

Gurugram University, Gurugram
M.P.E.S (Master of Physical Education)

SEM – I
CORE Course

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Research Methodology in Physical Education		4			4			4	30	70			100
History & Principals of Physical Education		4			4			4	30	70			100
Sports Nutrition		4			4			4	30	70			100

Sem – I
Discipline Specific Elective Course

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Practical – Athletics & Games				6			3	3			25	50	75

Sem – I
MDC – (Multidisciplinary Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Foundation & Professional Preparation		3			3			3	25	50			75

Sem – I
AEC – (Ability Enhancement Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Athletic Care & Rehabilitation		1		2	1		1	2	5	20	5	20	50

Sem – I
VAC – (Value Added Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Sports Journalism & Tourism		1		2	1		1	2	5	20	5	20	50

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Rakesh Kumar
Faculty of Humanities
Gurugram University Gurugram

Sem – II
CORE Course

CORE Course													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	P I	PE
Anatomy & Physiology		4		0	4		0	4	30	70			100
Kinesiology		3		2	3		1	4	25	50	5	20	100
Principals of Sports Training		3		2	3		1	4	25	50	5	20	100

Sem – II
Discipline Specific Elective Course

Discipline Specific Elective Course													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	P I	PE	Total
Exercise Physiology		2		2	2		1	3	15	35	5	20	75

Sem – II
MDC – (Multidisciplinary Course)

MDC – (Multidisciplinary Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	P I	P E
Sports Sociology		3		0	3		0	3	25	50			75

Sem – II
AEC – (Ability Enhancement Course)

AEC (Ability Enhancement Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Physical Fitness & Wellness		1		2	1		1	2	5	20	5	20	50

Sem – II
SEC – (Skill Enhancement Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	P I	PE
Officiating & Coaching		1		2	1		1	2	5	20	5	20	50

Sem – III
CC – (Core Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Sports Psychology		3		2	3		1	4	25	50	5	20	100
Statistics in Physical Education		3		2	3		1	4	25	50	5	20	100
Sports Medicine		3		2	3		1	4	25	50	5	20	100

Sem – III
DSEC – (Discipline Specific Elective Course)

BSEE (Discipline Specific Elective Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Biomechanics in Sports		2		2	2		1	3	15	35	5	20	75

Sem – III
MDC – (Multidisciplinary Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Physiotherapy		2		2	2		1	3	15	35	5	20	75

Sem – III
SEC – (Skill Enhancement Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Olympic Movement		1		2	1		1	2	5	20	5	20	50

Sem – III
VAC – (Value Added Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Ethics & Laws		2		0	2		0	2	15	35			50

Sem – III
Seminar

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks					
		(Hours)			Credits					TI	TE	PI	PE	Total
Seminar		0		4		0	2	2						50

Sem – IV
CC – (Core Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks					
		(Hours)			Credits					TI	TE	PI	PE	Total
Sports Management		3		2	3		1	4	25	50	5	20	100	
Test Measurement & Evaluation in Phy. Edu.		2		4	2		2	4	15	35	15	35	100	

Sem – IV
DSEC – (Discipline Specific Elective Course) **Choose Any One**

Choose Any One													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	P I	PE
Yoga & Meditation		2		2	2		1	3	15	35	5	20	75
Health Education		2		2	2		1	3	15	35	5	20	75

Sem – IV
MDC – (Multidisciplinary Course)

MDC – (Multidisciplinary Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	P I	PE
Event Management in Sports		2		2	2		1	3	15	35	5	20	75

Sem – IV
AEC – (Ability Enhancement Course)

AEC – (Ability Enhancement Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Gym Management		1		2	1		1	2	5	20	5	20	50

Sem – IV
Community Engagement/Field Work/Survey/Seminar

Community Engagement/Field Work/Survey/Seminar													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	T E	PI	P E
								6					150

SEMESTER – I

CORE Course

CORE Course													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	T E	PI	PE
Research Methodology in Physical Education		4			4			4	30	70	-	-	100
History & Principals of Physical Education		4			4			4	30	70	-	-	100
Sports Nutrition		4			4			4	30	70	-	-	100

Research Methodology in Physical Education

Maximum Marks: 70

Max. Time: 3 hrs

Course Objectives

- The students would be able to know the Meaning, Need and importance of Research in Physical Education and sports.
- The students would be able to know and understand the concept of Research Problem, sampling process
- The students would be able to know and understand the concept of review of related literature and variables
- The students would be able to know the ethics in research and tool for data collection

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (14 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit-I

Introduction: - Meaning and Definition of Research, Need and importance of Research in Physical Education and Sports, Characteristics of Research in Physical Education & Sports; Types of Research - Historical, Descriptive, Experimental, Philosophical; Research Problem, location and criteria of Selection of Problem, Formulation of a Research Problem, Meaning of Limitations and Delimitations.

Unit-II

Concept of Sampling and Hypothesis: - Meaning and Definition of Sample and Population, Types of Sampling: Probability Methods- Systematic Sampling, Cluster sampling, Stratified Sampling, Area Sampling, Multistage Sampling; Non- Probability Methods: Convenience Sample, Judgement Sampling, Quota Sampling. Meaning and definition of Hypothesis, significance of Hypothesis in research, Types of Hypotheses, Type 1 and Type 2 errors in Hypothesis testing.

Unit-III

Review of related literature: - Survey of Related Literature: Need for surveying related literature, Kinds of Related Literature, Literature Sources – Primary and Secondary, steps in Literature Search. Variables: Meaning and Definition of Variables, types of variables: Dependent, Independent, Control, Extraneous, Moderator, Source of variables.

Unit-IV

Ethical Issues and tools in Research: - Ethical Issues in Research: Principles of research ethics. Areas of Scientific Dishonesty, Responsibilities of Researchers. Tools of Research: Observation, Interviews, questionnaires, opinion or attitude scales, Criteria for the selection of research tool, Psychological Tests and Personality Inventories.

Suggested Readings:

1. Best J. W (1971) Research in Education, New Jersey; Prentice Hall.
2. Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall
3. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London; Routledge Press
4. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human Kinetics;
5. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi; Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam
6. Rothstein, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs; Prentice Hall, Inc
7. Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication

History & Principles of Physical Education**Maximum Marks: 70****Max. Time: 3 hrs****Course Objectives**

- Develop an understanding of the historical evolution of Physical Education and Sports.
- Examine the philosophical and educational foundations of Physical Education.
- Understand the biological, psychological, and sociological principles underlying Physical Education.
- Analyze the role of Physical Education in contemporary society and educational systems.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (14 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Historical Development of Physical Education: Meaning, Definition, Scope and Objectives of Physical Education. Historical Development of Physical Education in India: Vedic Period, Epic Period, Buddhist Period, Medieval Period, British Period, Post-Independence Period, Indigenous Physical Activities and Traditional Games of India. Development of Physical Education in Ancient Greece and Rome. German, Swedish and Danish Systems of Physical Education. Historical Development of Physical Education in England and the United States of America.

UNIT-II

Philosophical Foundations and Principles of Physical Education: Meaning, Nature and Importance of Philosophy. Relationship between Philosophy and Physical Education. Major Schools of Philosophy and their Application in Physical Education: Idealism, Naturalism, Realism, Pragmatism, Existentialism, Olympic Philosophy and Olympism. Educational Values of Physical Education.

UNIT-III**Scientific Foundations of Physical Education**

Biological Foundations: Growth and Development in Relation to Physical Activity. Heredity and Environment. Physical Fitness, Wellness and Healthy Lifestyle. Effects of Exercise on Various Body Systems.

Psychological Foundations: Learning and Motor Learning. Motivation and Participation in Physical Activity. Personality Development through Physical Education and Sports. Emotional and Mental Health in Sports.

UNIT-IV

Sociological Foundations and Contemporary Issues in Physical Education: Physical Education as a Social Institution. Socialization through Physical Education and Sports. Leadership, Group Dynamics and Team Building. Sports and National Integration. Gender Equity and Inclusion in Physical Education. Adapted Physical Education and Sports for Persons with Disabilities. Role of National and International Organizations in Physical Education and Sports.

Suggested Readings:

1. Bucher, C.A. – *Foundations of Physical Education and Sport*.
2. Kamlesh, M.L. – *Foundations of Physical Education*.
3. Nixon, J.E. & Jewett, A.E. – *An Introduction to Physical Education*.
4. Williams, J.F. – *Principles of Physical Education*.
5. Singh, Ajmer – *History and Principles of Physical Education*.
6. Sharma, O.P. – *History of Physical Education*.
7. UNESCO Reports on Physical Education and Sport.
8. NEP-2020 and UGC Guidelines on Physical Education.

Sports Nutrition

Maximum Marks: 70

Max. Time: 3 hrs

Course Objectives

- Develop an understanding of the principles of nutrition and their application in sports.
- Analyze the nutritional requirements of athletes during training, competition, and recovery.
- Understand the role of macro and micronutrients in sports performance.
- Evaluate contemporary issues related to sports supplements, ergogenic aids, and hydration strategies.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (14 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Fundamentals of Nutrition and Sports Nutrition: Meaning, Definition, Scope, and Importance of Nutrition. Concepts of Health, Wellness, Balanced Diet, and Nutritional Status. Principles of Sports Nutrition. Digestion, Absorption, Transport, and Metabolism of Nutrients. Energy Requirements in Sports and Physical Activity. Assessment of Nutritional Status of Athletes. Recommended Dietary Allowances (RDA) and Dietary Guidelines for Athletes.

UNIT-II

Macronutrients and Athletic Performance: Carbohydrates: Classification and Functions, Glycemic Index and Glycemic Load, Carbohydrate Loading and Glycogen Replenishment. Proteins: Structure, Classification, and Functions. Protein Requirements for Athletes, Protein Timing and Recovery Nutrition. Fats: Types and Functions, Role of Fat in Endurance Performance, Healthy Fat Intake for Athletes, Energy Balance and Body Composition in Sports.

UNIT-III

Micronutrients, Hydration, and Recovery Nutrition: Vitamins and Their Role in Sports Performance. Minerals and Trace Elements: Iron, Calcium, Magnesium, Zinc, Sodium, Potassium. Hydration and Fluid Balance: Water Requirements, Electrolyte Balance, Dehydration and Over hydration. Sports Drinks and Recovery Beverages. Nutrition Before,

During, and After Competition. Recovery Nutrition and Muscle Repair. Nutrition for Injury Prevention and Rehabilitation.

UNIT-IV

Specialized Sports Nutrition and Contemporary Issues: Nutrition for Different Types of Sports: Endurance Sports, Strength and Power Sports, Team Sports, Combat Sports. Nutrition Across the Lifespan: Children and Adolescent Athletes, Female Athletes, Masters Athletes. Weight Management in Sports: Weight Gain Strategies, Weight Loss Strategies, Eating Disorders in Athletes. Ergogenic Aids and Sports Supplements: Creatine, Caffeine, Protein Supplements, Sports Bars and Energy Gels. Anti-Doping and Nutritional Considerations.. Contemporary Trends in Sports Nutrition. Nutritional Counseling and Meal Planning for Athletes.

Suggested Readings:

1. Burke, L. & Deakin, V. – *Clinical Sports Nutrition*.
2. Maughan, R.J. – *Sports Nutrition: A Practical Guide for the Professional Working with Active People*.
3. Bean, A. – *The Complete Guide to Sports Nutrition*.
4. Jeukendrup, A. & Gleeson, M. – *Sport Nutrition: An Introduction to Energy Production and Performance*.
5. Dunford, M. – *Sports Nutrition: A Practice Manual for Professionals*.
6. Williams, M.H. – *Nutrition for Health, Fitness and Sport*.
7. Potgieter, S. – *Sport Nutrition for Coaches*.
8. International Olympic Committee (IOC) Consensus Statements on Sports Nutrition.

Sem – I

Discipline Specific Elective Course

Discipline Specific Elective Course													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Practical – Athletics & Games				6			3	3			25	50	75
External Examinations-70													

External Examination: 70

Practical: Track Events & Throws

- (i) Teaching ability of different types of Starts
- (ii) (with & without starting blocks) and Finishing techniques
- (iii) Teaching ability of Short Put Techniques (Standing and Parry O'Brien Technique)
- (iv) Teaching ability of Discus Throw Technique
- (v) Teaching ability of Javelin Throw Technique
- (vi) Interpretation of various rules of Throwing Events
- (vii) (Track Events, Short Put, Discus and Javelin throw)
- (viii) Marking of Short Put, Discus and Javelin throw Sector
- (ix) Marking of Track 400m and 200m.

Practical: Game (Your Specialization)

- (i) Marking of Court/Ground
- (ii) Teaching ability of various skills of your game
- (iii) Interpretation of Various rules of your game
- (iv) Filling the score sheet of your game

Note: Candidate have to take at least 5 teaching lessons on various techniques.

Sem – I
MDC – (Multidisciplinary Course)

MDC (Multidisciplinary Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Foundation & Professional Preparation		3			3			3	25	50	-	-	75

Maximum Marks: 50

Max. Time: 2 hrs

Course Objectives:

- Understand the philosophical, biological, psychological, and sociological foundations of Physical Education.
- Analyze the structure and processes of professional preparation in Physical Education.
- Apply effective teaching and field experience practices in educational settings.
- Demonstrate professional ethics, leadership, and research competencies.
- Evaluate emerging trends and challenges in the profession of Physical Education.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit–I

Foundations of Physical Education: Meaning, Definition, Scope, and Importance of Physical Education. Philosophical Foundations of Physical Education. Biological, Psychological, and Sociological Foundations of Physical Education and Sports. Aims, Objectives, and Outcomes of Physical Education in Modern Society. Relationship of Physical Education with General Education, Health Education, Recreation, and Sports.

Unit–II

Professional Preparation in Physical Education: Concept, Need, and Historical Development of Professional Preparation in Physical Education. Professional Competencies and Standards for Physical Education Teachers. Structure of Physical Education Teacher Education Programmes (B.P.Ed. and M.P.Ed.). Curriculum Design, Planning, and Evaluation in Physical Education Teacher Education. Professional Ethics, Values, and Code of Conduct for Physical Education Professionals.

Unit–III

Teacher Education and Field Experiences: Teaching Practice: Concept, Objectives, and Organization. School Internship, Field Work, and Community-Based Programmes. Micro-Teaching, Simulation Teaching, and Reflective Teaching Practices. Observation, Assessment, and Feedback Mechanisms in Teacher Preparation. Use of ICT and Digital Technologies in Physical Education Teacher Education.

Unit–IV

Professional Development and Emerging Trends: Continuing Professional Development (CPD) and Lifelong Learning. Research Orientation and Evidence-Based Practices in Physical Education. Leadership, Management, and Administrative Skills for Physical Education Professionals. National and International Professional Organizations in Physical Education and Sports. Emerging Trends and Challenges in Physical Education: Inclusive Education, Fitness Industry, Sports Technology, and Entrepreneurship.

Book References:

1. **Bucher, Charles A. & Wuest, Deborah A:** *Foundations of Physical Education, Exercise Science and Sport.*
2. **Siedentop, Daryl:** *Introduction to Physical Education, Fitness and Sport.*
3. **Sharman, J.R.:** *Introduction to Physical Education.*

4. **Kamlesh, M.L.:** *Foundations of Physical Education.*
5. **Uppal, A.K.:** *Physical Education and Health Education.*
6. **Nixon, John E. & Jewett, Ann E.:** *An Introduction to Physical Education.*
7. **Voltmer, Edward F. & Esslinger, Arthur A.:** *The Organization and Administration of Physical Education*

Sem – I

AEC – (Ability Enhancement Course)

AEC – (Ability Enhancement Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Athletic Care & Rehabilitation		1		2	1		1	2	5	20	5	20	50

Maximum Marks: 20

Max. Time: 1 hrs

Course Objectives:

- The course aims to provide advanced knowledge of sports injury prevention, athletic care, rehabilitation techniques, and return-to-play protocols for athletes.
- It enables students to understand scientific approaches to injury management and rehabilitation in sports settings.

Note: *There shall be four questions in all. Question no. 1 consisting of five short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (5 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.*

Unit-I

Foundations of Athletic Care and Sports Injuries: Meaning, Scope and Importance of Athletic Care and Rehabilitation. Principles of Athletic Training and Athlete Health Management. Classification of Sports Injuries: Acute, Chronic and Overuse Injuries. Causes, Mechanisms and Risk Factors of Sports Injuries. Prevention of Sports Injuries: Conditioning, Warm-up, Cool-down, Protective Equipment and Injury Surveillance. Emergency Care in Sports: First Aid, CPR, On-field Assessment and Management.

Unit-II

Assessment and Therapeutic Management of Sports Injuries: Clinical Evaluation and Assessment of Sports Injuries. Soft Tissue Injuries: Sprains, Strains, Tendinitis and Bursitis. Bone and Joint Injuries: Fractures, Dislocations and Stress Fractures. Therapeutic Modalities in Rehabilitation: Cryotherapy, Thermotherapy, Hydrotherapy, Ultrasound Therapy, Electrical Stimulation Principles of Therapeutic Exercise: Flexibility Training, Strengthening Exercises, Endurance Training, Proprioceptive and Balance Training. Taping, Bandaging and Bracing Techniques in Sports.

Unit-III

Rehabilitation and Return-to-Play Strategies: Principles and Stages of Sports Rehabilitation. Rehabilitation of Common Sports Injuries: Ankle Injuries, Knee Injuries, Shoulder Injuries, Lower Back Injuries. Functional Rehabilitation and Sport-Specific Conditioning. Psychological Aspects of Injury and Rehabilitation. Return-to-Play Criteria and Decision-Making Process. Role of Sports Medicine Team: Sports Physician, Physiotherapist, Athletic Trainer, Strength and Conditioning Specialist.

Practical Components:

Students shall complete the following practical activities:

- Demonstration of basic first aid for sports injuries.
- Application of PRICE/POLICE protocol.
- Demonstration of stretching and strengthening exercises.

- Basic taping and bandaging techniques.
- Preparation of a rehabilitation programme for a common sports injury.
- Case study on injury prevention and rehabilitation of an athlete.

Suggested Books

1. Athletic Training and Sports Medicine – Robert C. Schenck Jr.
2. Therapeutic Exercise: Foundations and Techniques – Carolyn Kisner & Lynn Allen Colby.
3. Sports Injury Prevention and Rehabilitation – David Joyce & Daniel Lewindon.
4. Clinical Sports Medicine – Peter Brukner & Karim Khan.
5. Essentials of Athletic Injury Management – William E. Prentice.
6. Principles of Athletic Training – William E. Prentice.
7. Sports Medicine – P.K. Banerjee.
8. Sports Medicine and Rehabilitation – V.K. Sharma.

Sem – I

VAC – (Value Added Course)

VAC – (Value Added Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Journalism & Tourism		1		2	1		1	2	5	20	5	20	50

Maximum Marks: 35

Max. Time: 2 hrs

Course Objectives:

- The course is designed to develop knowledge and skills related to sports communication, media reporting, sports event coverage, and sports tourism.
- It aims to familiarize students with modern sports media practices and the growing role of tourism in the sports industry.

Note: There shall be four questions in all. Question no. 1 consisting of five short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (5 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit-I

Foundations of Sports Journalism: Meaning, Nature, Scope and Importance of Sports Journalism. History and Development of Sports Journalism in India and Abroad. Principles and Ethics of Sports Reporting. Role and Responsibilities of Sports Journalists. Sports News Writing: News Reporting, Feature Writing, Match Reports, Interviews and Press Releases. Sports Media: Print Media, Electronic Media, Digital and Social Media Platforms.

Unit-II

Sports Media Management and Event Coverage: Sports Broadcasting and Commentary: Radio Commentary, Television Commentary, Live Streaming and Podcasting. Sports Photography and Videography: Principles and Techniques. Press Conferences, Media Relations and Public Relations in Sports. Sports Marketing and Media Management. Event Reporting and Coverage of National and International Sports Competitions. Use of Information and Communication Technology (ICT) in Sports Journalism.

Unit-III

Sports Tourism: Meaning, Concept, Scope and Importance of Sports Tourism. Types of Sports Tourism: Event Sports Tourism, Active Sports Tourism, Nostalgia Sports Tourism. Sports Tourism Destinations and Infrastructure Development. Planning and Management of Sports Tourism Events. Economic, Social and Cultural Impact of Sports Tourism. Major

International and National Sports Events and Their Tourism Significance: Olympic Games, Asian Games, Commonwealth Games, Cricket World Cup, Major Indian Sporting Events.

Practical Components:

Students shall complete the following practical activities:

- Writing a sports news report.
- Conducting and presenting a mock sports interview.
- Commentary practice for a sports event.
- Preparation of a sports blog or social media campaign.
- Case study of a major sports event and its tourism impact.
- Preparation of a sports tourism promotion plan.

Suggested Books:

1. Sports Journalism: A Practical Introduction – Phil Andrews.
2. Sports Journalism – Raymond Boyle.
3. Writing and Reporting for the Media – John R. Bender et al.
4. Mass Communication in India – Keval J. Kumar.
5. Sports Marketing – Matthew D. Shank & Mark R. Lyberger.
6. Sport Tourism: Principles and Practice – Russell Hoyer, Tom Hinch & Graham Higham.
7. Sport Tourism Development – Tom Hinch & James Higham.
8. Managing Sport Tourism – Mike Weed & Chris Bull.

SEMESTER- II

CORE Course

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Anatomy & Physiology		4			4			4	30	70	-	-	100
Kinesiology		3		2	3		1	4	25	50	5	20	100
Principals of Sports Training		3		2	3		1	4	25	50	5	20	100

Anatomy & Physiology

Maximum Marks: 70

Max. Time: 3 hrs

Course Objectives

- The students would be able to know the skeletal system, cell, tissue, organ, ligament, cartilage, Spinal column, Pelvic Girdle, The extremities, Joints and their movements.
- The students would be able to know the muscular system & digestive system and effects of exercise on both systems.
- The students would be able to know Fatigue, staleness, muscle cramp.
- The students would be able to know about excretory system and effects of exercise on it.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (14 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit-I

Meaning and definition of Anatomy and Physiology, Role of Anatomy and Physiology in physical education & sports Structure, types and Function of the Cell and Tissues, Skeleton system, Classification of bones and Types of Joints

Unit-II

Introduction of Muscular system, Types of muscles in human body, Types of Muscle Contraction and Short and long term Effect of Exercise on Muscular system. Introduction of Digestive system, Role of Digestive system in human body, Structure of Digestive organs, Mechanism of Digestion, Effect of Exercise on Digestive system

Unit-III

Macro & Micro Structure of the Skeletal Muscle, Chemical Composition of Skeletal Muscle, Sliding Filament Theory of Muscular Contraction, Composition of slow and fast twitch muscle fibers, Muscle Tone, Neuro-muscular Junction and transmission of nerve impulse across it.

Unit-IV

Structure and functions of excretory system, meaning of endocrine glands and exocrine glands, structure of the following glands - pituitary glands, thyroid, parathyroid, adrenal glands, Hypothalamus. Effect of Exercise on excretory system and Endocrine System.

Suggested Readings:

1. Amrit Kumar, R. Moses. (1995). Introduction to Exercise Physiology. Madras: PoompugarPathipagam.
2. Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.
3. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
4. David, L. Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
5. Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
6. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
7. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
8. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
9. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
10. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company.

Kinesiology

Theory Examination :50

Max. Time: 2 hrs

COURSE LEARNING OUTCOMES

- The students would be able to know the Meaning, Definition, and Scope & Importance of kinesiology.
- The students would be able to know the concept and Terminology of various types of Movements around Joints.
- The students would be able to know and understand the Structural and functional Classification of Muscles and Postural Defects Injuries
- The students would be able to know and understand the Characteristics and Functions of Shoulder Joint & Shoulder Girdle Muscles and Hip Joint Muscles.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit -1

Introduction:- Meaning, importance and scope of Kinesiology in Physical Education; Meaning of axis and planes; Types of axis and planes; Medical Terminology of Body Positions; Terminologies of different Body movements.

Unit-II

Muscles of various regions :- Functional classification of Skelton Muscles; Origin, Insertion and Actions of Muscles present on back and abdominal region- Latissimus Dorsi, Trapezius, Rhomboid Major, Rhomboid Minor and Rectus Abdominal; Origin, Insertion and Actions of Muscles of Hip region -Gluteus maximus, Gluteus medius and Gluteus minimus Muscles; Origin, Insertion and Action of Muscles present on Neck region- Sternocleidomastoid muscle.

Unit-III

Joints of Upper Extremity:- Shoulder joint – Structure, Ligaments, Muscle reinforcement and Movements; Elbow joint - Structure, Ligaments, Muscle reinforcement and Movements; Origin, Insertion and Actions of Muscles present on upper extremity- Deltoid, Biceps, Triceps and Pectoralis Major.

Unit-IV

Joints of Lower extremity:- Hip Joint - Structure, Ligaments, Muscle reinforcement and Movements; Knee joint – Structure, Ligaments, Muscle reinforcement and Movements; Origin, Insertion and Action of Muscles present on lower extremity- Hamstrings group of Muscles, Quadriceps group of Muscles, Sartorius Muscle, Gastrocnemius Muscle.

Practical Components

Students shall perform and submit practical work on:

- Identification of body planes, axes, and joint movements.
- Measurement of range of motion using a goniometer.
- Identification and palpation of major muscle groups.
- Analysis of gait (walking and running).
- Video-based movement analysis of sports techniques.
- Kinesiological analysis of one fundamental skill and one game-specific skill.
- Preparation of a movement analysis report using qualitative observation.

Suggested Readings:

1. Gowitzke, B.A and Milner, M (1988). Scientific Basis of Human Movement (3rd. ed.) Baltimore: Williams and Wilkins.
2. Groves, R and Camaine, D. (1983). Concepts in Kinesiology. (2nd.ed) Philadelphia: Saunders College Publishing.
3. Hay, J. & Reid, J (1982). The Anatomical and Mechanical Basis of Human Motion. Englewood Cliffs: Prentice Hall

4. Luttegens, Kathryn, Deutsch, Helga, Hamilton, Nancy. Kinesiology- Scientific Basis of Human Motion. 8th.Ed., Brown & Bench mark.

5. Rasch, P. (1989) Kinesiology and Applied Anatomy. Philadelphia: Lea & Febiger. 6. Thompson, C. (1985). Manual of Structural Kinesiology. (10th. ed.) St. Louis: Times Mirror/ Mosby College Publishing.

Principles of Sports Training

Theory Examination: 50

Max. Time: 2 hrs

COURSE LEARNING OUTCOMES

- Students would be able to know the meaning, importance, aim-objectives and principles of sports training.
- Students would be able to know about strength, speed, endurance, coordination, flexibility and training load
- Students would be able to know the technical and tactical training and their methods.
- Students would be able to know the meaning and types of periodization, its aim and content of periods.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit-I

Introduction: - Sports training: Definition, Aim and Characteristics, Principles of Sports Training; Meaning of training Load, Load Intensity, Load Volume, Over Load: Meaning, Causes of Over Load, Symptoms of Overload and Remedial Measures of over load; Characteristics and benefits of Altitude Training

Unit-II

Components of Physical Fitness: -Strength: Meaning of muscular strength, Types of strengths, Method of improving different types of strengths, Speed: Meaning, Types of speed, methods of improving different types of speed; Endurance: Meaning, Types of endurance, Methods to improve different types of Endurance

Unit-III

Flexibility and Coordinative ability: - Meaning of muscular Flexibility, Types of muscular flexibility, Methods to Improve the Flexibility- ballistic stretching, dynamic stretching, active stretching, passive (or relaxed) stretching, static stretching, isometric stretching & PNF stretching. Meaning of Coordinative ability, Methods to improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method.
Special Type Training: Plyometric Training.

Unit-IV

Training Plan:- Meaning of periodisation, Phases of periodisation: Preparatory Phase, Competition Phase and Transition Phase, Types of periodisation: Meaning, Single, Double and Multiple Periodisation; Macro Cycle in Preparatory, Competition and Transition Period; Meso- Cycle in Preparatory, Competition and Transition Period; Training Plan: Short Term Plan and Long Term Plans.

Practical Components

Students shall complete practical assignments related to:

- Preparation of annual and seasonal training plans.
- Designing microcycle and mesocycle training programmes.
- Demonstration of various training methods.
- Fitness assessment and interpretation of results.
- Monitoring training load using heart rate and Rating of Perceived Exertion (RPE).
- Video analysis of sports techniques.
- Case study on training programme design for an individual athlete.
- Preparation of a training logbook.

Suggested Readings:

1. Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
2. Bunn, J.N. (1998) Scientific Principles of Coaching. New Jersey Engle Wood Cliffs, Prentice Hall Inc.
3. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company
4. Daniel, D. Arnheim (1991) Principles of Athletic Training. St. Luis, Mosby Year Book
5. David R. Mottram (1996) Drugs in Sport. School of Pharmacy, Liverpool: John Moore University
6. Gary, T. Moran (1997) - Cross Training for Sports. Canada: Human Kinetics
7. Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications
8. Yograj Thani (2003), Sports Training, Delhi: Sports Publications

Sem – II

Discipline Specific Elective Course

Discipline Specific Elective Course													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Exercise Physiology		2		2	2		1	3	15	35	5	20	75

Exercise Physiology

Theory Examination: 35

Max. Time: 2 hrs

COURSE LEARNING OUTCOMES

- Develop an advanced understanding of physiological responses and adaptations to exercise and sports training.
- Examine the role of body systems in physical performance and athletic achievement.
- Analyze physiological factors influencing health, fitness, and sports performance.
- Apply exercise physiology principles in training, coaching, rehabilitation, and performance enhancement.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Exercise Physiology: Meaning, scope, and importance of Exercise Physiology in Physical Education and Sports. Cellular structure and function related to exercise. Homeostasis and physiological regulation during exercise. Skeletal muscle structure, types of muscle fibers, and mechanism of muscle contraction. Neuromuscular adaptations to exercise and training. Physiological basis of movement and motor unit recruitment.

UNIT-II

Energy Metabolism and Exercise: Bioenergetics and energy transfer in physical activity. ATP production and utilization during exercise. Energy systems: ATP-PC System, Anaerobic Glycolytic System, and Aerobic Oxidative System. Energy expenditure during different types of physical activities and sports. Measurement of energy cost and oxygen consumption. Lactate production, oxygen deficit, oxygen debt.

UNIT-III

Physiological Responses and Adaptations to Exercise: Cardiovascular responses and adaptations to acute and chronic exercise. Respiratory responses and adaptations to exercise training. Endocrine responses to physical activity and training. Thermoregulation during exercise and environmental influences. Fatigue: Types, causes, mechanisms, and recovery processes. Physiological adaptations to strength, endurance, speed, and flexibility training.

UNIT-IV

Exercise Physiology in Sports Performance and Health: Physiological determinants of sports performance. Assessment of aerobic capacity (VO₂ Max), anaerobic power, and muscular fitness. Exercise prescription for health, fitness, and athletic populations. Exercise physiology across age groups and genders. Overtraining, detraining, and recovery strategies. Physiological aspects of sports nutrition, hydration, and ergogenic aids. Application of exercise physiology in coaching, rehabilitation, and performance enhancement.

Practical Components

Students shall perform and submit practical work on:

- Measurement of resting and exercise heart rate.
- Measurement of blood pressure before and after exercise.
- Estimation of VO₂ Max using field tests.
- Harvard Step Test and calculation of Fitness Index.
- Cooper 12-Minute Run/Walk Test.
- Queens College Step Test.
- Grip strength and back strength assessment.
- Sit-and-Reach Test for flexibility.
- Measurement of Body Mass Index (BMI) and body composition.
- Preparation of an exercise prescription based on physiological assessment.

Suggested Book Readings:

1. **McArdle, W.D., Katch, F.I. & Katch, V.L.** (2022). *Exercise Physiology: Nutrition, Energy and Human Performance* (10th Edition). Wolters Kluwer.
2. **Powers, S.K. & Howley, E.T.** (2021). *Exercise Physiology: Theory and Application to Fitness and Performance* (11th Edition). McGraw-Hill Education.
3. **Wilmore, J.H., Costill, D.L. & Kenney, W.L.** (Latest Edition). *Physiology of Sport and Exercise*. Human Kinetics.
4. **Fox, E.L., Bowers, R.W. & Foss, M.L.** (Latest Edition). *The Physiological Basis of Physical Education and Athletics*. Brown & Benchmark.
5. **Astrand, P.O., Rodahl, K., Dahl, H.A. & Stromme, S.B.** (Latest Edition). *Textbook of Work Physiology: Physiological Bases of Exercise*. Human Kinetics.
6. **Kenney, W.L., Wilmore, J.H. & Costill, D.L.** (Latest Edition). *Physiology of Sport and Exercise*. Human Kinetics.
7. **Kansal, D.K.** (Latest Edition). *Applied Physiology of Exercise and Sports*. Sports Publication.
8. **Shaver, L.G.** (Latest Edition). *Essentials of Exercise Physiology*. Surjeet Publications.
9. **Guyton, A.C. & Hall, J.E.** (2021). *Textbook of Medical Physiology* (14th Edition). Elsevier.
10. **Agarwal, A.K.** (Latest Edition). *Exercise Physiology*. Friends Publications.

Sem – II

MDC – (Multidisciplinary Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Sociology		3			3			3	25	50	-	-	75

Sports Sociology

Theory Examination: 50

Max. Time: 2 hrs

COURSE LEARNING OUTCOMES

- Develop an understanding of sociological concepts and their application to sports and physical education.
- Examine the role of sports as a social institution and agent of social change.

- Analyze the influence of culture, socialization, gender, media, and globalization on sports.
- Promote critical understanding of contemporary social issues in sports and physical activity.

Note: *There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.*

UNIT-I

Foundations of Sports Sociology: Meaning, nature, scope, and importance of Sociology and Sports Sociology. Relationship of Sociology with Physical Education and Sports. Basic sociological concepts: Society, Culture, Social Structure, Social Institution, Community, and Group. Sports as a social institution. Functions and values of sports in modern society. Sociological theories and perspectives in sports: Functionalism, Conflict Theory, Symbolic Interactionism, and Critical Theory.

UNIT-II

Socialization and Cultural Dimensions of Sports: Socialization through sports and physical activity. Role of family, school, peer groups, and community in sports participation. Sports and cultural values, norms, traditions, and customs. Social stratification and sports participation. Sports and social mobility. Influence of religion, ethnicity, and cultural diversity on sports.

UNIT-III

Contemporary Social Issues in Sports: Gender and sports: Equity, inclusion, and participation. Sports and women empowerment. Disability, inclusion, and Paralympic sports. Race, caste, ethnicity, and discrimination in sports. Violence, aggression, and deviant behavior in sports. Ethics, fair play, sportsmanship, and social responsibility.

UNIT-IV

Sports, Media, Globalization, and Development: Sports and mass media: Print, electronic, and digital media. Commercialization and professionalization of sports. Globalization and its impact on sports culture. Sports, politics, and national identity. Sports as a tool for peace, development, and social integration. Emerging trends in sports sociology and future challenges.

Suggested Book Readings:

1. **Coakley, J.** (Latest Edition). *Sports in Society: Issues and Controversies*. McGraw-Hill Education.
2. **Jay Coakley & Elizabeth Pike** (Latest Edition). *Sports in Society: Issues and Controversies*. McGraw-Hill.
3. **Houlihan, B.** (Latest Edition). *Sport and Society: A Student Introduction*. Sage Publications.
4. **Jarvie, G.** (Latest Edition). *Sport, Culture and Society: An Introduction*. Routledge.
5. **Maguire, J.** (Latest Edition). *Global Sport: Identities, Societies, Civilizations*. Polity Press.
6. **Cashmore, E.** (Latest Edition). *Sports and Society*. Routledge.
7. **Loy, J.W., McPherson, B.D. & Kenyon, G.S.** (Latest Edition). *Sport and Social Systems*. Addison-Wesley.
8. **Sage, G.H.** (Latest Edition). *Power and Ideology in American Sport*. Human Kinetics.
9. **Singh, A.** (Latest Edition). *Sociology of Physical Education and Sports*. Friends Publications.
10. **Kamlesh, M.L.** (Latest Edition). *Sociological Foundations of Physical Education*. Friends Publications.

Sem – II

AEC – (Ability Enhancement Course)

AEC (Ability Enhancement Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Physical Fitness & Wellness		1		1	1		1	2	5	20	5	20	50

Physical Fitness & Wellness

Theory Examination: 20

Max. Time: 1 hrs

COURSE LEARNING OUTCOMES

- Develop comprehensive knowledge of physical fitness and wellness concepts.
- Understand the scientific principles underlying fitness assessment, exercise prescription, and wellness promotion.
- Analyze the relationship between physical activity, lifestyle, and overall well-being.
- Apply fitness and wellness principles for health enhancement, disease prevention, and sports performance.

Note: There shall be four questions in all. Question no. 1 consisting of five short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (5 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Physical Fitness and Wellness: Concept, meaning, scope, and significance of Physical Fitness and Wellness. Components of Health-Related Fitness: Cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. Components of Skill-Related Fitness: Speed, power, agility, balance, coordination, and reaction time. Dimensions of Wellness: Physical, emotional, social, intellectual, occupational, environmental, and spiritual wellness. Lifestyle factors affecting fitness and wellness. Physical activity guidelines for health and fitness promotion.

UNIT-II

Fitness Assessment and Exercise Prescription: Principles of exercise training and conditioning. Fitness assessment techniques and health screening procedures. Measurement and evaluation of fitness components. Exercise prescription for different age groups and populations. Designing fitness programs for health, fitness, and sports performance. Monitoring exercise intensity and training load. Safety considerations and risk management in fitness programs.

UNIT-III

Wellness Promotion and Contemporary Health Issues: Nutrition and weight management for fitness and wellness. Stress management and mental well-being. Lifestyle diseases and preventive strategies through physical activity. Role of fitness and wellness in enhancing quality of life. Workplace wellness, community wellness, and public health initiatives. Emerging trends in fitness and wellness: Functional fitness, wearable technology, digital health, and wellness coaching. Fitness and wellness programs for special populations.

Practical Components:

Students shall complete practical assignments related to:

- Assessment of BMI, Waist-Hip Ratio, and body composition.
- Administration of:
 - Harvard Step Test
 - Cooper 12-Minute Run Test
 - Sit-and-Reach Test
 - Push-up Test
 - Curl-up Test
- Preparation of individualized fitness programmes using the FITT principle.
- Lifestyle assessment and wellness profiling.
- Demonstration of warm-up, cool-down, stretching, and relaxation exercises.

- Preparation of a weekly wellness plan.

Suggested Book Readings

1. Corbin, C.B., Welk, G.J., Corbin, W.R. & Welk, K.A. (Latest Edition). *Concepts of Fitness and Wellness: A Comprehensive Lifestyle Approach*. McGraw-Hill Education.
2. Hoeger, W.K. & Hoeger, S.A. (Latest Edition). *Fitness and Wellness*. Cengage Learning.
3. Nieman, D.C. (Latest Edition). *Fitness and Sports Medicine*. Bull Publishing.
4. Fahey, T.D., Insel, P.M. & Roth, W.T. (Latest Edition). *Fit and Well: Core Concepts and Labs in Physical Fitness and Wellness*. McGraw-Hill.
5. Heyward, V.H. (Latest Edition). *Advanced Fitness Assessment and Exercise Prescription*. Human Kinetics.
6. ACSM (Latest Edition). *ACSM's Guidelines for Exercise Testing and Prescription*. American College of Sports Medicine.
7. Sharkey, B.J. & Gaskill, S.E. (Latest Edition). *Fitness and Health*. Human Kinetics.
8. Anspaugh, D.J., Hamrick, M.H. & Rosato, F.D. (Latest Edition). *Wellness: Concepts and Applications*. McGraw-Hill.
9. Kansal, D.K. (Latest Edition). *Applied Measurement, Evaluation and Sports Selection*. Sports Publication.
10. Agarwal, A.K. (Latest Edition). *Physical Fitness and Wellness*. Friends Publications.

Sem – II

SEC – (Skill Enhancement Course)

SEC – (Skill Enhancement Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Officiating & Coaching		1		2	1		1	2	5	20	5	20	50

Officiating & Coaching

Theory Examination: 20

Max. Time: 1 hrs

COURSE LEARNING OUTCOMES

- Understand the philosophy, principles, and scientific foundations of coaching and officiating.
- Develop professional competencies required for coaching and officiating in various sports and games.
- Acquire knowledge of sports rules, competition management, and ethical practices.
- Apply modern coaching methods, talent identification, and performance analysis techniques.

FOUR

Note: There shall be ~~5~~ questions in all. Question no. 1 consisting of five short answer type questions (1 mark each) covering the entire syllabus shall be compulsory. Student will have to attempt any three questions (5 marks each) from rest of the questions. All questions shall carry equal marks.

UNIT I

Foundations of Coaching and Sports Officiating

Coaching: Meaning, concept, objectives, and scope of coaching, Philosophy and principles of coaching, Roles and responsibilities of a coach. Qualities and competencies of an effective coach, Leadership styles in coaching

Officiating: Meaning, concept, objectives, and importance of officiating, Duties and responsibilities of referees, umpires, judges, and technical officials, Principles of officiating, Decision-making in sports officiating

Ethics: Sportsmanship and Fair Play, Code of Ethics for coaches and officials, Professional conduct and integrity, Conflict management during competitions

UNIT II

Scientific Coaching and Competition Management

Scientific Coaching: Principles of sports training, Teaching methods and coaching pedagogy, Planning coaching sessions, Annual and seasonal training plans, Warm-up and cool-down, Injury prevention and athlete safety

Competition Management: Organization of competitions, Types of tournaments, Preparation of fixtures, Technical officials and their duties, Scoring systems, Protest and appeal procedures

UNIT III

Modern Trends in Coaching and Officiating

Performance Analysis: Match observation, Technical and tactical analysis, Video analysis, Statistical analysis of performance

Talent Development: Talent identification, Long-Term Athlete Development (LTAD), Athlete monitoring and evaluation

Emerging Trends: Technology in officiating (VAR, Hawk-Eye, Electronic Timing Systems), Wearable technology in coaching, Artificial Intelligence and sports analytics, Continuing professional development for coaches and officials

Practical Components:

Students shall complete practical work related to:

- Demonstration of officiating signals in athletics and selected games.
- Conducting officiating during inter-class or intramural competitions.
- Preparation of fixtures and tournament schedules.
- Preparation of score sheets and result records.
- Planning and conducting coaching sessions.
- Preparation of lesson plans for skill teaching.
- Video analysis of sports performance.
- Organization of a mini sports competition.

Suggested Readings:

1. Martens, R. (2012). *Successful Coaching* (4th ed.). Human Kinetics.
2. Bompa, T. O., & Buzzichelli, C. (2019). *Periodization: Theory and Methodology of Training* (6th ed.). Human Kinetics.
3. Gilbert, W. (2017). *Coaching Better Every Season*. Human Kinetics.
4. Jones, R. L. (Ed.). (2006). *The Sports Coach as Educator: Re-conceptualising Sports Coaching*. Routledge.
5. Weinberg, R. S., & Gould, D. (2023). *Foundations of Sport and Exercise Psychology* (8th ed.). Human Kinetics.
6. Singh, H. (1991). *Science of Sports Training*. DVS Publications.
7. Uppal, A. K. (2016). *Physical Education and Sports*. Friends Publications.
8. Kansal, D. K. (2012). *Test and Measurement in Sports and Physical Education*. DVS Publications.

SEMESTER – III

CC – (Core Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Sports Psychology		3		2	3		1	4	25	50	5	20	100
Statistics in Physical Education		3		2	3		1	4	25	50	5	20	100
Sports Medicine		3		2	3		1	4	25	50	5	20	100

Max Marks: 50

Sports Psychology

Max Time: 02 Hours

Course Objectives

- Develop an understanding of psychological principles related to sports and physical activity.
- Examine the role of psychological factors in sports performance and athlete development.
- Equip students with psychological skills and techniques for performance enhancement.
- Understand counselling, motivation, leadership, and mental health issues in sports settings.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Sports Psychology: Meaning, Nature, Scope, and Importance of Sports Psychology. Historical Development of Sports Psychology at National and International Levels. Psychological Bases of Human Behaviour in Sports and Physical Activity. Individual Differences: Personality, Intelligence, Aptitude, and Attitude. Learning and Motor Skill Acquisition: Theories and Principles. Role of Sports Psychologist in Athlete Development and Performance Enhancement.

UNIT-II

Motivation, Emotion, and Personality in Sports: Motivation: Concept, Types, and Theories of Motivation in Sports. Achievement Motivation and Competitive Orientation. Emotion and Emotional Control in Sports. Stress, Anxiety, Arousal, and Their Effects on Performance. Personality Theories and Assessment of Personality in Athletes. Aggression and Sportsmanship in Competitive Sports.

UNIT-III

Psychological Skills Training and Performance Enhancement: Psychological Skills Training (PST): Concept and Importance. Goal Setting Techniques and Performance Planning. Concentration, Attention, and Focus Control. Mental Imagery and Visualization Techniques. Self-talk, Confidence Building, and Self-Efficacy. Relaxation Techniques: Progressive Muscle Relaxation, Meditation, and Biofeedback.

UNIT-IV

Group Dynamics, Leadership, and Mental Health in Sports: Group Dynamics and Team Cohesion in Sports. Leadership: Theories, Styles, and Applications in Sports. Communication and Interpersonal Relationships in Teams. Psychological Counselling and Athlete Welfare. Burnout, Overtraining Syndrome, and Mental Health Issues in Athletes. Contemporary Issues in Sports Psychology: Exercise Psychology, Positive Psychology, and Athlete Well-being.

Practical Components:

Students shall complete the following practical activities:

- Preparation of a psychological profile of an athlete.
- Goal-setting exercise for sports performance.
- Practice of relaxation techniques (deep breathing and progressive muscle relaxation).
- Guided imagery and visualization sessions.
- Administration and interpretation of a basic motivation or anxiety questionnaire.
- Case study on psychological preparation of an athlete before competition.

Suggested Books for Reading:

1. Foundations of Sport and Exercise Psychology – Weinberg, R. S. & Gould, D.
2. Sport Psychology: Concepts and Applications – Cox, R. H.
3. Applied Sport Psychology: Personal Growth to Peak Performance – Williams, J. M. & Krane, V.
4. Psychology of Coaching – Tutko, T. A. & Richards, J. W.
5. Sport and Exercise Psychology – Anshel, M. H.
6. Introduction to Sports Psychology – Alderman, R. B.
7. Psychology in Sports – Bunker, L. K. & Magill, R. A.
8. Sports Psychology – Singh, A.
9. Educational Psychology – Mangal, S. K.
10. Sports Psychology – Kamlesh, M. L.

Statistics in Physical Education

Max Marks: 50

Max Time: 02 Hours

Course Objectives

- Develop understanding of statistical concepts and their applications in Physical Education, Sports Sciences, and research.
- Enable students to organize, analyse, interpret, and present quantitative data.
- Equip students with skills to apply appropriate statistical techniques in sports research.
- Develop competence in the use of statistical software and interpretation of research findings.

Note: *There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.*

UNIT-I

Introduction to Statistics and Data Organization: Meaning, Nature, Scope, and Importance of Statistics in Physical Education and Sports. Types of Data: Qualitative and Quantitative; Primary and Secondary Data. Variables, Scales of Measurement (Nominal, Ordinal, Interval, Ratio). Collection of Data: Census and Sampling Methods. Classification and Tabulation of Data. Graphical Representation of Data: Bar Diagrams, Histograms, Frequency Polygon, Pie Charts, and Ogives.

UNIT-II

Descriptive Statistics: Measures of Central Tendency: Mean, Median, and Mode. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, and Standard Deviation. Percentiles and Quartiles. Skewness and Kurtosis. Normal Probability Curve and its Characteristics. Standard Scores (Z-Scores and T-Scores) and their Applications in Sports Performance Evaluation.

UNIT-III

Correlation and Inferential Statistics: Concept and Types of Correlation. Calculation and Interpretation of Pearson Product-Moment Correlation. Rank Order Correlation (Spearman's Method). Concept of Probability and Sampling Error. Hypothesis Formulation and Testing. Levels of Significance, Confidence Limits, Type-I and Type-II Errors.

UNIT-IV

Advanced Statistical Techniques and Applications: Parametric and Non-Parametric Statistics. t-Test (Independent and Dependent Samples). Analysis of Variance (One-Way

ANOVA): Concept and Application. Chi-Square Test and its Applications. Introduction to Statistical Software (SPSS, Excel, R) for Data Analysis. Interpretation and Reporting of Statistical Results in Research Reports and Theses.

Practical Components

Students shall complete the following practical activities:

- Preparation of frequency distribution tables.
- Graphical presentation of sports performance data.
- Calculation of: Mean, Median, Mode, Standard Deviation
- Calculation of Rank Order Correlation (Spearman's Method).
- Interpretation of descriptive statistics using sports data.
- Preparation of a statistical report based on fitness test scores.

Suggested Books for Reading:

1. Research Methods in Physical Activity – Thomas, J. R., Nelson, J. K., & Silverman, S. J.
2. Measurement and Evaluation in Physical Education and Exercise Science – Morrow, J. R., Mood, D. P., Disch, J. G., & Kang, M.
3. Statistical Methods – Snedecor, G. W. & Cochran, W. G.
4. Fundamentals of Statistics – Gupta, S. C.
5. Statistics in Psychology and Education – Garrett, H. E.
6. Research Process in Physical Education and Sports Sciences – Clarke, H. H. & Clarke, D. H.
7. Educational and Psychological Statistics – Asthana, B. B.
8. Statistics for Physical Education – Verma, J. P.
9. Introduction to Statistics in Physical Education – Kansal, D. K.
10. Basic Statistics – Sharma, J. P.

Max Marks: 50

Sports Medicine

Max Time: 02 Hours

Course Objectives

- Develop comprehensive knowledge of sports medicine and its role in sports performance and athlete welfare.
- Understand the prevention, assessment, treatment, and rehabilitation of sports injuries.
- Examine the physiological and medical aspects of exercise and sports participation.
- Promote safe participation in sports through scientific training and medical support.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Sports Medicine: Meaning, Definition, Scope, and Importance of Sports Medicine. Historical Development of Sports Medicine at National and International Levels. Multidisciplinary Approach in Sports Medicine. Role and Responsibilities of Sports Physician, Physiotherapist, Athletic Trainer, Coach, and Physical Education Teacher. Medical Examination and Pre-Participation Health Screening. Health Appraisal and Fitness Assessment of Athletes.

UNIT-II

Sports Injuries and Their Prevention: Classification of Sports Injuries: Acute and Chronic Injuries. Causes, Mechanisms, and Risk Factors of Sports Injuries. Common Sports Injuries: Sprains, Strains, Dislocations, Fractures, Muscle Tears, Tendinitis. Soft Tissue Injuries and Overuse Injuries. Principles of Injury Prevention in Sports. Protective Equipment, Warm-up, Cool-down, and Conditioning Programmes.

UNIT-III

Therapeutic Management and Rehabilitation: Immediate Care of Sports Injuries: RICE/PRICE Principles. First Aid Management. Therapeutic Modalities: Cryotherapy, Thermotherapy, Hydrotherapy, Electrotherapy. Principles of Rehabilitation and Return-to-

Play Criteria. Exercise Therapy and Corrective Exercises. Sports Taping and Bracing Techniques. Rehabilitation of Common Sports Injuries.

UNIT-IV

Medical Issues in Sports and Exercise: Exercise and Health: Benefits and Risks. Nutrition and Hydration in Sports Performance. Environmental Factors Affecting Performance: Heat Stress, Cold Exposure, Altitude, Pollution. Doping in Sports: Concept and Classification of Doping Agents, Anti-Doping Regulations. Role of the World Anti-Doping Agency (WADA). Female Athlete Health and Sports Participation. Current Trends and Emerging Issues in Sports Medicine.

Practical Components

Students shall complete the following practical activities:

- Demonstration of first aid for common sports injuries.
- Application of basic bandaging and taping techniques.
- Demonstration of PRICE/POLICE protocol.
- Preparation of a rehabilitation plan for a common sports injury.
- Assessment of hydration status and recovery strategies.
- Case study on prevention and management of a sports injury.
- Preparation of a pre-participation medical screening checklist.

Suggested Books for Reading:

1. Clinical Sports Medicine – Brukner, P. & Khan, K.
2. Sports Medicine – Peterson, L. & Renström, P.
3. Essentials of Athletic Injury Management – Prentice, W. E.
4. Therapeutic Exercise for Musculoskeletal Injuries – Houglum, P. A.
5. Introduction to Sports Medicine and Athletic Training – Anderson, M. K. & Hall, S. J.
6. Sports Injuries: Prevention, Diagnosis, Treatment and Rehabilitation – Bahr, R. & Maehlum, S.
7. Sports Medicine – Kansal, D. K.
8. Sports Medicine – Singh, A.
9. Sports Medicine and Rehabilitation – Micheli, L. J.
10. Sports First Aid and Injury Prevention – Maughan, R. J. & Burke, L. M.

Sem – III

DSEC – (Discipline Specific Elective Course)

DSEC – (Discipline Specific Elective Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Biomechanics in Sports		2		2	2		1	3	15	35	5	20	75

Biomechanics in Sports

Max Marks: 35

Max Time: 02 Hours

Course Objectives

- Develop an understanding of biomechanical principles and their application in sports and physical activities.
- Analyze human movement using mechanical and anatomical concepts.
- Apply biomechanical principles for performance enhancement and injury prevention.
- Utilize modern biomechanical techniques and technologies in sports analysis.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Biomechanics: Meaning, Definition, Nature, Scope, and Importance of Biomechanics in Sports. Historical Development of Sports Biomechanics. Relationship of Biomechanics with Anatomy, Kinesiology, Physics, and Sports Sciences. Fundamental Concepts: Motion and Types of Motion, Force and Its Characteristics. Mass, Weight, and

Inertia. Work, Power, and Energy. Newton's Laws of Motion and Their Applications in Sports. Mechanical Principles Governing Human Movement.

UNIT-II

Kinematics and Kinetics of Human Movement: Linear Kinematics: Distance and Displacement, Speed and Velocity. Acceleration. Angular Kinematics: Angular Displacement, Angular Velocity, Angular Acceleration. Projectile Motion and Its Application in Sports. Kinetics: Internal and External Forces. Friction and Its Effects on Performance, Torque and Levers. Equilibrium and Stability in Sports Activities. Center of Gravity and Its Applications in Athletic Performance.

UNIT-III

Biomechanical Analysis of Sports Skills: Methods of Biomechanical Analysis. Qualitative and Quantitative Analysis of Human Movement. Biomechanical Analysis of Fundamental Movements: Walking, Running, Jumping, Throwing. Biomechanical Principles in Individual and Team Sports. Factors Affecting Sports Technique and Performance. Biomechanics and Skill Acquisition.

UNIT-IV

Applied Sports Biomechanics and Technology: Biomechanics and Sports Injury Prevention. Ergonomics and Sports Equipment Design. Mechanical Efficiency and Performance Optimization. Technology in Sports Biomechanics: Motion Analysis Systems, Force Platforms, Electromyography (EMG), Wearable Sensors Computer Applications in Biomechanical Analysis. Recent Trends and Research in Sports Biomechanics.

Practical Components:

Students shall complete the following practical activities:

- Identification of body planes and axes of movement.
- Demonstration of different classes of levers in the human body.
- Qualitative analysis of running and jumping techniques.
- Video analysis of one selected sports skill.
- Observation and analysis of balance and stability during sports movements.
- Preparation of a biomechanical report on a selected athletic or game skill.

Suggested Books for Reading:

1. Biomechanics of Sport and Exercise – McGinnis, P. M.
2. Biomechanical Basis of Human Movement – Hamill, J., Knutzen, K. M., & Derrick, T. R.
3. Fundamentals of Biomechanics – Knudson, D.
4. Scientific Principles of Coaching – Hay, J. G. & Reid, J. G.
5. Mechanical Basis of Human Motion – Rasch, P. J. & Burke, R. K.
6. Research Methods in Biomechanics – Robertson, D. G. E., Caldwell, G. E., Hamill, J., Kamen, G., & Whittlesey, S. N.
7. Kinesiology and Applied Anatomy – Rasch, P. J.
8. Sports Biomechanics – Knudson, D. & Morrison, C.
9. Biomechanics and Kinesiology – Kansal, D. K.
10. Biomechanics in Physical Education and Sports – Uppal, A. K.

Sem – III

MDC – (Multidisciplinary Course)

MDC (Multidisciplinary Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Physiotherapy		2		2	2		1	3	15	35	5	20	75

Sports Physiotherapy

Maximum Marks: 35
Course Objectives

Max. Time: 02 hrs

- Develop an understanding of the principles and scope of sports physiotherapy in athletic performance and rehabilitation.
- Equip students with knowledge of sports injuries, assessment techniques, and therapeutic interventions.
- Familiarize students with rehabilitation protocols and return-to-play criteria.
- Enable students to apply physiotherapeutic techniques for injury prevention, treatment, and performance enhancement.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Foundations of Sports Physiotherapy: Meaning, scope, objectives, and importance of sports physiotherapy. Role of sports physiotherapist in sports medicine and athlete care. Functional anatomy and biomechanics related to sports injuries. Principles of injury prevention and management. Sports injury epidemiology and risk factors. Ethical and professional issues in sports physiotherapy.

Unit II

Sports Injury Assessment and Therapeutic Modalities: Subjective and objective assessment of sports injuries. Clinical examination and functional movement assessment. Assessment of joint stability, flexibility, muscle strength, and posture. Documentation and injury reporting.

Therapeutic Modalities: Cryotherapy and thermotherapy. Ultrasound therapy. Electrical stimulation (TENS, EMS, IFT). Laser therapy and hydrotherapy. Taping and strapping techniques. Massage therapy in sports.

Unit III

Rehabilitation of Sports Injuries: Stages of rehabilitation. Tissue healing and recovery process. Exercise therapy and therapeutic exercises. Flexibility, strengthening, balance, and proprioceptive training.

Rehabilitation of Common Sports Injuries: Shoulder injuries. Elbow and wrist injuries. Knee injuries (ACL, MCL, meniscus). Ankle sprains and Achilles tendon injuries. Muscle strains and ligament injuries. Low back pain and spinal injuries in athletes.

Unit IV

Advanced Sports Physiotherapy and Performance Enhancement

Return-to-Play and Injury Prevention: Return-to-play criteria and decision-making. Functional testing and performance assessment. Injury surveillance and prevention programmes.

Performance Enhancement: Physiotherapy for athletic performance optimization. Corrective exercises and movement screening. Recovery strategies in sports. Sports-specific conditioning and injury prevention protocols.

Practical Components

Students shall complete the following practical activities:

- Demonstration of ROM assessment.
- Stretching and strengthening exercise protocols.
- Application of cryotherapy and thermotherapy.
- Demonstration of balance and proprioceptive training.
- Basic taping and strapping techniques.
- Preparation of a rehabilitation programme for a selected sports injury.
- Case study on physiotherapy management of an injured athlete.

Suggested Books for Reading:

1. Sports Physiotherapy: Applied Science and Practice – Y. Paul Singh.
2. Clinical Sports Medicine – Peter Brukner & Karim Khan.
3. Sports Injury Prevention and Rehabilitation – David Joyce & Daniel Lewindon.
4. Therapeutic Exercise: Foundations and Techniques – Carolyn Kisner & Lynn Allen Colby.

5. Orthopaedic Physical Assessment – David J. Magee.
6. Essentials of Sports Medicine – Gregory L. Wells.
7. Sports Injuries: Prevention, Diagnosis, Treatment and Rehabilitation – Lars Peterson & Per Renström.
8. Tidy's Physiotherapy – Stuart Porter.

Sem – III

SEC – (Skill Enhancement Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Olympic Movement		1		2	1		1	2	5	20	5	20	50

Olympic Movement

Theory Examination: 20

Max. Time: 2 hrs

COURSE LEARNING OUTCOMES

- Develop an understanding of the origin, philosophy, principles, and evolution of the Olympic Movement.
- Familiarize students with the governance, organization, and functioning of the Olympic Movement at international and national levels.
- Promote Olympic values, ethics, fair play, gender equality, sustainability, and cultural diversity through sports.
- Develop practical competencies in Olympic education, event organization, and the promotion of Olympism.

Note: There shall be ~~six~~ ^{FOUR} questions in all. Question no. 1 consisting of five short answer type questions (1 mark each) covering the entire syllabus shall be compulsory. Student will have to attempt any three questions (5 marks each) from rest of the questions. All questions shall carry equal marks.

UNIT I

History, Philosophy, and Evolution of the Olympic Movement

Ancient Olympic Games: Origin and historical development, Religious, cultural, and educational significance, Events, rules, and organization, Decline of the Ancient Olympic Games

Modern Olympic Movement: Revival of the Modern Olympic Games, Vision and contributions of **Baron Pierre de Coubertin**, Olympic Motto, Olympic Creed, Olympic Oath, Olympic Symbol, Olympic Flag, Olympic Flame, and Olympic Mascot, Olympic Values: Excellence, Friendship, and Respect

Olympic Education: Concept and objectives of Olympic Education, Fair Play and Sportsmanship, Olympic ethics and moral values, Olympic Day celebrations, Role of sports in peace, education, and international understanding

UNIT II

Governance and Organization of the Olympic Movement

Olympic Governance: Structure and functions of the **International Olympic Committee (IOC)**, National Olympic Committees (NOCs), International Sports Federations (IFs), Olympic Games.

Indian Olympic Association (IOA): objectives and functions, Outstanding Indian Olympic athletes and their achievements, Government initiatives for Olympic excellence (e.g., TOPS, Khelo India)

UNIT III

Contemporary Issues and Future of the Olympic Movement

Ethics and Governance: Olympic Charter, Good governance in sports, Anti-doping policies, Athlete rights and responsibilities, Gender equality and inclusion

Future Challenges: Commercialization of sports, Political influence and boycotts, Integrity and corruption in sports, Future of the Olympic Movement

Practical Components:

Students shall complete the following practical activities:

- Preparation of a timeline of the Modern Olympic Games.
- Seminar on Olympic values and ethics.
- Presentation on an Indian Olympic medallist.
- Case study on the organization of a recent Olympic Games.
- Quiz on Olympic symbols, motto, and major events.
- Preparation of a report on India's Olympic performance.
- Celebration of **Olympic Day** activities in the institution.

Suggested Readings

1. Chatziefstathiou, D. (2012). *Olympic Education and International Olympic Academy: Past, Present and Future*. Cambridge Scholars Publishing.
2. Findling, J. E., & Pelle, K. D. (Eds.). (2004). *Encyclopedia of the Modern Olympic Movement*. Greenwood Press.
3. Toohey, K., & Veal, A. J. (2007). *The Olympic Games: A Social Science Perspective* (2nd ed.). CABI.
4. Lyras, A., & Welty Peachey, J. (2011). *Sport for Development and Peace: Olympic Perspectives*. International Olympic Academy.
5. Kidd, B. (2013). *The Struggle for Canadian Sport* (selected chapters on Olympism and Olympic values). University of Toronto Press.
6. Müller, N. (Ed.). (2000). *Pierre de Coubertin 1863–1937: Olympism – Selected Writings*. International Olympic Committee.
7. Lenskyj, H. J. (2012). *Olympic Industry Resistance: Challenging Olympic Power and Propaganda*. SUNY Press.
8. Payne, M. (2006). *Olympic Turnaround*. Praeger Publishers.
9. Majumdar, B., & Mehta, N. (Eds.). (2010). *India and the Olympics*. Routledge India.
10. Ghosh, A. K. (2018). *Olympic Movement and Sports Administration*. Khel Sahitya Kendra.

Official References

- **International Olympic Committee (IOC)**. *Olympic Charter* (Latest Edition).
- **International Olympic Committee (IOC)**. *Olympic Agenda 2020+5*.
- **International Olympic Academy (IOA)**. Publications on Olympic Education.
- **Indian Olympic Association (IOA)**. Annual Reports and Official Publications.
- **World Anti-Doping Agency (WADA)**. *World Anti-Doping Code*.

SEM - III VAC – (Value Added Course)									Marks				
Course Title	Course ID	L	T	P	L	T	P	Total Credit	TI	T E	PI	P E	Total
		(Hours)			Credits								
Sports Ethics & Laws		2			2			2	15	35	-	-	50

Sports Ethics & Laws

Max Time: 02 Hours

Max Marks: 35

Course Objectives

- Develop an understanding of ethical principles and legal frameworks governing sports and physical education.
- Examine moral issues, professional responsibilities, and fair play in sports.
- Familiarize students with sports laws, governance structures, and dispute resolution mechanisms.
- Promote ethical conduct, integrity, and legal awareness among sports professionals.

Note: *There shall be four questions in all. Question no. 1 consisting of seven short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.*

UNIT-I

Foundations of Sports Ethics: Meaning, Nature, Scope, and Importance of Ethics in Sports. Philosophical Foundations of Ethics: Moral Values, Virtues, and Ethical Decision-Making. Fair Play, Sportsmanship, Integrity, and Respect in Sports. Ethical Issues in Sports: Cheating and Gamesmanship, Violence and Aggression, Match Fixing and Corruption, Gender Equity and Inclusion. Professional Ethics for Coaches, Physical Education Teachers, Sports Administrators, and Athletes. Olympic Values and Ethical Principles in Sports.

UNIT-II

Sports Law and Governance: Introduction to Sports Law: Meaning, Scope, and Sources. Legal Structure of Sports Organizations and Governing Bodies. National and International Sports Governance Systems. Rights and Responsibilities of Athletes, Coaches, Officials, and Sports Organizations. Contracts in Sports: Athlete Contracts, Sponsorship Agreements, Endorsement Contracts. Legal Issues in Sports: Negligence and Liability, Risk Management, Child Protection and Safeguarding in Sports

UNIT-III

Contemporary Issues and Dispute Resolution in Sports: Doping and Anti-Doping Regulations. Role of the World Anti-Doping Agency (WADA) and National Anti-Doping Frameworks. Intellectual Property Rights in Sports: Copyright, Trademark, Broadcasting Rights. Athlete Welfare, Human Rights, and Safe Sport Policies. Sports Dispute Resolution: Arbitration, Mediation, Sports Tribunals. Emerging Ethical and Legal Issues: Technology and Artificial Intelligence in Sports, Data Privacy, E-Sports and Digital Sports Governance

Suggested Books for Reading:

1. Sports Ethics: Applications for Fair Play – Mike McNamee & Jim Parry.
2. Ethics in Sport – William J. Morgan, Klaus V. Meier & Angela J. Schneider.
3. Sports Law – Simon Gardiner, Mark James, Roger Welch, Ian Blackshaw, et al.
4. Principles of Sports Law – Mark James.
5. International Sports Law – Ian Blackshaw.
6. Sport Governance – Russell Hoyer & Graham Cuskelly.
7. Managing Sport Organizations – Trevor Slack & Milena Parent.
8. Ethics and Fair Play in Sport – Angela Lumpkin, Sharon Stoll & Jennifer Beller.
9. Legal Aspects of Sports – James A. R. Nafziger.
10. Sports Management and Law – A. Mukherjee.

Sem – III
Seminar

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
eminar		0		4			0	2					50

SEMESTER – IV

CC – (Core Course)

CC – (Core Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Sports Management		3		2	3		1	4	25	50	5	20	100
Test Measurement & Evaluation in Phy. Edu.		2		4	2		2	4	15	35	15	35	100

Maximum Marks: 50

Sports Management

Max. Time: 02 hrs

Course Objectives

- Develop an understanding of the principles and practices of sports management.
- Equip students with managerial skills required for planning, organizing, and administering sports programs and institutions.
- Familiarize students with sports event management, marketing, and financial management.
- Prepare students for leadership roles in sports organizations, educational institutions, and fitness industries.

Note: There shall be nine questions in all. Question no. 1 consisting of five short answer type questions (2 marks each) covering the entire syllabus shall be compulsory. Two questions (10 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Foundations of Sports Management: Meaning, concept, scope, and significance of Sports Management. Evolution and development of sports management. Principles and functions of management. Leadership theories and leadership styles in sports organizations. Decision-making and communication in sports management. Organizational structure of sports institutions and agencies.

Unit II

Organization and Administration of Sports Programmes: Planning, organizing, staffing, directing, coordinating, and controlling sports programmes. Management of sports facilities and equipment. Human resource management in sports organizations. Risk management and safety measures in sports. Sports policies and governance. Roles and responsibilities of sports administrators.

Unit III

Sports Event and Financial Management: Planning and organization of tournaments, championships, leagues, and sports festivals. Event scheduling and logistics management. Protocols, ceremonies, and event operations. Volunteer management and stakeholder coordination.

Financial Management in Sports: Budget preparation and financial planning. Sources of finance in sports organizations. Sponsorship, fundraising, and grants. Accounting and financial control in sports programmes.

Unit IV

Sports Marketing, Entrepreneurship, and Contemporary Issues: Concepts and principles of sports marketing. Sponsorship and endorsement in sports. Branding and promotion of sports events and organizations. Media relations and digital marketing in sports.

Sports Entrepreneurship and Emerging Trends: Entrepreneurship opportunities in sports and fitness industries. Sports tourism and recreation management. Professional sports management and sports business. Contemporary issues in sports management: Ethics, governance, technology, sustainability, and globalization.

Practical Components

Students shall complete the following practical activities:

- Preparation of a proposal for organizing a sports event.

- Preparation of a sports event budget.
- Design of tournament fixtures and schedules.
- Inventory management of sports equipment.
- Preparation of sponsorship proposals and promotional materials.
- Case study on the management of a national or international sports event.
- Preparation of an event evaluation report.

Suggested Books for Reading:

1. Sport Management Principles and Applications – Russell Hoye, Aaron Smith, Matthew Nicholson & Bob Stewart.
2. Contemporary Sport Management – Paul M. Pedersen & Lucie Thibault.
3. Managing Sport Organizations – Trevor Slack & Joe Parent.
4. Sport Marketing – Bernard J. Mullin, Stephen Hardy & William A. Sutton.
5. Foundations of Sport and Exercise Psychology – Robert S. Weinberg & Daniel Gould (Leadership and management aspects).
6. Administration of Physical Education and Sports Programmes – S.S. Puri & V.K. Sharma.
7. Management Concepts and Organizational Behaviour – P. Subba Rao.

Test Measurement & Evaluation in Physical Education

Maximum Marks: 35

Max. Time: 02 hrs

Course Objectives

- To understand the principles of test construction and evaluation.
- To acquire practical knowledge of administering standardized fitness and sports skill tests.
- To develop competency in scoring, interpretation, and application of test results.
- To use evaluation techniques for performance enhancement and talent identification.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Foundations of Test, Measurement and Evaluation: Meaning, concept, need, and importance of Test, Measurement, and Evaluation. Relationship among testing, measurement, and evaluation. Principles and purposes of evaluation in Physical Education and Sports. Criteria of a good test: Validity, Reliability, Objectivity, and Norms. Establishing validity and reliability. Classification of tests and measurements. Ethical considerations in testing and evaluation. Steps in test construction. Grading scales and performance standards.

Unit II

Physical Fitness and Health-Related Fitness Tests: Harvard Step Test, Cooper 12-Minute Run-Walk Test, Queens College Step Test, AAHPER Youth Fitness Test, Kraus-Weber Test, Body Mass Index (BMI), Waist-Hip Ratio, Skinfold Measurements.

Unit III

Motor Fitness and Motor Ability Tests: Barrow Motor Ability Test, Indiana Motor Fitness Test, McCloy General Motor Ability Test, AAPHERD Motor Fitness Test. Agility Tests: Shuttle Run Test, Illinois Agility Test, Zig-Zag Run Test. Balance and Coordination Tests: Stork Stand Test, Bass Balance Test

Unit IV

Sports Skill Tests for Individual and Team Games

Basketball Skill Tests: Johnson Basketball Test, AAHPER Basketball Skill Test, Basketball Shooting Test, Dribbling and Passing Accuracy Tests

Volleyball Skill Tests: Brady Volleyball Test, Russell-Lange Volleyball Test, Service and Passing Tests

Football (Soccer) Skill Tests: McDonald Soccer Test, Mor-Christian Soccer Test, Dribbling and Kicking Accuracy Tests

Hockey Skill Tests: Field Hockey Skill Tests, Dribbling and Hit Accuracy Tests

Badminton and Tennis Skill Tests: French Short Serve Test, Hewitt Tennis Achievement Test.

Practical Components:

Students shall complete the following practical activities:

- Administration and scoring of the Harvard Step Test.
- Conducting the Cooper 12-Minute Run Test.
- Administration of the Sit-and-Reach Test.
- Measurement of BMI and Waist-Hip Ratio.
- Administration of Barrow Motor Ability Test.
- Conducting Johnson Basketball Skill Test.
- Administration of Brady Volleyball Skill Test.
- Preparation of a fitness profile for an athlete.
- Interpretation of test scores and preparation of an evaluation report.

Suggested Books for Reading:

1. Tests and Measurement in Sports and Physical Education – P.K. Kansal.
2. Measurement and Evaluation in Physical Education and Exercise Science – James R. Morrow Jr. et al.
3. Measurement Concepts in Physical Education and Exercise Science – Baumgartner & Jackson.
4. Research Methods in Physical Activity – Thomas, Nelson & Silverman.
5. Educational Measurement and Evaluation – J.C. Aggarwal.
6. Physical Fitness Tests and Measurements – Vivian H. Heyward.

Sem – IV

DSEC – (Discipline Specific Elective Course) **Choose Any One**

DSEC – (Discipline Specific Elective Course) Choose Any One													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Yoga & Meditation		2		2	2		1	3	15	35	5	20	75
Health Education		2		2	2		1	3	15	35	5	20	75

Yoga & Meditation

Max Marks: 35

Max Time: 02 Hours

Course Objectives

- Develop a comprehensive understanding of the philosophy, principles, and practices of Yoga and Meditation.
- Explore the role of Yoga in physical, mental, emotional, and spiritual well-being.
- Apply Yogic practices for health promotion, stress management, and sports performance enhancement.
- Understand the scientific and therapeutic applications of Yoga and Meditation in contemporary society.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

UNIT-I

Foundations of Yoga: Meaning, Definition, Nature, Scope, and Importance of Yoga. Historical Development and Evolution of Yoga. Philosophy of Yoga: Yoga in the Vedas and Upanishads, Yogic Concepts in Indian Philosophy. Types and Schools of Yoga: Raja Yoga, Hatha Yoga, Karma Yoga, Bhakti Yoga, Jnana Yoga. Ashtanga Yoga of Patanjali. Yoga as a Lifestyle and Its Relevance in Modern Society.

UNIT-II

Yogic Practices and Techniques: Principles and Guidelines for Yogic Practices. Yogic Kriyas: Neti, Dhauti, Nauli, Kapalabhati, Trataka. Asanas: Standing Asanas, Sitting Asanas, Forward and Backward Bending Asanas, Twisting Asanas, Balancing Asanas. Pranayama:

Anulom-Vilom, Bhastrika, Ujjayi, Bhramari, Sheetali and Sheetkari. Surya Namaskar and Its Benefits. Relaxation Techniques: Shavasana, Yoga Nidra

UNIT-III

Meditation and Applied Yoga: Meaning, Concept, and Types of Meditation. Stages of Meditation: Dharana, Dhyana, Samadhi. Methods of Meditation: Mindfulness Meditation, Mantra Meditation, Transcendental Meditation, Vipassana Meditation. Yoga for Stress Management and Mental Health. Yoga and Sports Performance Enhancement. Psychological Benefits of Yoga and Meditation.

UNIT-IV

Therapeutic Yoga and Research Perspectives: Therapeutic Applications of Yoga. Yoga for Lifestyle Disorders: Obesity, Hypertension, Diabetes, Cardiovascular Disorders. Yoga for Musculoskeletal Health and Injury Prevention. Yoga in Physical Education and Sports Training. Scientific Basis of Yoga and Contemporary Research. Emerging Trends and Innovations in Yoga and Meditation.

Practical Components

Students shall complete the following practical activities:

- Demonstration of selected Asanas with proper technique.
- Practice and teaching of Pranayama techniques.
- Guided meditation sessions.
- Yoga Nidra and relaxation practices.
- Preparation of a 30-minute Yoga session for athletes.
- Assessment of flexibility before and after Yoga practice.
- Preparation of a practical record with illustrations and benefits of selected Yogic practices.

Suggested Books for Reading:

1. Light on Yoga – B. K. S. Iyengar
2. The Heart of Yoga – T. K. V. Desikachar
3. Hatha Yoga Pradipika – Bihar School of Yoga.
4. Asana Pranayama Mudra Bandha – Swami Satyananda Saraswati
5. The Science of Yoga – William J. Broad
6. Yoga Education – A.G. Mohan & Indra Mohan.
7. Yoga for Health and Physical Education – A. K. Uppal & G. P. Gautam.
8. Essentials of Yoga – Swami Sivananda
9. Yoga and Sports Performance – D. K. Kansal.
10. Patanjali Yoga Sutras – Swami Vivekananda

Health Education

Maximum Marks: 35

Max. Time: 2 hrs

Course Objectives

- Develop an understanding of the concepts, principles, and dimensions of health education.
- Promote awareness regarding personal, community, environmental, and public health issues.
- Equip students with knowledge of health promotion, disease prevention, and healthy lifestyle practices.
- Enable students to design and implement health education programs in educational and sports settings.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Foundations of Health Education: Concept, meaning, scope, and objectives of Health Education. Dimensions of Health: Physical, Mental, Emotional, Social, Spiritual, and

Environmental Health. Principles and philosophy of Health Education. Determinants of health and factors influencing health behavior. Health education methods, media, and communication strategies. Role of Health Education in Physical Education and Sports.

Unit II

Personal Health and Lifestyle Management: Personal hygiene and healthy lifestyle practices. Nutrition and balanced diet for health and physical performance. Physical activity, fitness, and wellness. Stress management, mental health, and emotional well-being. Sleep, relaxation, and recovery for health maintenance. Prevention of lifestyle-related diseases: Obesity, Diabetes, Hypertension, and Cardiovascular Diseases.

Unit III

Community and Environmental Health: Concepts and importance of Community Health. Environmental health and sanitation. Water, air, food, and noise pollution and their health implications. Public health services and health care delivery systems. School and college health programs. National health programs and policies in India.

Unit IV

Health Promotion and Disease Prevention: Communicable and Non-Communicable Diseases: Causes, prevention, and control. Immunization and vaccination programs. Substance abuse: Tobacco, alcohol, drugs, and preventive education. First aid, safety education, and emergency health care. Health counseling and health promotion strategies. Role of physical educators and sports professionals in health promotion.

Practical Components:

Students shall complete the following practical activities:

- Assessment of Body Mass Index (BMI) and Waist-Hip Ratio (WHR).
- Preparation of a balanced diet chart for athletes and non-athletes.
- Conducting a health awareness campaign.
- Demonstration of personal hygiene and sanitation practices.
- Basic first aid demonstration.
- Preparation of health education materials (posters, pamphlets, presentations).
- Survey and report on lifestyle-related health issues in a community or educational institution.

Suggested Books for Reading:

1. Health Education: Creating Strategies for School and Community Health – Mary H. Connell & David B. Marks.
2. Principles of Health Education and Health Promotion – Susan B. Bastable.
3. Introduction to Health Education and Health Promotion – Manoj Sharma & John A. Romas.
4. Dimensions of Human Health – D.J. Anspaugh, M.H. Hamrick & F.D. Rosato.
5. Health and Physical Education – A.K. Uppal.
6. School Health Education – B.K. Mahajan & M.C. Gupta.
7. Textbook of Preventive and Social Medicine – K. Park.
8. Community Health Nursing – B.T. Basavanthappa.

Sem – IV

MDC – (Multidisciplinary Course)

MBC (Multidisciplinary Course)													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					TI	TE	PI	PE
Event Management in Sports		2		2	2		1	3	15	35	5	20	75

Event Management in Sports

Maximum Marks: 35

Max. Time: 02 hrs

Course Objectives

- Develop a comprehensive understanding of sports event management principles and practices.

- Equip students with skills required for planning, organizing, conducting, and evaluating sports events.
- Familiarize students with logistics, marketing, sponsorship, risk management, and financial aspects of sports events.
- Prepare students to manage sports competitions, tournaments, leagues, and mega sporting events effectively.

Note: There shall be nine questions in all. Question no. 1 consisting of seven short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (7 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Foundations of Sports Event Management: Meaning, concept, scope, and significance of event management in sports. Types of sports events: Intramural, Extramural, Intercollegiate, National, International, and Mega Sporting Events. Principles and functions of sports event management. Organizational structure and management hierarchy of sports events. Roles and responsibilities of event managers, technical officials, and volunteers. Leadership and communication in sports event management.

Unit II

Planning and Organization of Sports Events

Event Planning Process: Event concept development and feasibility analysis. Setting goals, objectives, and event policies. Preparation of event proposals and project plans. Event scheduling and competition programming. Venue selection and facility management. Equipment procurement and inventory management.

Human Resource Management: Recruitment and training of officials and volunteers. Team coordination and stakeholder management. Protocols and hospitality management.

Unit III

Event Operations, Risk Management and Finance

Event Operations: Registration and accreditation procedures. Competition management and technical operations. Opening, closing, and medal ceremonies. Crowd management and spectator services. Transportation, accommodation, and logistics management.

Risk and Safety Management: Risk assessment and emergency planning. Safety standards and security arrangements. Medical services and first aid management. Disaster and crisis management during sports events.

Financial Management: Budget preparation and financial planning. Sources of funding for sports events. Sponsorship and fundraising. Financial control, auditing, and reporting.

Unit IV

Sports Marketing and Promotion: Principles of sports marketing. Sponsorship acquisition and management. Branding and promotion of sports events. Media management and public relations. Social media and digital marketing strategies.

Technology and Innovation in Sports Events: Event management software and digital platforms. Online registration and accreditation systems. Timing, scoring, and performance tracking technologies. Broadcasting and live-streaming of sports events.

Event Evaluation: Post-event evaluation and reporting. Impact assessment of sports events. Legacy and sustainability of sporting events. Contemporary trends and challenges in sports event management.

Practical Components

Students shall complete the following practical activities:

- Preparation of a complete sports event proposal.
- Preparation of an event budget.
- Designing tournament fixtures (Knockout and League).
- Preparation of venue layout and equipment checklist.
- Drafting sponsorship and media plans.
- Organizing a mini sports event in the institution.

- Preparation of an event evaluation report and documentation.
- Development of promotional materials (poster, brochure, social media content).

Suggested Books for Reading:

1. Managing Sport Events – Greenwell, Danzey-Bussell & Shonk.
2. Sport Event Management – Laura J. Burton & Gil B. Fried.
3. Managing Major Sports Events – Milena M. Parent & T. Christopher Greenwell.
4. Event Management in Sport, Recreation and Tourism – Tom Masterman.
5. Contemporary Sport Management – Paul M. Pedersen & Lucie Thibault.
6. Sport Marketing – Mullin, Hardy & Sutton.
7. Administration of Physical Education and Sports Programmes – S.S. Puri & V.K. Sharma.

Sem – IV

AEC – (Ability Enhancement Course)

Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits				TI	TE	PI	PE	Total
Gym Management		1		2	1		1	2	5	20	5	20	50

Gym Management

Maximum Marks: 20

Max. Time: 01 hrs

Course Objectives:

- Develop knowledge and skills related to the management and operation of fitness centers and gymnasiums.
- Familiarize students with gym planning, equipment management, safety procedures, and customer service.
- Enhance entrepreneurial and managerial competencies for establishing and managing fitness facilities.
- Promote professional ethics and best practices in the fitness industry.

Note: There shall be four questions in all. Question no. 1 consisting of five short answer type questions (1 marks each) covering the entire syllabus shall be compulsory. Two questions (5 marks each) will be asked from each unit. Student will have to attempt one question from each unit. All questions shall carry equal marks.

Unit I

Fundamentals of Gym Management: Meaning, concept, scope, and importance of gym management. Evolution and growth of the fitness industry. Types of fitness centers and gymnasiums. Organizational structure and administration of fitness facilities. Roles and responsibilities of gym managers, trainers, and support staff. Professional ethics and code of conduct in fitness services.

Unit II

Facility and Equipment Management: Planning and layout of gymnasiums and fitness centers. Selection, installation, maintenance, and inventory management of gym equipment. Fitness assessment and member orientation procedures. Record keeping and membership management systems.

Safety and Risk Management: Safety standards and guidelines for fitness facilities. Prevention and management of gym-related injuries. Emergency procedures and first aid in fitness centers. Hygiene, sanitation, and environmental management in gyms.

Unit III

Business and Marketing Aspects: Establishing and operating a fitness center. Business planning and feasibility analysis. Financial management, budgeting, and pricing strategies. Membership promotion and customer relationship management. Marketing and branding of fitness services. Digital marketing and social media promotion for fitness businesses. Emerging trends in the fitness industry: Personal training, online coaching, wellness centers, and fitness technology.

Practical Components

Students shall complete the following practical activities:

- Preparation of a gym layout and equipment plan.
- Demonstration of the safe use of cardiovascular and resistance training equipment.
- Preparation of preventive maintenance and equipment inspection schedules.
- Fitness assessment of a client (BMI, body composition, flexibility, strength, and endurance).
- Design of a six-week exercise programme using the FITT principle.
- Preparation of a gym budget and membership plan.
- Development of a marketing strategy for a fitness centre.
- Visit to a commercial gym or fitness centre and submission of an observational report.

Suggested Books for Reading:

1. Fitness Management – Mike Bates & Scott Dritz.
2. Managing Health, Fitness and Sport Facilities – Thomas H. Sawyer & Peter A. DiLoreto.
3. Facility Design and Management for Health, Fitness, Physical Activity, Recreation and Sports Facility Professionals – Sawyer and associates.
4. Fitness Professional's Handbook – Howley & Franks.
5. Sport Facility Management – Gil B. Fried.
6. Administration of Physical Education and Sports Programmes – S.S. Puri & V.K. Sharma.
7. Entrepreneurship Development – S.S. Khanka.

Sem – IV

Community Engagement/Field Work/Survey/Seminar

Community Engagement/Field Work/Survey/Seminar													
Course Title	Course ID	L	T	P	L	T	P	Total Credit	Marks				
		(Hours)			Credits					T I	T E	PI	P E
								6					150