

CHAUDHARY RANBIR SINGH UNIVERSITY, JIND
Scheme of Examination UG Programme (Interdisciplinary): Scheme D



Scheme & Syllabus

Subject: Bachelor of Physical Education, Health Education and Sports Science

As per NEP 2020 Curriculum Framework for Undergraduate Programme (Multiple Entry – Exit, Internships and Choice Based Credit System)




Chairperson
Department of Physical Education
Chaudhary Ranbir Singh University
Jind (Haryana) INDIA 126102

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Subject: Bachelor of Physical Education, Health Education and Sports Science


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Sem	Types of Course	Course Code	Paper/Title	Theory	Practical	Total	Contact Hours	Max Marks				Total
								Theory		Practical		
								External	Internal	External	Internal	
1	CC - 1	B.Sc./PE/101	History and Foundation of Physical Education	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 1	B.Sc./PE/102	Health Education	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 1	B.Sc./PE/103	Basic Anatomy and Physiology	3	1	4	5 (3+2)	50	20	20	10	100
	CC M - 1	B.Sc./PE/104	Olympic Movement	2	-	2	2	35	15	-	-	50
	(MDC) – 1	Course from Pool of Courses Available in College/Institute										
	AEC – 1	Course from Pool of Courses Available in College/Institute										
	SEC – 1	Course from Pool of Courses Available in College/Institute										
	VAC – 1	VAC – 101	Human Values and Ethics	2	0	2	2	35	15	-	-	50
2	CC - 4	B.Sc./PE/201	Exercise Physiology	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 5	B.Sc./PE/202	Sports Psychology	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 6	B.Sc./PE/203	Sports Nutrition	3	1	4	5 (3+2)	50	20	20	10	100
	CC M - 2	B.Sc./PE/204	Asian and Commonwealth Games	2	-	2	2	35	15	-	-	50
	(MDC) – 2	Course from Pool of Courses Available in College/Institute										
	AEC – 2	Course from Pool of Courses Available in College/Institute										
	SEC – 2	Course from Pool of Courses Available in College/Institute										
	VAC – 2	VAC – 201	Environment Studies	1	1	2	3	20	10	15	5	50




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Sem	Types of Course	Course Code	Paper/Title	Theory	Practical	Total	Contact Hours	Max Marks				Total
								Theory		Practical		
								External	Internal	External	Internal	
3	CC - 7	B.Sc./PE/301	Fundamental of Sports Medicine	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 8	B.Sc./PE/302	Curriculum Design in Physical Education	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 9	B.Sc./PE/303	Sports Injury and Rehabilitation	3	1	4	5 (3+2)	50	20	20	10	100
	CC M - 3	B.Sc./PE/304	Sports Journalism	3	1	4	5 (3+2)	50	20	20	10	100
	MDC - 3	Course from Pool of Courses Available in College/Institute										
	AEC - 3	Course from Pool of Courses Available in College/Institute										
	SEC - 3	Course from Pool of Courses Available in College/Institute										
4	CC - 10	B.Sc./PE/401	Physical Fitness	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 11	B.Sc./PE/402	Sports Sociology	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 12	B.Sc./PE/403	Organization and Administration	3	1	4	5 (3+2)	50	20	20	10	100
	CC M - 4 (V)	Course from Pool of Courses Available in College/Institute										
	AEC - 4	Course from Pool of Courses Available in College/Institute										
	VAC - 3	Course from Pool of Courses Available in College/Institute										


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Sem	Types of Course	Course Code	Paper/Title	Theory	Practical	Total	Contact Hours	Max Marks				Total
								Theory		Practical		
								External	Internal	External	Internal	
5	CC - 13	B.Sc./PE/501	Sports Training	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 14	B.Sc./PE/502	Kinesiology	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 15	B.Sc./PE/503	Sports Management	3	1	4	5 (3+2)	50	20	20	10	100
	CC M – 5 (V)	B.Sc./PE/504	Stress Management	3	1	4	5 (3+2)	50	20	20	10	100
6	CC - 16	B.Sc./PE/601	Measurement and Evaluation	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 17	B.Sc./PE/602	Biomechanics	3	1	4	5 (3+2)	50	20	20	10	100
	CC - 18	B.Sc./PE/603	Officiating and Coaching	3	1	4	5 (3+2)	50	20	20	10	100
	CC M - 6	B.Sc./PE/604	Posture and Athletic Care	3	1	4	5 (3+2)	50	20	20	10	100
	CC M – 7 (V)	B.Sc./PE/605	Adapted Physical Education	3	1	4	5 (3+2)	50	20	20	10	100

CC- Core Course, CCM- Core Course Minor, MDC- Multidisciplinary Course, AEC- Ability Enhancement Course, SEC- Skill Enhancement Course, VAC- Value Addition Course, CCM (V) - Core Course Minor Vocational



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Core Course – 1

B.Sc./PE/101

History and Foundation of Physical Education

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 12 hours)

Introduction of Physical Education

- Meaning and definition of Physical Education
- Relationship of Physical Education with Health and General Education
- Aim and Objectives Physical Education
- Scope of Physical Education.
- Need of Physical Education in modern society.
- Misconceptions regarding Physical Education.
- Physical Education as Arts or Science

Unit – II (Contact Hours: 12 hours)

History of Physical Education in India:

- Physical Education during Indus Valley Civilization (3250 BC – 2500 BC)
- Physical Education during Vedic period (2500 BC – 600 BC)
- Physical Education during Early Hindu Period (600 BC – 320 A.D)
- Physical Education during Later Hindu Period (320 A.D – 1000 A.D)
- Physical Education during Medieval Period (1000 A.D – 1757 A.D)
- Physical Education during British Period (Till 1947)
- Physical Education during After Independence

Unit – III (Contact Hours: 11 Hours)

Biological Basis of Physical Education:

- Meaning of Growth and Development
- Meaning of Chronological Age, Anatomical age, Physiological age and Mental age
- Principles of Growth and development
- Difference between Growth and development
- Factors affecting Growth and development
- Growth and Development at various Levels of Childhood: Pre - Adolescence – Adolescence Adulthood.

Unit – IV (Contact Hours: 10 hours)

Career opportunities in Physical Education and Sports:

- Qualifications and responsibilities of Physical Education and Sports professionals at various levels of educational institutions.

- Qualifications and responsibilities as Coach, Fitness Trainers, Yoga Instructors and others
- Qualifications and responsibilities as sports Event Managers, Technical Officials, Researchers and others
- Qualifications and responsibilities in Health Clubs and Fitness Centers, Aerobics, Dance & Recreation Clubs in Corporate Sectors and others.
- Qualifications and responsibilities Sports Journalists, Commentators, Sports Photographers and Video Analysts
- Career opportunities in various Central Govt, State Govt., Private Organizations and others

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Aims, Objectives, and scope of Physical Education.
2. Explain the historical development of Physical Education in India
3. Illustrate the basic knowledge of biological aspects of Physical Education
4. Tell the various Career opportunities in Physical Education and Sports.
5. Know the basic specifications of court/ground, general rules and demonstrate the basic skills of Kho-Kho and Badminton.

Part – II Practical

Unit	Topics	Marks	Contact Hours
I	Kho - Kho: Court specifications, general rules and basic skills	15	15
II	Badminton: Court specifications, general rules and basic skills	15	15

Internal Assessment: 10 Marks (Evaluation through Skill Test/ Assignments/ Quiz/ Viva Voce/ Practical Record File)

End Term Exam: 20 Marks (Evaluation through performance in Skill Test/Demonstration/ Viva Voce/ Practical Record File)


Learning Resources

1. Baljit Singh (2009). Principles of Physical Education. New Delhi: Sports Publication.
2. Bevinson Perinbaraj. S (2002). History of Physical Education. Karaikudi: Vinsi Publications.
3. Bucher A. Charles. (1983). Foundations of Physical Education. St. Louis: Mosbyco.
4. Charles A. Bucher. (1982). Foundations of Physical Education. USA: The C.V. Mosby company.
5. Charles C. Cowell & William L. France. (1963). Philosophy and Principles of Physical Education. New Jersey: Prentice-Hall.
6. Singh Ajmer et.al. Modern Text Book of Physical Education, Health and Sports, Kalyani Publishers, Ludhiana,(2010). 7.
7. Sharma, V.K, Health & Physical Education, Saraswati House Pvt. Ltd . Daryagani, New Delhi. (2013).
8. Singh Ajmer et. al. Olympic Movement, Kalyani Publishers, Ludhiana, (2000).

9. Kamlesh & Sangral, Principles & History of Physical Education, Parkash Brothers, Ludhiana. (2000).
10. Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co. Deshpande, S. H. (2014).
11. Mohan, V. M. Principles of physical education. Delhi: Metropolitan Book Dep.
12. Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co.
13. Pinto John and Roshan Kumar Shetty (2021) Introduction to Physical Education, Louis Publications, Mangalore.
14. Amit Arjun Budhe, (2015) Career aspects and Management in Physical Education, Sports Publication, New Delhi

Journals and Electronic Resources

1. 2. Sports Science and Health Advances, eISSN: 2583-8296
2. Khel Journal



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Core Course – 2

B.Sc./PE/102

Health Education

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 12 hours)

Introduction of Physical Education

- Meaning and definition of Physical Education
- Relationship of Physical Education with Health and General Education
- Aim and Objectives Physical Education
- Scope of Physical Education.
- Need of Physical Education in modern society.
- Misconceptions regarding Physical Education.
- Physical Education as Arts or Science

Unit – II (Contact Hours: 12 hours)

Occupational Health

- Meaning and definition of Occupational Health
- Scope of Occupational Health
- Principles of Occupational Health.
- Scope of Occupational Health
- Factors responsible for Occupational Health Hazards and Diseases: Physical Hazards, Chemical Hazards, Biological Hazards, Mechanical Hazards, Psycho – Social Hazards.
- Occupational diseases caused by Physical and Chemical factors

Unit – III (Contact Hours: 11 Hours)

Communicable Diseases

- Meaning of Communicable Diseases
- Name of various Communicable Diseases
- Meaning, Causes, symptoms and Treatment of HIV/ AIDS
- Meaning, Causes, symptoms and Treatment of Hepatitis A, B and C
- Meaning, Causes, symptoms and Treatment of Tuberculosis and Chicken Pox
- Meaning, Causes, symptoms and Treatment of COVID-19

Unit – IV (Contact Hours: 10 hours)

Non - Communicable Diseases:

- Meaning of Non-Communicable Diseases
- Name of various Non-Communicable Diseases
- Meaning, Causes, symptoms and Treatment of various types cardiovascular disease

- Meaning, Causes, symptoms and Treatment of various types of Typhoid and Attention Deficit Hyperactivity Disorder (ADHD)
- Meaning, Causes, symptoms and Treatment of Type I and Type II Diabetes
- Meaning, Causes, symptoms and Treatment of Arthritis

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the concept of Health and Health Education.
2. Explain the concept of Occupational Health
3. Illustrate the basic knowledge of various Communicable Diseases
4. Acquire basic knowledge about the Communicable Diseases
5. Able to calculate and analyze Blood pressure, BMI, Peak Expiratory Flow and Oxygen saturation level

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	BMI: Calculation of BMI, Categories of BMI	5	7
II	Calculation of Peak Expiratory Flow with Spirometer, Analysis of Peak Expiratory Flow	5	8
III	Measurement of Pulse Rate and Blood Pressure	5	7
IV	Measurement of Oxygen Saturation level, its interpretation	5	8

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Sharma, V.K, Health & Physical Education Saraswati House Pvt. Ltd . Daryaganj, New Delhi.(2013).
2. Bucher Olsen and Willgoose; The Foundation of Health Prentice Hall inc. Englewood Cliffs, New Jersey,(1976).
3. Turner S and Smith, School Health and Health Education, The C.V. Mos by Company St.Loius (1961).
4. Singh Ajmer et.al. Modern Text Book of Physical Education, Health and Sports, Kalyani Publishers, Ludhiana, (2010).
5. Kang G.S. Deol N.S. An introduction to Health and Physical Education 21st century. Patiala (2008).
6. Verma, K.K., “Health & Physical Education” Parkash Brothers, Ludhiana, 2015



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Core Course – 3

B.Sc./PE/103

Basic Anatomy and Physiology

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 12 hours)

Introduction of Anatomy and Physiology

- Meaning and Definition of Anatomy and Physiology.
- Importance of Anatomy and Physiology in Physical Education and sports
- Cell: Structure, Properties and functions
- Meaning of Cell, Tissues, Organs and System.
- Bone: Meaning and types
- Skeletal System: Structure and functions of Skeletal System.
- Axial and Appendicular Skeleton

Unit – II (Contact Hours: 12 hours)

Joints and Muscular System

- Meaning of Joints, Types of Joints
- Types of Synovial Joints present in human body
- Meaning of Muscle, Types of muscles present in human body
- Gross Structure of Skeletal Muscle,
- Structural Classification of Skeletal muscles.

Unit – III (Contact Hours: 11 Hours)

Circulatory System and Digestive System

- Constituents of blood and Function of blood
- Structure of the heart
- Types of Blood Circulation: Systemic, Pulmonary and Coronary
- Organs of Digestive System
- Structure and functions of the digestive system,
- Process of Food absorption, Name and functions of various digestive juices and enzymes

Unit – IV (Contact Hours: 10 hours)

Respiratory System and Excretory System:

- Organs of Respiratory system and their functions.
- Structure of Respiratory system
- Exchange of gases in the lungs and tissues

- Organs of Excretory System: kidneys and skin
- Parts and Functions of the urinary system
- Structure and functions of Skin

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Anatomy, Physiology and structure of Cells.
2. Explain the structure of Joints and Muscular System
3. Illustrate the basic knowledge about Anatomy, Physiology of Circulatory and Digestive Systems of human body
4. Explain the Anatomy, Physiology of Respiratory and Excretory Systems of human body
5. Identify name and locations of bones, muscles and organs of various systems of human body

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Identification of Name and location of Human Bones on Skeleton and Chart	10	10
II	Identification of Name and location of Major Muscles of Human Body on Model and Chart	10	10
III	Identification of Name and Location of organs of various systems: Circulatory, Digestive, Respiratory and Excretory on Models and Charts	10	10

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Singh Ajmer et.al. “Modern Text Book of Physical Education, Health and Sports”, Kalyani Publishers, Ludhiana,(2010).
2. Gupta, A. P. (2010). Anatomy and physiology. Agra: Sumit Prakashan.
3. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.
4. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
5. Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co.
6. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surjeet Publication.
7. Moorthy, A. M. (2014). Anatomy physiology and health education. Karaikudi: Madalayam Publications.
8. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co.
9. Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd.
10. Sharma, R. D. (1979). Health and physical education, Gupta Prakashan.



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Core Course Minor – 1

B.Sc./PE/104

Olympic Movement

Max Marks: 50

Theory: 50 (Internal Assessment = 15 + 35 End Term Exam)

Question Paper: 35 Marks

Time Allowed: 2 Hours

Instructions for Question Paper Setter

The question paper will consist of Four Units I, II, III & IV. Unit I, II and III will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit IV will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 1 mark for each question.

Unit – I (Contact Hours: 10 hours)

Origin of Olympic Movement

- Philosophy of Olympic movement
- The significant stages in the development of the Ancient Olympic movement
- Politics and Religion of Ancient Olympics, Opening ceremony, Different Events of Ancient Olympics, Participants of Various events, Prizes for winners,
- Decline and Termination of the ancient Olympics

Unit – II (Contact Hours: 10 hours)

Modern Olympic Games

- Revival of Olympic Games
- Olympic Symbols: Motto, Rings, Flag, Medals, Flame, Torch Relay and Anthem
- Opening ceremony, Closing ceremony, medal ceremony
- Olympic Protocol for member countries
- Indian Performance in Modern Olympics.

Unit – III (Contact Hours: 10 Hours)

Different Olympic Games

- Paralympics Games: Brief History and symbols. Its relation with other Olympics
- Winter Olympics: Brief History and symbols. Its relation with other Olympics
- Youth Olympic Games: Brief History and symbols. Its relation with other Olympics
- Indian Performance in Modern Paralympics, Winter and Youth Olympics.


Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the concept of Olympic Movement and Ancient Olympics.
2. Acquire basic knowledge about Modern Olympics.
3. Describe the various Types of Olympics.


Learning Resources

1. Singh Ajmer et.al. “Modern Text Book of Physical Education, Health and Sports”, Kalyani Publishers, Ludhiana,(2010).
2. Gupta, A. P. (2010). Anatomy and physiology. Agra: Sumit Prakashan.
3. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.



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4. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
5. Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co.
6. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surjeet Publication.
7. Moorthy, A. M. (2014). Anatomy physiology and health education. Karaikudi: Madalayam Publications.
8. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co.
9. Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd.
10. Sharma, R. D. (1979). Health and physical education, Gupta Prakashan.



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Core Course – 4

B.Sc./PE/201

Exercise Physiology

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 11 hours)

Introduction of Exercise Physiology

- Meaning of Exercise Physiology, Anabolism, Catabolism and Metabolism
- Importance of Exercise Physiology in Physical Education
- Types of muscular Contractions: Isometric, Isotonic and Isokinetic
- Meaning of Body Composition, Components of Body Composition
- Effect of Exercises on the body composition.

Unit – II (Contact Hours: 11 hours)

Muscular System and Exercise

- Gross Structure of the Skeletal Muscle
- Functions of Muscular system
- Properties of slow-twitch and fast-twitch muscle fibers
- Meaning of Aerobic Activity, Anaerobic Activity, Muscle Tone, Muscle Hypertrophy and Atrophy.
- Effect of exercises and training on the muscular system

Unit – III (Contact Hours: 12 Hours)

Cardiovascular System and Exercise

- Meaning and functions of Cardiovascular System
- Meaning of Stroke Volume, Cardiac Output, Heart Rate, Blood pressure and Cardiac Hypertrophy
- Conduction System of the Heart
- Blood circulation in the Heart, Blood Supply to the Heart
- Effect of exercises and training on the Cardio vascular system.

Unit – IV (Contact Hours: 11 hours)

Respiratory System and Exercise:

- Meaning of Lung Volumes: Inspiratory Reserve Volume, Expiratory reserve volume, Tidal Volume and Residual Volume
- Meaning of Lung capacities: Total Lung Capacity, Inspiratory Capacity, Vital Capacity and Functional Residual Capacity.
- Mechanism of Breathing
- Diffusion of Gases: Exchange of Gases in the Lungs and Exchange of Gases in the Tissues
- Effect of exercises and training on the respiratory system.

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Exercise Physiology, Body Composition and types of muscle contractions

2. Explain the effect of exercise on the various aspects of Skelton muscles
3. Illustrate the effects of various aspects of circulatory system
4. Tell the various Effects of exercise on the various capacities and volumes of lung.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	Football: Court specifications, general rules and basic skills. Wrestling: Mat specifications, General rules and basic skills	15+15	15+15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
2. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
3. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
4. Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
5. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
6. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
7. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
8. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
9. William, D. McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance.
10. Philadelphia: Lippincott Williams and Wilkins Company.
11. Anand, R.L (1987) Play Field Manual, Patiala: NIS Publication.
12. N Kumar (2003). Play and Learn Football. K.S.K. NewDelhi.
13. Sharma OP (2001). Teaching and Coaching –Football. Khel S.K.Delhi.
14. N Kumar (2003). Play and Learn Football. K.S.K. NewDelhi.



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Core Course – 5

B.Sc./PE/202

Sports Psychology

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction of Sports Psychology

- Meaning and definition of Psychology and Sports Psychology
- Importance of Sports Psychology in Physical Education and sports
- Branches of Sports Psychology
- Psychological factors effecting sports performance
- Brief History of Sports Psychology

Unit – II (Contact Hours: 10 hours)

Learning

- Meaning and definition of Learning
- Laws of learning and its implications in sports
- Meaning of Motor Skill learning, Principles of Motor Skill Learning
- Meaning of Learning Curve, Types of Learning Curve
- Characteristics of Learning Curve
- Implications of learning Curve in Physical Education and Sports.

Unit – III (Contact Hours: 10 Hours)

Motivation

- Meaning and definition of Motivation
- Importance of Motivation in Physical Education and Sports
- Types of Motivations: Intrinsic and Extrinsic
- Methods of motivation applicable in Physical Education and Sports
- Drive theory of Motivation.

Unit – IV (Contact Hours: 10 hours)

Personality:

- Meaning and definition of Personality
- Characteristics of Personality
- Dimensions of Personality
- Meaning of Personality traits and Its effects on sports performance
- Factors affecting development of personality

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Sports Psychology and explain various dimensions of sports psychology.

2. Explain the laws of learning and its implications in motor learning
3. Illustrate the concept of motivation and its implication in sports
4. Tell the various dimensions of personality and its implication in sports

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	Kabaddi: Court specifications, general rules and basic skills. Table tennis: Table & Racket specifications General rules and basic Skills	30	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. John D Lauther (2000) Psychology of Coaching. New Jersey: Prentice Hall Inc.
2. John D.Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.
3. Miroslaw Vauks & Bryant Cratty (1999) . Psychology and the Superior Athlete. London: The Macmillan Co.
4. Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.
5. Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.
6. Sahni SP (2005). Psychology and Its Application in Sports. D.V.S. Delhi. Shaw D and Other (2005). Sport & Exercise Psychology. Bios. U.K.
7. Verma V (1999). Sport Psychology & All-Round Development. Sport Pub. New Delhi.
8. Wann DL (1997). Sport Psychology. Prentice Hall. New Jersey.
9. Kumar, Dharmander. (2018). Kabaddi and Its Playing Techniques. Writers Choice, New Delhi.
10. Mishra, S.C. (2007). Teach Yourself Kabaddi. Sports Publications, New Delhi.
11. Rao CV (1983). Kabaddi. Native Indian Sports. NSNIS. Patiala Publisher
12. Rao EP (1994). Modern Coaching in Kabaddi.D.V.S.Pub.



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Core Course – 6

B.Sc./PE/203

Sports Nutrition

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction of Sports Nutrition

- Meaning and Definition of Nutrition and Sports Nutrition
- Meaning of Calories, Macro Nutrients, Micro Nutrients
- Meaning of Basal Metabolic Rate (BMR) and its role in body
- Meaning of Balanced diet, Components of Balanced diet
- Factor affecting Balanced diet

Unit – II (Contact Hours: 10 hours)

Macro Nutrients

- Carbohydrate: Meaning, Sources and Functions in Body
- Fat: Meaning, Sources and Functions in Body
- Protein: Meaning, Sources and Functions in Body
- Ratio of Carbohydrate, Fat and Protein required in Balanced diet for Normal Adult.
- Ratio of Carbohydrate, Fat and Protein required in Balanced diet for Sports persons of different categories.

Unit – III (Contact Hours: 10 Hours)

Micro Nutrients: Vitamins

- Meaning of Vitamins, Types of Vitamins: Fat soluble and water Soluble
- Sources, Functions in body and Daily requirements: Fat soluble Vitamins: A, D, E, and K
- Sources, Functions in body and Daily requirements: Water soluble Vitamins: Vitamin C and B vitamins (B1, B2, B3, B5, B6, B7, B9 and B12)
- Disorders in body due to the deficiencies of different Vitamins.

Unit – IV (Contact Hours: 10 hours)


Micro Nutrients: Minerals:

- Sources, Functions in body and Daily requirements of Calcium, Phosphorus Potassium, Sodium, Chloride, Magnesium, Iron, Zinc and Iodine.
- Disorders in body due to the deficiencies of Minerals
- Dietary requirements before and after exercise

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe basic concept of Balanced diet.



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2. Illustrate basic concept of Macro Nutrients.
3. Explain basic requirement and sources of vitamins.
4. Describe basic requirement and sources of Minerals various dimensions of personality and its implication in sports.
5. Calculate BMR and design diet plan

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Calculation of BMR for Men and Women	15	15
II	Designing of Basic Diet Plan: ratio of Carbohydrate, fat and protein in various meals	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Jeukendrup, A., & Gleeson, M. (2019). Sport nutrition: An introduction to energy production and performance (3rd ed.). Human Kinetics.
2. McArdle, W. D., Katch, F. I., & Katch, V. L. (2015). Sports and exercise nutrition (4th ed.). Wolters Kluwer Health/Lippincott Williams & Wilkins.
3. Dunford, M., & Doyle, J. A. (2021). Nutrition for sport and exercise (4th ed.). Cengage Learning.
4. Bean, A. (2017). The complete guide to sports nutrition (9th ed.). Bloomsbury Sport.
5. Burke, L. M., & Deakin, V. (Eds.). (2020). Clinical sports nutrition (6th ed.). McGraw-Hill Education.
6. Lanham-New, S. A., Stear, S. J., Shirreffs, S. M., & Collins, A. L. (Eds.). (2011). Sport and exercise nutrition. Wiley-Blackwell.
7. Antonio, J., Kalman, D. S., Stout, J. R., Greenwood, M., Willoughby, D., & Haff, G. G. (Eds.). (2023). Essentials of sports nutrition and supplements (2nd ed.). Humana Press.
8. Thomas, D. T., Erdman, K. A., & Burke, L. M. (Eds.). (2016). Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. Journal of the Academy of Nutrition and Dietetics, 116(3), 501-528. (Note: While not a book, it is a key reference in the field.)
9. Kerksick, C., Wilborn, C., Roberts, M., et al. (2018). International society of sports nutrition position stand: Nutrient timing. Journal of the International Society of Sports Nutrition, 15(1), 21. (Similar caveat as above)
10. Reimers, K. J. (2012). Sports nutrition for endurance athletes. VeloPress.



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Core Course Minor – 2

B.Sc./PE/204

Asian and Commonwealth Games

Max Marks: 50

Theory: 50 (Internal Assessment = 15 + 35 End Term Exam)

Question Paper: 35 Marks

Time Allowed: 2 Hours

Instructions for Question Paper Setter

There will be total 7 question in the question paper. Two questions will be from each units carry 10 marks each and students have to attempt one question from each unit. Five questions will be from all three units and carry 1 mark for each.

Unit – I (Contact Hours: 10 hours)

Asian Games

- Philosophy of Asian games.
- Brief history of the development of the Asian Games.
- Reorganization and expansion of the Asian Games
- Symbols and Mascots of Asian Games
- Countries participating in the Asian Games
- Numbers of Events conducted in Asian games

Unit – II (Contact Hours: 10 hours)

Commonwealth Games

- Philosophy of Commonwealth Games.
- Brief history of the development of the Commonwealth Games
- Structure of Commonwealth Games Federation
- Queen's baton Relay, Opening and Closing Ceremony of Commonwealth Games
- Countries participating in the Commonwealth Games
- Numbers of Events conducted in Commonwealth Games.

Unit – III (Contact Hours: 10 Hours)

Indian performance in Asian Games and Commonwealth Games

- Organization of Asian Games in India
- Organization of Commonwealth Games in India
- Indian Performance in Asian Games
- Indian Performance in Commonwealth Games.

Learning Outcomes


After completing this course, the learner will be able to:

1. Describe the Philosophy, development, and structure of Asian games.
2. Acquire knowledge the Philosophy, development, and structure of Commonwealth games.
3. Describe the Indian Performance in the Commonwealth and Asina Games.

Learning Resources

1. Singh Ajmer et.al. "Modern Text Book of Physical Education, Health and Sports", Kalyani Publishers, Ludhiana,(2010).
2. Gupta, A. P. (2010). Anatomy and physiology. Agra: Sumit Prakashan.

3. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.
4. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
5. Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co.
6. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surjeet Publication.
7. Moorthy, A. M. (2014). Anatomy physiology and health education. Karaikudi: Madalayam Publications.
8. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co.
9. Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd.
10. Sharma, R. D. (1979). Health and physical education, Gupta Prakashan.



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Core Course – 07

B.Sc./PE/301

Fundamental of Sports Medicine

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Sports Medicine

- Definition, scope, and importance of sports medicine.
- Historical development and current trends in sports medicine.
- Interdisciplinary approach: Collaboration with physiotherapists, trainers, and doctors.
- Role of sports medicine in enhancing athletic performance.

Unit – II (Contact Hours: 10 hours)

Drugs and Doping

- History of doping and anti-doping
- Role of IOC and WADA
- World Anti-doping code
- Definition- Classes and Methods of Doping
- Harmful effect of Doping

Unit – III (Contact Hours: 10 Hours)

Thermoregulation and Environmental Physiology

- Body temperature regulation during exercise.
- Heat stress, cold stress, and altitude effects on performance.
- Hydration and electrolyte balance during exercise.
- Acclimatization to environmental conditions.

Unit – IV (Contact Hours: 10 hours)


Energy Systems and Metabolism

- ATP: structure, function, and role in energy production.
- Anaerobic energy systems: phosphagen system and glycolysis.
- Aerobic energy systems: Krebs cycle and oxidative phosphorylation.
- Energy production during rest, submaximal, and maximal exercise.
- Factors affecting metabolism: diet, exercise intensity, and duration.

Learning Outcomes

After completing this course, the learner will be able to:

1. Understand the principles of sports medicine and its applications.
2. Familiarize with anti-doping regulations and their importance.
3. Explain thermoregulatory mechanisms during physical activity.
4. Analyze energy demands for various types of physical activity.



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Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Basketball: Court specifications, general rules and basic skills	15	15
II	Judo: Mat specifications, general rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Brukner, P., & Khan, K. (2017). Brukner & Khan's Clinical Sports Medicine (5th ed.). McGraw-Hill Education.
2. Sherry, E., & Warby, S. (2016). Sports Medicine: Principles of Primary Care. Elsevier.
3. Frounfelter, G., & Kurtz, C. A. (2014). Introduction to Sports Medicine and Athletic Training. Cengage Learning.
4. Prentice, W. E. (2021). Principles of Athletic Training: A Guide to Evidence-Based Clinical Practice (17th ed.). McGraw-Hill Education.
5. Miller, M. D., & Thompson, S. R. (2019). DeLee, Drez, and Miller's orthopaedic sports medicine: Principles and practice (5th ed.). Elsevier.
6. Magee, D. J., Manske, R. C., Zachazewski, J. E., & Quillen, W. S. (2021). Athletic and sport issues in musculoskeletal rehabilitation (2nd ed.). Elsevier.
7. Norris, C. M. (2019). Managing sports injuries: A guide for students and clinicians (5th ed.). Elsevier.
8. Hunter, G., & Speed, C. (2019). Sports physiotherapy: Applied science and practice. Elsevier.
9. Bahr, R., & Engebretsen, L. (2019). Sports injury prevention: A team approach (2nd ed.). Wiley-Blackwell.
10. Micheli, L. J. (2018). The handbook of pediatric sports medicine. Oxford University Press.



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Core Course – 08

B.Sc.-PE-302

Curriculum Design in Physical Education

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Foundation of Curriculum Design

- Meaning, definition, and importance of curriculum in physical education.
- Philosophical, psychological, and sociological bases of curriculum design.
- Principles of curriculum construction.
- Objectives of physical education curriculum

Unit – II (Contact Hours: 10 hours)

Curriculum Development

- Principles of Planning: Understanding the capacity characteristics and needs of the learner. Evaluation and follow up
- Factors affecting curriculum.
- Construction of Time Table: Work load, total lecturer required, duration of class
- The Role of the teacher in curriculum development

Unit – IV (Contact Hours: 10 hours)

Methods of Teaching

- Methods of teaching.
- Grouping of students for instruction, lecture, projects, activities, demonstration.
- Block of period, total time allotment does a given activity, teaching aids, conditioning.
- Special gadgets to concentrate on development of particular skills or activity, provision for individual differences.

Unit – IV (Contact Hours: 10 Hours)


Contemporary Trends and Issues in Curriculum Design

- Technology integration in physical education curricula.
- Addressing diversity and inclusion in curriculum design.
- Global perspectives on physical education curriculum development.
- Challenges in curriculum design: Budget constraints, policy changes, and resource allocation.

Learning Outcomes

After completing this course, the learner will be able to:

1. Understand the foundations and theories of curriculum design.


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2. Apply knowledge to develop effective physical education curricula.
3. Critically evaluate the effectiveness of physical education programs.
4. Explore innovative and inclusive approaches in curriculum development.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Handball: Mat specifications, general rules and basic skills	15	15
II	Boxing: Mat specifications, general rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Bucher, C. A., & Wuest, D. A. (2019). Foundations of Physical Education, Exercise Science, and Sport (19th ed.). McGraw-Hill.
2. Laker, A. (2016). The Future of Physical Education: Building a New Pedagogy. Routledge.
3. Kirk, D. (2010). Physical Education Futures. Routledge.
4. Siedentop, D. (2020). Introduction to Physical Education, Fitness, and Sport (10th ed.). McGraw-Hill.
5. Doll, R. C. (2013). Curriculum Improvement: Decision Making and Process (9th ed.). Pearson.
6. Rakesh Gupta. (2003). Professional Preparation and Curriculum Designs in Physical Education and Sports. Friends Publications
7. P.B. Dubey. (2015). Professional Preparation and Curriculum Design in Physical Education and Sports. Khel Sahitya Kendra



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Core Course – 9

B.Sc./PE/303

Sports Injury and Rehabilitation

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 11 hours)

Sports Injuries and Their Management

- Types of sports injuries: Acute and chronic injuries.
- Common injuries in sports: Sprains, strains, fractures, and dislocations.
- Mechanism of injury and risk factors.
- Importance of sports injury management in athlete performance.

Unit – II (Contact Hours: 11 hours)

Injury Prevention and First Aid

- Principles of injury prevention: Warm-up, cool-down, stretching, and strengthening exercises.
- Use of protective equipment and proper techniques in sports.
- Importance of biomechanics and technique correction in preventing injuries.
- Basics of first aid: R.I.C.E. principle (Rest, Ice, Compression, Elevation).

Unit – III (Contact Hours: 12 Hours)

Assessment and Diagnosis of Sports Injuries

- Principles of injury assessment: HOPS (History, Observation, Palpation, Special tests).
- Diagnostic tools: imaging (X-ray, MRI, CT scans) and functional tests.
- Recognizing signs and symptoms of common injuries.
- Use of taping, strapping, and bracing in acute injury management.

Unit – IV (Contact Hours: 11 hours)


Rehabilitation and Recovery

- Goals and phases of rehabilitation: Acute, subacute, and chronic stages.
- Guidelines for sport-specific rehabilitation and RTP progression.
- Nutrition and hydration for recovery.
- Psychological aspects of injury and recovery

Learning Outcomes

After completing this course, the learner will be able to:

1. To provide students with knowledge of common sports injuries and their mechanisms.
2. To equip students with skills for injury prevention, assessment, and immediate care.
3. To understand the principles and methods of rehabilitation.
4. To enable students to design rehabilitation programs tailored to specific injuries.


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Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<p>Injury Assessment: Perform HOPS evaluation for mock injury cases.</p> <p>Rehabilitation Techniques: Demonstrate stretching, strengthening, and proprioceptive exercises.</p> <p>Taping and Strapping: Hands-on application for different joints and body parts.</p>	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Peggy A. Houglum, Kristine L. Boyle-Walker & Daniel E. Houglum (2022). Rehabilitation of Musculoskeletal Injuries, Human Kinetics; Fifth edition
2. Brukner & Khan's Clinical Sports Medicine injuries, Volume 1, McGraw Hill / Australia
3. Arvinen-Barrow, Monna, (2024) The Psychology of Sport Injury and Rehabilitation, T&F Routledge
4. Swapan Kumar Dey (2022) A Textbook of Sports & Exercise Physiology, Jaypee Brothers Medical Publishers; Second edition
5. Shyamal Koley (2018), Essentials of Exercise Physiology, Jaypee Brothers Medical Publishers; First Edition
6. Dr. S. Narayan Murthy (2019), Khel Chikitsa, Sports Publication; 1st edition



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Core Course Minor – 03

B.Sc.-PE-304

Sports Journalism

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Sports Journalism

- Meaning and Definition of Sports Journalism and mass communication.
- Historical aspect of Sports Journalism and mass communication,
- Mode of Sports Journalism, mass media, print, electronic and informal and its Importance.
- News, basic news elements, news story, Heading in News.
- Fact checking in journalism

Unit – II (Contact Hours: 10 hours)

- Role of Information Technology in Sports Journalism.
- Type of News: Quality and Qualification of news reporters.
- News desk and its importance in the sports journalism.
- Duties and responsibilities: sports editor, sub editor, photo journalist in the sports era.

Unit – III (Contact Hours: 10 Hours)

- Sports news feature: type of sports feature, exclusive features,
- Fearless writing in sports news.
- Invention in private life, sports charity.
- Reviewing sports book/ journals and its relevance in sports


Unit – IV (Contact Hours: 10 hours)

- Writing sports editorials, writing weekly or fortnightly column and its relevance in sports promotion.
- Covering local/ national sports competitions, writing of press release.
- Commentating of the sport events for radio and television channels.
- Interviewing process of outstanding sports person and its publication/Broadcasting for development the sports culture in society.

Learning Outcomes

After completing this course, the learner will be able to:

1. Comprehend about News Writing, and Sports Journalism.



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2. Mode of Mass- Communication.
3. Understand the role of IT in Mass Communication.
4. Information Technology and Mass Media.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Volleyball: Court specifications, general rules and basic skills	15	15
II	Swimming/Water polo: Pool specifications, general rules and basic skills		

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Hoshino, Atsushi (2009) The Origin of indoor Track and field meets IAAF. Retrieved on 2011-4-09
2. Waldo E. Sweet, Segal E. (1987) sports and recreation in ancient Greece . oxford University press p 37 retrieved on 03 August 2009
3. Mishara S. (2007) Text book of sports Journalism. New Delhi; House Ansari Road, Darya Ganj.
4. Sita R . Text. (2004) Book of sports Journalism Nagar , Delhi friend publication ,06, mukerjee Tower, Mukerjee Nagar Delhi
5. Keveal J. Kumar, (2004) Mass Communication in India Mumbai: Jaico Publishing House.
6. Bell, Daniel 2003 Encyclopedia of international Games MC Farland and company, Inc. publication, Jefferson north Carolina ISBN0-7864-1026-04
7. Human kinetic Publisher inc. (USA) (2000)
8. Singh, Hardy, “Science of Sports Training” DVS Publications, New Delhi. 1991.
9. Bompa, Tudor, O “ Periodisations training for sports” :Human Kinetics (U.S.A.)1999.
10. Ahuja , B.N. and Chhabra. “Principles and Technology of Journalism” surjeet publication, 7 Kholapur Road, Kamala Nager, Ddelhi.



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Core Course – 10

B.Sc./PE/401

Physical Fitness

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Physical Fitness

- Meaning and Definition
- Need and importance of physical Fitness.
- Physical fitness and sports.
- Types of Physical Fitness.

Unit – II (Contact Hours: 10 hours)

Physical Fitness Components

- Endurance meaning, and definition
- Types of Endurance.
- Method for develop endurance.
- Importance of Endurance.

Unit – III (Contact Hours: 10 Hours)

Strength

- Strength meaning and definition.
- Types of strength
- Need and Importance of strength.
- Role of strength in injury prevention and rehabilitation.

Unit – IV (Contact Hours: 10 hours)

Speed

- Speed Meaning and Definition
- Types of Speed
- Need and Importance of Speed
- Training method of Speed
- Meaning , definition, importance and types of flexibility

Learning Outcomes

After completing this course, the learner will be able to:

1. Comprehend the principles and importance of physical fitness.
2. Apply method and technique for improve physical fitness effectively.
3. Assessments of physical fitness at different level.

4. Understand the latest technology application in the field of physical fitness

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Record speed with 30 meter running test. ● Measure strength with help of dynamometer. ● Demonstration of endurance activities. ● Understanding of physical fitness and their indications/contraindications. 	30	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Bompa, T. O., & Buzzichelli, C. (2021). Periodization of strength training for sports. Human Kinetics Publishers.
2. Nicholls, A. R. (2021). Psychology in sports coaching: Theory and practice. Routledge.
3. Appelbaum, L. G., & Erickson, G. (2018). Sports vision training: A review of the state-of-the-art in digital training techniques. International Review of Sport and Exercise Psychology, 11(1), 160-189.
4. Human kinetic Publisher inc. (USA) (2000)
5. Dick W. Frank. "Sports Training Principals" Lepus Bricks (London) 1980.
6. Mathew, D. K. and Fox, E. L. "the physiological basis of Physical education and athletics" W.B. Saunders Company (Philadelphia)
7. Singh, Hardyal, "Science of Sports Training" DVS Publications, New Delhi. 1991.
8. Baechle, Thomes R. and Earle Roger W. "Essential Strength Training and Conditioning.
9. Harre, Dictrich. "Principles of sports training. Sportulag (Beslin) 1982.
10. Bompa, Tudor, O " Periodisations training for sports" :Human Kinetics (U.S.A.)1999



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Core Course – 11

B.Sc./PE/402

Sports Sociology

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction of sports sociology

- Meaning and importance of sports sociology
- Scope and features sports sociology
- Nature of sports sociology- Art or Science
- Suggestions for development and evolution of sports sociology
- Method of investigation and significance of sports sociology

Unit – II (Contact Hours: 10 hours)

Culture and sports

- Meaning of culture and sports
- Sports and culture of Man
- The interrelationship of culture and sports
- Difference between ancient and modern culture and sports

Unit – III (Contact Hours: 10 Hours)

Socialization in sports

- Introduction and mechanism
- Internalization, Agencies of socialization
- Factors of socialization, sports are a social experience, collective efforts
- Sports as an institutionalized game

Unit – IV (Contact Hours: 10 hours)

Violence in Sports

- Meaning and types of Violence
- Sociological perspectives of violence
- Reason and remedies of sports violence
- Stress and anxiety:- The meaning of stress and anxiety and their effects of sports performance

Learning Outcomes

After completing this course, the learner will be able to:

1. Analyze how social structures, institutions, and cultural practices shape and are shaped by sports.

2. Examining Social Issues in Sports
3. Explore critical issues such as gender equity, race and ethnicity, class, and inclusion in the context of sports.
4. Exploring the Role of Sports in Identity Formation
5. Understand how sports contribute to individual and group identity, including aspects like nationalism, community, and personal identity.
6. Critical Thinking on Power and Inequality in Sports

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Hockey: Field & Equipment specifications, general rules and basic skills.	15	15
II	Softball: Field & Equipment specification, General rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Coakley, J. J. (2021). Sports in society: Issues and controversies (13th ed.). McGraw-Hill Education.
2. Eitzen, D. S., & Sage, G. H. (2019). Sociology of North American sport (11th ed.). Oxford University Press.
3. Maguire, J., Jarvie, G., Mansfield, L., & Bradley, J. (2002). Sport worlds: A sociological perspective. Human Kinetics.
4. Giulianotti, R. (2005). Sport: A critical sociology. Polity Press.
5. Jarvie, G. (2006). Sport, culture, and society: An introduction. Routledge.
6. Carrington, B. (2010). Race, sport, and politics: The sporting black diaspora. SAGE Publications.
7. Horne, J., Tomlinson, A., & Whannel, G. (1999). Understanding sport: An introduction to the sociological and cultural analysis of sport. Routledge.
8. Collins, T. (2013). Sport in capitalist society: A short history. Routledge.
9. Andrews, D. L., & Silk, M. L. (2011). Sport and neoliberalism: Politics, consumption, and culture. Temple University Press.
10. Bairner, A. (2001). Sport, nationalism, and globalization: European and North American perspectives. SUNY Press.



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Core Course – 12

B.Sc./PE/403

Organization and Administration

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Organization and Administration

- Meaning and importance of Organization and Administration in Physical Education
- Qualification and Responsibilities of Physical education Teacher and pupil Leader
- Planning and their Basic Principles
- Programme Planning: Meaning, Importance, Principles of Programme Planning in Physical Education
- Function of Planning Organization, Staffing, Direction, Communication, Co-ordination, Controlling and innovation

Unit – II (Contact Hours: 10 hours)

Office Management, Record, Register and Budget

- Office Management: Meaning, Definition, Function and kinds of Office management
- Records and Registers: Maintenance of Attendance Register, Stock Register, cash Register, Physical Efficiency Record, Medical Examination Record
- Budget: Meaning, Importance of Budget making
- Criteria of a Good Budget, Source of Income, Expenditure, Preparation of Budget

Unit – III (Contact Hours: 10 Hours)


Facilities and Time-Table Management

- Facilities and Equipment Management: Types of facilities infrastructures- in-door, Out-door
- Care of School Building, Gymnasium, Swimming Pool, Play Fields, Playgrounds
- Equipment: Need, Importance, Purchase, Care and Maintenance
- Time-Table Management: Meaning. Need, Importance and factor Affecting Timetable

Unit – IV (Contact Hours: 10 hours)

Competition Organization:

- Importance of Tournament
- Types of Tournaments and its Organization Structure-Knock-out Tournaments, Leagues of Round Robin Tournaments, Combination Tournaments and Challenge Tournament
- Organization Structure of Athletic Meet
- Sports Event Intramural and Extramural Tournament Planning.



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Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Sports Psychology and explain various dimensions of sports psychology.
2. Explain the laws of learning and its implications in motor learning
3. Illustrate the concept of motivation and its implication in sports
4. Tell the various dimensions of personality and its implication in sports

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Rugby: Field specifications, general rules and basic skills.	15	15
II	Shooting: Area/Range specifications, General rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File (2.5 Marks for Each Unit).

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (5 Marks for Each Unit)

Learning Resources

1. Bucher, C. A., & Krotee, M. L. (2002). Management of physical education and sport (12th ed.). McGraw-Hill.
2. Chelladurai, P. (2006). Human resource management in sport and recreation (2nd ed.). Human Kinetics.
3. Covey, S. R. (2004). The 7 habits of highly effective people: Powerful lessons in personal change. Free Press.
4. Drucker, P. F. (2006). The effective executive: The definitive guide to getting the right things done. Harper Business.
5. Greenberg, J., & Baron, R. A. (2008). Behavior in organizations (9th ed.). Pearson Prentice Hall.
6. Koontz, H., & Weihrich, H. (2010). Essentials of management: An international perspective (9th ed.). Tata McGraw-Hill Education.
7. Mintzberg, H. (2009). Managing. Berrett-Koehler Publishers.
8. Robbins, S. P., Coulter, M., & DeCenzo, D. A. (2020). Fundamentals of management: Essential concepts and applications (11th ed.). Pearson.
9. Singh, B. D. (2009). Managing change in organizations. Excel Books India.
10. Stoner, J. A. F., Freeman, R. E., & Gilbert, D. R. (2009). Management (6th ed.). Pearson Education



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Core Course Minor – 4

23-VAC-113

Basic of Physiotherapy

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Physiotherapy

- Meaning and Definition
- Need for and importance of physiotherapy
- Scope of physiotherapy and Branches of physiotherapy
- Principles of physiotherapy.

Unit – II (Contact Hours: 10 hours)

Exercise Therapy

- Principles of exercise therapy: overload, specificity, progression, and individuality.
- Active Exercises: Assisted, free, resisted, and self-resisted exercises.
- Passive Exercises: Techniques and indications.
- Stretching: Types (static, dynamic, PNF) and principles.
- Strengthening Exercises: Isometric, isotonic, isokinetic exercises.

Unit – III (Contact Hours: 10 Hours)

Posture and Body Mechanics

- Normal and abnormal postures: assessment and correction.
- Postural deformities
- Principles of body mechanics in exercise therapy.
- Role of posture in injury prevention and rehabilitation.

Unit – IV (Contact Hours: 10 hours)


Therapeutic Modalities in Physiotherapy

- Goals: pain relief, tissue healing, muscle strengthening, and functional restoration.
- Electrotherapy: Electrical stimulation, ultrasound therapy
- Thermal Agents: Heat Therapy, cryotherapy, RICE
- Mechanical Therapy: Traction, Compression, Hydrotherapy
- Manual Therapy: Massage, joint mobilization

Learning Outcomes

After completing this course, the learner will be able to:

1. Comprehend the principles, scope, and importance of physiotherapy in health and rehabilitation.



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2. Apply electrotherapy, thermal agents, mechanical modalities, and manual therapy techniques effectively.
3. Perform assessments of joint range of motion (ROM), muscle strength, and vital signs.
4. Set up and use equipment like TENS, NMES, ultrasound, and traction devices with adherence to safety protocols.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Record vital signs: heart rate, blood pressure, respiratory rate. ● Measure joint range of motion (ROM) using a goniometer ● Demonstration of RICE ● Understanding of therapy principles and their indications/contraindications. 	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Kisner, C., Colby, L. A., & Borstad, J. (2017). Therapeutic exercise: foundations and techniques. Fa Davis.
2. Hollis, M., & Jones, M. E. (1988). Massage for Therapists.
3. Hollis, M., & Jones, E. (2009). Massage for therapists: a guide to soft tissue therapy. (No Title).
4. Subhash M Khatri. (2012) Basics of electrotherapy (second edition). Jaypee Brothers Medical Publishers (P) Ltd.
5. Parveen Kumar & Awadhesh Kumar Shirotriya. (2024). A Textbook of Exercise Physiology. Indu Book Service Pvt. Ltd. New Delhi
6. Prakash Joshi & Kkanchan Mittal. (2020). Essentials of Orthopedics and Applied Physiotherapy. Elsevier; 4th edition (1 January 2020); ELSEVIER,14th Floor, Building No 10 B, DLF Cyber City, Phase – II, Gurgaon Haryana (India) 122002
7. Thomas Myers (2014). Anatomy Trains. ELSEVIER (NP)
8. Lauren Jean Guthrie (2008). Clinical Case Studies in Physiotherapy: A Guide for Students and Graduates. ELSEVIER (NP)



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Core Course – 13

B.Sc.-PE-501

Sports Training

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Sports Training

- Meaning and Definition.
- Need for and importance of Sports Training.
- Scope of Sports Training and its types.
- Principles of Sports Training.
- Training load meaning, Load and Adaptation, Types of Training Load, Principles of training Load.

Unit – II (Contact Hours: 10 hours)

Method of Sports training

- Principles of Sports Training: overload, specificity, progression, and individuality.
- Stretching: Types (static, dynamic,) and principles.
- Warming-up and cooling Down: Meaning and Definition and its Importance.
- Weight Training, Circuit Training, interval Training, Fartlek training polymetric training, continues method training.

Unit – III (Contact Hours: 10 Hours)

Planning

- Introduction, Principles and types of training plan
- Periodization: Introduction, types their aim and Contents
- Talent Identification: pre requisites and Conditions for Developing suitable Young Athlete,
- Principles of early recognition of Athlete Talent

Unit – IV (Contact Hours: 10 hours)

Psychological Preparation

- Introduction, Psychological preparation of teams and individual sports.
- Technical training: Introduction of Technique, Tactics, Strategy, Skill Style, Development of Technique, and Tactics
- Environmental Factors: importance and role of Environmental factors for Sports performance.

- Recovery: Introduction, Phase, mean of recovery and its importance in the sports performance

Learning Outcomes

After completing this course, the learner will be able to:

1. Comprehend the principles, scope, and importance of Sports training in health and rehabilitation.
2. Apply Sports training techniques effectively for improve the physically fitness level.
3. Assessments of performance of the muscle strength, and conditioning.
4. Set up and use equipment like advance GYM, with latest technology.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Assess the training load with pulse rate. ● Assess the physical fitness components with the test. ● Demonstration of Training method. ● Understanding of sports training principles and their indications/contraindications. 	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Bompa, T. O., & Buzzichelli, C. (2021). Periodization of strength training for sports. Human Kinetics Publishers.
2. Nicholls, A. R. (2021). Psychology in sports coaching: Theory and practice. Routledge.
3. Appelbaum, L. G., & Erickson, G. (2018). Sports vision training: A review of the state-of-the-art in digital training techniques. International Review of Sport and Exercise Psychology, 11(1), 160-189.
4. Human kinetic Publisher inc. (USA) (2000)
5. Dick W. Frank. "Sports Training Principals" Lepus Bricks (London) 1980.
6. Mathew, D. K. and Fox, E. L. ' the physiological basis of Physical education and athletics" W.B. Saunders Company (Philadelphia)
7. Singh, Hardyal , " Science of Sports Training" DVS Publications , New Delhi. 1991.
8. Baechle, Thomes R. and Earle Roger W. "Essential Strength Training and Conditioning.
9. Harre, Dictrich. " Principles of sports training ' Sportulag (Beslin) 1982.
10. Bompa,Tudor,O " Periodisations training for sports" :Human Kinetics (U.S.A.)1999



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Core Course – 14

B.Sc.-PE-502

Kinesiology

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Kinesiology

- Meaning and definition of Kinesiology
- Importance of Kinesiology in Physical Education and Sports.
- Aim and objectives of the Kinesiology

Unit – II (Contact Hours: 10 hours)

Fundamental Concepts of Kinesiology

- Axis
- Planes
- Center of Gravity
- Line of Gravity.

Unit – III (Contact Hours: 10 Hours)

Muscles and Joints

- Functions of muscles
- Types of muscles
- Identification of major muscle
- Types and importance of joints

Unit – IV (Contact Hours: 10 hours)

Posture

- Concept of balance posture
- Cause of poor posture
- Bad posture
- Postural deformities

Learning Outcomes

After completing this course, the learner will be able to:

1. Understand the fundamentals of kinesiology
2. Apply basic concepts of kinesiology in practice
3. Understand the structure and function of muscles and joints
4. Evaluate and improve posture
5. Develop analytical skills in human movement
6. Demonstrate academic and practical skills.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Measuring body deformities ● Preparing models of planes and axis ● Identification of muscle through charts ● Study of joints through skeleton model. 	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Muscolino, J. E. (2023). Kinesiology: The skeletal system and muscle function (4th ed.). Elsevier.
2. Weinberg, R. S., & Gould, D. (2023). Foundations of sport and exercise psychology (8th ed.). Human Kinetics.
3. Baghurst, T., & DeFreitas, J. (2017). Research in kinesiology, health, and sport science. Routledge.
4. Houglum, P. A., & Houglum, R. J. (2012). Brunnstrom's clinical kinesiology. F.A. Davis Company.
5. Jaimez, A. (2021). Kinesiology: The complete guide: Exploring the body language of wellness. Independently Published.
6. La Tourelle, M. (2013). Principles of kinesiology. Singing Dragon.
7. Diamond, J. (2012). Your body doesn't lie. Warner Books.
8. Diamond, J. (2013). Life energy: Using the meridians to unlock the hidden power of your emotions. Warner Books.
9. Eden, D. (2014). Energy medicine. TarcherPerigee.
10. Eden, D. (2015). Energy medicine for women: Aligning your body's energies to boost your health and vitality. TarcherPerigee.



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Core Course – 15

B.Sc.-PE-503

Sports Management

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Sports Management

- Meaning, concept and definition of sports management, Historical perspective of sports management in India.
- Nature and scope of sports management, Aims and objectives of sports management, skills of sports management

Unit – II (Contact Hours: 10 hours)

Principles and Functions of Sports Management

- Guiding principles of sports management, Leaderships, Identification of resources
- Process or function of Sports Management (Planning, Organizing, Personnel / Staffing, Direction, Controlling, Coordination).

Unit – III (Contact Hours: 10 Hours)

Planning and Supervision in Sports Management


- Definition and meaning of planning, Need and importance of planning, Principle of planning, Steps involved in planning process.
- Organization and conduct of competition at various levels (State level competition, Inter college competition, National level Competition)
- Techniques of supervision in sports management, Methods of supervision / Role of a coach/manager

Unit – IV (Contact Hours: 10 hours)

Job Specifications and Procedures in Sports Management

- Job specification of sports manager in professional and state regulated sports bodies, managers, physical educational professional, career avenues and professional preparation, Tournaments/Competitions, Types of Tournaments, Fixture, Seeding, Structure and functions of S.A.I., University Sports Council and A.I.U.
- Purchase: List of Consumable and Non- Consumable sports goods and equipment in the Department of physical education, Procedure to purchase sports goods and equipment in the department of physical education, stock entry, storing and distribution.

Learning Outcomes



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After completing this course, the learner will be able to:

1. Comprehensive Understanding of Sports Management Concepts
2. Knowledge of Principles and Functions of Sports Management
3. Proficiency in Planning, Supervision, and Conduct of Competitions
4. Practical Skills in Sports Management Operations.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Netball: Ground specifications, general rules and basic skills	15	15
II	Baseball: Ground specifications, general rules and basic skills.	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Parkhouse, B. L. (2005) The Management of Sport: Its Foundation and Application. McGraw-Hill Education, 4th Edition.
2. Chelladurai, P. (2014) Managing Organizations for Sport and Physical Activity: A Systems Perspective. Routledge, 4th Edition.
3. DeSensi, J. T., & Rosenberg, D. (2010) Ethics and Morality in Sport Management. Fitness Information Technology, 4th Edition.
4. Masteralexis, L. P., Barr, C. A., & Hums, M. A. (2018) Principles and Practice of Sport Management. Jones & Bartlett Learning, 5th Edition.
5. Sharma, V. K. (2019) Sports Management. Khel Sahitya Kendra.
6. Bucher, C. A., & Krotee, M. L.(2011) Management of Physical Education and Sport. McGraw-Hill Education, 14th Edition.
7. Kundra, S.(2017) Sports Administration and Management. Sports Publication, 1st Edition.
8. Singh, Ajmer, et al.(2004) Essentials of Physical Education. Kalyani Publishers.



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Core Course Minor – 05

B.Sc.-PE-504

Stress Management

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

- Understanding Stress
- Stress: Concept and Symptoms.
- Types of stress: Eustress and distress.
- Stressors: Environmental, Social, Psychological and Physiological. Digital exhaustion, Stressors unique to different age groups and gender

Unit – II (Contact Hours: 10 hours)

- Impact of Stress
- Impact of stress: Physical, Psychological and Social domains Relation between Stress and Physiological state: General Adaptation Syndrome

Unit – III (Contact Hours: 10 Hours)

- Assessment and Management of Stress Assessment: Academic stress, Family stress, Examination Anxiety, Stressful Life events.
- Stress Management Techniques: Yoga, Meditation, Relaxation, Self-Affirmation


Unit – IV (Contact Hours: 10 hours)

- Stress Management and Coping Counseling for stress management. Cognitive Appraisal and Restructuring.
- Managing stress through Diet, Exercise, and Social Support. Developing Coping Skills: Problem-focused and Emotion-focused.

Learning Outcomes

After completing this course, the learner will be able to:

1. To understand the nature, symptoms, and types of stress and its effect on the physical, psychological, and social domains of an individual.
2. To understand various types of stressors on academic, family, and work fronts.
3. To develop skills to manage stress by learning yoga, meditation, cognitive appraisal, relaxation, and deep breathing techniques



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Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> Stress Self-Assessment Tools: Conducting stress level assessments using tools like the Perceived Stress Scale or Academic Stress Scale. Yoga, Meditation and Relaxation: Practicing stress-reducing asanas (Savasana), pranayama, and mindfulness meditation techniques, Progressive Muscle Relaxation. 	30	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

- Sharma, S. K. (2019) Health and Physical Education. Khel Sahitya Kendra.
- Greenberg, J. S. (2016) Comprehensive Stress Management. McGraw-Hill Education, 14th Edition.
- NIMHANS (2015). Self-Help Strategies for Managing Stress. NIMHANS Publications.
- Kabat-Zinn, J. (2013) Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness. Bantam Books, Revised Edition.
- Girdano, D., Everly, G. S., & Dusek, D. E. (2012) Controlling Stress and Tension. Pearson Education, 9th Edition.
- Nagendra, H. R., & Nagarathna, R. (2009) Yoga for Stress Management. Swami Vivekananda Yoga Prakashana.
- Singh, Ajmer, et al. (2004) Essentials of Physical Education. Kalyani Publishers.
- Sapolsky, R. M. (2004) Why Zebras Don't Get Ulcers: The Acclaimed Guide to Stress, Stress-Related Diseases, and Coping. W. H. Freeman, 3rd Edition.
- Lazarus, R. S., & Folkman, S. (1984) Stress, Appraisal, and Coping. Springer Publishing Company.
- Hans Selye. (1976) The Stress of Life. McGraw-Hill Education, Revised Edition.



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Core Course – 16

B.Sc.-PE-601

Measurement and Evaluation

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Measurements and Evaluation

- Meaning and Definition.
- Importance of Measurements and Evaluation in sports.
- Principles of Measurements and Evaluation.
- Scope of Measurements and Evaluation

Unit – II (Contact Hours: 10 hours)

Introduction to Test

- Meaning and Definition of test
- Classification test: statistical test, Physical test.
- Psychomotor test, written test.
- Contraction of knowledge test and sports skill test

Unit – III (Contact Hours: 10 Hours)

Introduction to Test administration

- Advance preparation.
- Duties during the test
- Duties after test.
- Test record, report, construction of table, graphs and profiles


Unit – IV (Contact Hours: 10 hours)

- AAHPER Health related Physical Fitness Test.
- Borrow motor ability test.
- Scoot Motor ability test.
- Harvard step test.

Learning Outcomes

After completing this course, the learner will be able to:

1. Asses the fitness level of the athlete.
2. Administration the test



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Jind (Haryana) INDIA 126102

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Record test, re-test result. ● Administration of physical test. ● Demonstration of Harvard step test. ● Understanding of physical fitness. 	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Kansal, D.K. (1996) Test and measurement in sports and physical education, New Delhi DVS Publication.
2. Barrow , H.M. and McGee, R and Tritschler , K.A. (1989) practical measurement in physical education and sports (14 ed.) Landon: Lea & Febiger
3. Marrow, J R & Jackson AW (1995) Measurement and Evaluation in human performance USA Human Kinetic Publisher, Urban champaign Illionois
4. Lipman , H.A.(2009) Measurement and Evaluation in physical education. India : Friend Publication
5. Human kinetic Publisher inc. (USA) (2000)
6. Kansal D.K., (2012) A practical approaches to test measurement & evaluation. New Delhi: sports and spiritual science publication.
7. Singh, Hardyal, “Science of Sports Training” DVS Publications, New Delhi. 1991.
8. Bompa,Tudor,O “ Periodisations training for sports” :Human Kinetics (U.S.A.)1999.



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Core Course – 17

B.Sc.-PE-602

Biomechanics

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction of Fundamentals of Biomechanics

- Definition of Biomechanics & Sports Biomechanics
- Importance of Biomechanics for Sports technique
- Goals of Sports Biomechanics – Performance Enhancement, Technique, Equipment, Training, Injury Prevention and Rehabilitation

Unit – II (Contact Hours: 10 hours)

Linear and Angular Kinematics

- Linear Kinematic Quantities: Distance and Displacement, Speed and velocity, Acceleration, Vectors and scalars,
- Angular Kinematics
- Angular Distance and Displacement
- Angular Speed and Velocity

Unit – III (Contact Hours: 10 Hours)

Linear Kinetics

- Inertia, Mass, Force (Internal and External), Momentum, Friction and its types
Angular Kinetics of Human Movement:
- Eccentric force, Moment of force, Moment of Inertia and Center of gravity and its uses

Unit – IV (Contact Hours: 10 hours)


Basic Concept

- Forms of Motion
- Linear Motion
- Angular Motion
- General Motion
- Concept of Relative Motion
- Newton's Law of Linear Motion.

Learning Outcomes

After completing this course, the learner will be able to:

1. Know the concept and purpose of Biomechanics
2. Able to differentiate Kinematic and Kinetic Parameters
3. Knowledge about basic mechanics applied in sports



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Part – II Practical


Unit	Topics	Marks	Contact Hours
I	● Archery: Target& Area specifications, general rules and basic skills.	15	15
II	● Fencing: Piste specifications, general rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. McGinnis, Peter M. Biomechanics of Sport and Exercise, Second Edition (Champaign:Human kinetics publishers, 2005)
2. Robertson, D. Gordon E. et. Al. Research Methods in Biomechanics. (Champaign etc: Human kinetics publishers, 2004)
3. Hall, Susan J. Basic Biomechanics, Fourth Edition (Boston etc.:WCB/MC Graw-Hill Companies, 2004)
4. Rai Ramesh, Biomechanics – Mechanical Aspects of human motion (Mohali Punjab:Agrim Publication, 2003)
5. Hay, James G. The Biomechanics of Sports Techniques, Fourth Edition (Englewood cliffs, New Jersey; Prentice Hall, 1993)
6. Kreighbaum, Ellen and Barthels. Biomechanics – A qualitative Approach for studying Human movement. Third edition (New York:MC millan publishing company, 1990)
7. Hay, James G. and Raid J. Gavin, Anatomy, Mechanics and Human motion, Second Edition (Englewood cliffs, New Jersey: Prentice Hall, 1988).
8. Bunn, John W. Scientific Principles of Coaching, Second Edition. (Englewood cliffs, New Jersey: Prentice Hall, Inc. 1972)



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Core Course – 18

B.Sc.-PE-603

Officiating and Coaching

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction of Officiating and Coaching

- Meaning, definition and concept of Officiating and Coaching
- Principles of Officiating and Principles of Coaching
- Measures for improving the standards of Officiating and Coaching
- Relation of official and coach with management, players/teams and spectators.
- Ethics for Officiating and Coaching

Unit – II (Contact Hours: 10 hours)

Officiating

- Philosophy of Officiating
- Duties of official in general, pre, during and post-game Duties of official for various major games and sports.
- Dress Codes of officials for various major games and sports
- Numbers of officials, Officiating positions, Signals and Movement of Officials during officiating for various major games and sports.
- Latest technological advancements in the Officiating in various games and sports

Unit – III (Contact Hours: 10 Hours)

Coaching

- Philosophy of Coaching
- Duties of coach in general, pre-game, during-game and post-game duties of coach for various major games and sports.
- Latest technological advancements in the coaching for various major games and sports
- Awards for coaches at State and National level.
- Famous Coaches of various major games and sports

Unit – IV (Contact Hours: 10 hours)

Career opportunities in Coaching and Officiating

- Academic and Technical Qualifications of officials for various major games and sports.
- Academic and Technical Qualifications of coaches for various major games and sports

- Famous Institutes that offer technical qualifications in Officiating and Coaching for Sports and Game
- Career opportunities in Officiating and Coaching: Government, Clubs, Private Sectors etc.
- Qualities of an ideal coach and official.

Learning Outcomes

After completing this course, the learner will be able to:

1. Describe the Meaning, Concept and Principles of Officiating and Coaching
2. Explain the Philosophy, Duties and Latest technological
3. Advancement in Officiating
4. Illustrate the Philosophy, Duties, Latest technological Advancements and Awards in Coaching.
5. Know the basic specifications of court/ground, general rules and demonstrate the basic skills of Kabaddi and Football

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	<ul style="list-style-type: none"> • Karate: Mat area specifications, general rules and basic skills 	15	15
II	<ul style="list-style-type: none"> • Taekwondo: Competition area specifications, general rules and basic skills 	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. John Bunn. (2010). Scientific principles of Officiating. Englewood Cliffs N.J. prentice Hall
2. Bunn, J. W. (2012). The art of officiating sports. Englewood cliffs N.J. Prentice Hall.
3. Bunn, J. W. (1992). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.
4. Dyson, G. H. (1963). The mechanics of Athletics. London: University of London Press Ltd.
5. Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
6. Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.
7. Rees, Roy. (2010). Coaching Soccer Successfully Human Kinetics Windsor.
8. Cavendish, Marshall. (2012). The Sportsman's World of Soccer" Marshal Cavendish London
9. Worthington, Eric. (2011). Teaching Soccer Skill Lepus Books
10. Taylor, Hugh. (2016). The Scottish Football Book No19 Stanley Paul, London
11. Lawson P. (2001). "Soccer" National Westminster Bank Sport Coaching Series Training and Education Associates Ltd, London
12. Reilly T. & Williams Mark. (2014). Science & Soccer" Routledge, London.
13. John W. Dann. (2002). Scientific Principle of Coaching WCB, Brown and benchmark Publisher, U.S.A.



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Core Course Minor – 06

B.Sc.-PE-604

Posture and Athletic Care

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to Posture

- Meaning and Definition.
- Need and Importance of Good Posture.
- Posture deformities.
- Types of Posture deformities

Unit – II (Contact Hours: 10 hours)

Introduction to Athletic Care

- Sprint, Middle and Long Distance Trot.
- Obstacle event, Horizontal and vertical Jump.
- Combine event.
- Technical aspect of athletics event track and field events

Unit – III (Contact Hours: 10 Hours)

Introduction to Athletic Events

- Sprint, Middle and Long Distance Trot.
- Obstacle event, Horizontal and vertical Jump.
- Combine event.
- Technical aspect of athletics event track and field events.


Unit – IV (Contact Hours: 10 hours)

- Rules and Regulations of Athletic Event: track and field.
- Quality and Qualification of a good official for conduct athletic event.
- General competition rule and regulation of track and field event: Entries, clothing, shoes, bibs, number, disqualification, protest& appeal, scoring.
- Marking of standard track, Athletic Bodies International Association of Athletic Federation (IAAF) and Athletic Federation of India (AFI).

Learning Outcomes

After completing this course, the learner will be able to:

1. Comprehend the principles and importance of posture.
2. Apply method and technique for improve posture effectively.


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3. Assessments of posture at different age/gender level.
4. Understand the latest rules and regulation, and technology application in the field of athletics.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I to IV	<ul style="list-style-type: none"> ● Record speed with 30 meter running test. ● Measure strength with help dynamometer. ● Demonstration of endurance activities. ● Understanding of physical fitness and Posture. 	30	30

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Mishara S. (2007) Text book of sports Journalism. New Delhi; House Ansari Road, Darya Ganj.
2. Sita R . Text. (2004) Book of sports Journalism Nagar , Delhi friend publication ,06, mukerjee Tower,
3. Keveal J. Kumar, (2004) Mass Communication in India Mumbai : Jaico Publishing House.
4. Hoshino, Atsushi (2009) The Origin of indoor Track and field meets IAAF. Retrieved on 2011-4-09
5. Waldo E Sweet, Segal E.(1987) sports and recreation in ancient Greece . oxford University press p 37 retrieved on 03 August 2009.
6. Bell, Daniel 2003 Encyclopedia of international Games MC Farland and company, Inc. publication, Jefferson north Carolina ISBN0-7864-1026-04
7. Human kinetic Publisher inc. (USA) (2000)
8. Singh, Hardy, “Science of Sports Training” DVS Publications, New Delhi. 1991.
9. Bompa,Tudor,O “ Periodisations training for sports” :Human Kinetics (U.S.A.)1999.



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Core Course Minor – 07

B.Sc.-PE-605

Adapted Physical Education

Max Marks: 100

Theory: 70 (Internal Assessment = 20 + 50 End Term Exam)

Practical: 30 (Internal Assessment = 10 + 20 End Term Exam)

Question Paper: 50 Marks

Time Allowed: 3 Hours

Instructions for Question Paper Setter

The question paper will consist of Five Units I, II, III, IV and V. Units I, II, III & IV will have two questions from their respective Units of the Syllabus and will carry 10 marks each. Unit Vth will consist of 5 short answer type questions, which will cover the entire syllabus and will carry 2 marks for each question.

Unit – I (Contact Hours: 10 hours)

Introduction to adapted physical education

- Meaning, definition, and scope of adapted physical education.
- Need for and importance of adapted physical education.
- Objectives and principles of adapted physical education
- Role and responsibilities of an adapted physical educator
- Provisions of special rights and privileges for differently abled through legislations
- Social welfare programmes for differently abled
- Mass public educations/awareness programmes

Unit – II (Contact Hours: 10 hours)

Understanding Disabilities

- Types of disabilities: Physical, intellectual, sensory, and behavioral.
- Characteristics and needs of individuals with disabilities.
- Common conditions: autism spectrum disorder, cerebral palsy, Down syndrome, visual and hearing impairments, etc.
- Barriers to physical activity and strategies to overcome them.
- Social Determination, Social Rejection

Unit – III (Contact Hours: 10 Hours)


Adapted physical education programme

- Guiding Principles for Adapted Physical Education Programme (AAHPER Principle)
- Physical Education Programme for Differently abled school children:
- Co-Curricular activities for differently abled children
- Aquatic activity programmes for differently abled
- Rehabilitative role & importance of aquatic activity

Unit – IV (Contact Hours: 10 hours)

Assessment and Evaluation in Adapted Physical Education

- Purpose and importance of assessment in APE.
- Tools and techniques for assessing motor skills, physical fitness, and functional abilities.
- Monitoring progress and providing feedback.



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- Case studies and real-world applications.

Learning Outcomes

After completing this course, the learner will be able to:

1. Define and explain the principles of adapted physical education.
2. Identify and classify different types of disabilities.
3. Design inclusive physical education programs for individuals with special needs.
4. Apply assessment tools to evaluate motor skills and physical fitness in individuals with disabilities.

Part – II Practical


Unit	Topics	Marks	Contact Hours
I	Chess: Board specifications, general rules and basic skills	15	15
II	Tennis: Court specifications, general rules and basic skills	15	15

Internal Assessment: 10 Marks Evaluation through Assignments/ Quiz/ Viva Voce/ Practical Record File. (05 Marks for Each Unit)

End Term Exam: 20 Marks Evaluation through Skill of handling the instrument / Demonstration/ Viva Voce/ Practical Record File (10 Marks for Each Unit)

Learning Resources

1. Winnick, J. P., & Porretta, D. L. (2016). Adapted Physical Education and Sport (6th ed.). Human Kinetics.
2. Sherrill, C. (2004). Adapted Physical Activity, Recreation, and Sport: Crossdisciplinary and Lifespan (6th ed.). McGraw-Hill.
3. Auxter, D., Pyfer, J., & Huettig, C. (2010). Principles and Methods of Adapted Physical Education and Recreation (11th ed.). McGraw-Hill.
4. Lieberman, L. J., & Houston-Wilson, C. (2017). Strategies for Inclusion: A Handbook for Physical Educators (3rd ed.). Human Kinetics.
5. DePauw, K. P., & Gavron, S. J. (2005). Disability and Sport (2nd ed.). Human Kinetics.



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