of Volleyball</li> <li>• Basic Skills: Serving, Passing, Setting, Attacking, Blocking, Digging</li> <li>• Rules and Scoring System</li> <li>• Rotation System, Team Positions, and Court Markings</li> </ul> <p><b>Kabaddi</b></p> <ul style="list-style-type: none"> <li>• Origin and Popularity of Kabaddi in Indian Culture</li> <li>• Skills: Raiding, Defending, Dodging, Footwork, Struggle</li> <li>• Rules and Officiating Signals</li> <li>• Types of Kabaddi (Standard Style, Circle Style) and Court Layout</li> </ul>	
<b>UNIT-IV (Game Analysis And Lesson Planning)</b>	
<ul style="list-style-type: none"> <li>• Offensive and Defensive Strategies For Each Team Game</li> <li>• Match Analysis Techniques and Performance Assessment</li> <li>• Coaching Philosophies and Planning Seasonal Training Programs</li> <li>• Lesson Planning and Progression for Skill Development</li> <li>• Selection and Training of Teams for Competition</li> </ul>	
<b>Practical</b>	
<p>Students must demonstrate competency in all of the games. Practical evaluation will include:</p> <p><b>Skill Demonstration</b></p> <p>Execution of Fundamental Skills and Techniques</p> <p>Small-Sided and Full-Game Play Situations</p>	

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<b>Officiating Practice</b>	
Role of Referee/Umpire in Game Situations	
Use of Proper Signals and Rule Enforcement	

**Instruction for Examiners/ Paper Setters:**

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**SUGGESTED READINGS:**

1. Singh, H. (2012). *Science of Sports Training*. Friends Publications.
2. Tirunarayanan, C., & Hariharan, S. (2003). *Methodology of Teaching Physical Education*. South India Press.
3. Balyan, G. (2007). *Encyclopaedia of Rules of Games and Sports*. Sports Publications.
4. Sharma, V. M. (2009). *Teaching and Coaching of Games and Sports*. Khel Sahitya Kendra.
5. Sethi, G., & Bhatia, M. (2011). *Teaching and Coaching of Football, Hockey, Volleyball & Kabaddi*. Sports Publication.
6. Official Rule Books of Football (FIFA), Hockey (FIH), Volleyball (FIVB), and Kabaddi (AKFI).

240/SS/CC403

Name of Subject: <b>Sports Medicine</b>	<b>Maximum Theory Marks: (25+50)</b>
Subject Code: <b>240/ SS/CC4ID1</b>	<b>Maximum Practical Marks: (5+20)</b>

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**Objective:** - To provide students with knowledge of the role of sports medicine in enhancing performance, preventing injuries, and promoting athlete health. The course focuses on injury identification, treatment, rehabilitation, and the application of medical principles in sports settings.

**Overall Learning Outcomes:** Upon successful completion of this course, students will be able to:

1. Understand the scope and importance of sports medicine in physical education and sports.
2. Identify common sports injuries and describe their causes and classifications.
3. Apply appropriate first-aid and injury prevention strategies.
4. Understand rehabilitation methods and medical support systems in sport.
5. Promote safe participation in physical activity through health education and injury management.

**Course Contents:**

<b>UNIT-I(Introduction To Sports Medicine)</b>	
<ul style="list-style-type: none"> <li>• Definition, Scope, and Historical Development of Sports Medicine</li> <li>• Role of Sports Physician, Physical Education Teacher, and Physiotherapist</li> <li>• Classification of Sports Injuries: Acute and Chronic</li> <li>• Causes and Mechanisms of Injuries in Various Sports</li> <li>• Importance of Fitness Screening and Pre-Participation Evaluation</li> </ul>	
<b>UNIT-II (Prevention and Management Of Injuries)</b>	
<ul style="list-style-type: none"> <li>• Principles of Injury Prevention: Warm-Up, Cool-Down, Protective Equipment</li> <li>• Emergency Care And Management: PRICER Principles (Protection, Rest, Ice, Compression, Elevation, sRehabilitation)</li> <li>• Common Injuries: Sprains, Strains, Dislocations, Fractures, Abrasions, and Contusions</li> <li>• Taping and Bandaging Techniques</li> <li>• Role Of Nutrition, Hydration, and Sleep in Injury Prevention</li> </ul>	
<b>UNIT-III(Rehabilitation and Recovery)</b>	
<ul style="list-style-type: none"> <li>• Objectives And Principles of Rehabilitation</li> <li>• Phases of Rehabilitation: Acute, Sub-Acute, and Chronic</li> </ul>	

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<ul style="list-style-type: none"> <li>• Use of Therapeutic Modalities: Cryotherapy, Thermotherapy, Electrotherapy, Ultrasound</li> <li>• Physiotherapy Exercises: Isometric, Isotonic, Isokinetic</li> <li>• Criteria for Return-to-Play and Psychological considerations</li> </ul>	
<b>UNIT-IV (Sports Health and Medical Support Systems)</b>	
<ul style="list-style-type: none"> <li>• Exercise and Cardiovascular Health: Risks and Benefits</li> <li>• Common Medical Conditions in Athletes: Asthma, Diabetes, Anemia, Female Athlete Triad</li> <li>• Doping in Sports: Definition, Types, Consequences, and Anti-Doping Policies (WADA, NADA)</li> <li>• Role Of Medical Check-Ups, Health Cards, and Insurance in Athlete Welfare</li> <li>• Medical Coverage During Training and Competition</li> </ul>	
<b>Practical :</b>	
<ol style="list-style-type: none"> <li>1. <b>First Aid &amp; Emergency Response</b> <ul style="list-style-type: none"> <li>○ Demonstration of CPR and Basic Life Support</li> <li>○ Application of PRICER Principles</li> </ul> </li> <li>2. <b>Injury Identification &amp; Taping</b> <ul style="list-style-type: none"> <li>○ Identification of Anatomical Injury Sites</li> <li>○ Practice of Taping and Bandaging Techniques for Ankle, Wrist, Knee</li> </ul> </li> <li>3. <b>Use Of Therapeutic Modalities</b> <ul style="list-style-type: none"> <li>○ Demonstration of Ice Pack, Hot Pack, TENS Unit, Etc.</li> <li>○ Physiotherapy Drills for Common Sports Injuries</li> </ul> </li> <li>4. <b>Practical Record And Viva</b> <ul style="list-style-type: none"> <li>○ Submission of Injury Case Study or Rehabilitation Report</li> <li>○ Viva Based on Practical Application and Theoretical Knowledge</li> </ul> </li> </ol>	

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### SUGGESTED READINGS:

1. Roy, S. (2008). *Sports Medicine: Functional Fitness and Rehabilitation*. Sports Publications.
2. Christopher, M. N. (2005). *Essentials of Sports Medicine*. Kluwer Academic Publishers.
3. Prentice, W. E. (2011). *Principles of Athletic Training*. McGraw-Hill.
4. Brukner, P., & Khan, K. (2012). *Clinical Sports Medicine*. McGraw-Hill.
5. Singh, A. (2006). *Sports Injuries and Their Management*. Kalyani Publishers.
6. Pandey, P. K. (2007). *Sports Medicine and Physiotherapy*. Friends Publications.
7. WADA (Latest). *World Anti-Doping Code*. [www.wada-ama.org](http://www.wada-ama.org)

