



Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE

DEEMED TO BE UNIVERSITY

(An ISO 9001 : 2015 Certified Institution)

University with Graded Autonomy Status

Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu. India.



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Maduravoyal, Chennai - 600 095. Tamilnadu. India.

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New Curriculum Structure for 3 years courses

2020 Regulations

**BACHELOR OF PHYSICAL EDUCATION
AND SPORTS**

(BPES)

**CURRICULUM
STRUCTURE**



Semester : 1

Course Code	Course Title	C	L	T/SLr	P/R	T / L / ETP
HBTA20001	Tamil-I/Hindi-I/French-I	3	0	0	3	T
HBEN20001	English-I	3	0	0	3	T
HBPE20001	Rules of Games and Sports - Part-I Football/Kabaddi/Throws	3	1	0	4	T
HBPE20002	History and Foundation of Physical Education	4	0	0	4	T
HBPE20003	Organization and Administration in Physical Education	4	0	0	4	T
	Practical					
HBPE20L01	Practical-I	0	0	3	2	
	Total Credits.....20					

Semester : 2

Course Code	Course Title	C	L	T/SLr	P/R	T / L / ETP
HBTA20002	Tamil-II/Hindi-II/French-II	3	0	0	3	T
HBEN20002	English-II	3	0	0	3	T
HBPE20004	Methods in Physical Education	4	0	0	4	T
HBPE20005	Rules of Games and Sports- Part -II (Cricket, Volleyball, Jumps)	3	1	0	4	T
HBPE20006	Health and Safety Education	4	0	0	4	T
	Practical					
HBPE20L02	Practical-II	0	0	3	2	
	Total Credits.....20					

Semester : 3

Course Code	Course Title	C	L	T/SLr	P/R	T / L / ETP
HBPE20007	Fundamentals of Anatomy and Physiology	4	0	0	4	T
HBPE20008	Tests, Measurements and Evaluation	4	0	0	4	T
HBPE20009	Rules of Games and Sports-Part - III (Basketball, Kho-Kho, Track Events)	3	1	0	4	T
HBPE20010	Sports Management in Physical Education	4	0	0	4	T
HBPE20011	Recreational and Camping activities	4	0	0	4	T
	Practical					
HBPE20L03	Practical-III	0	0	3	2	
	Total Credits.....22					



Semester: 4

Course Code	Course Title	C	L	T/SLr	P/R	T / L/ ETL
HBPE20012	Sports Psychology and Sports Journalism	4	0	0	4	
HBPE20013	Exercise Physiology	4	0	0	4	
HBPE20014	Rules of Games and Sports-Part - IV Badminton/ Table Tennis/ Throw ball	3	1	0	4	
HBMG20001	Environmental Studies	4	0	0	4	
	Practical					
HBPE20L04	Practical-IV Officiating and Coaching	0	0	3	2	
HBPE20L05	Practical-V Specialization Games Skill	0	0	3	2	
	Total Credits.....20					

Semester : 5

Course Code	Course Title	C	L	T/SLr	P/R	T / L/ ETL
	Elective – 1					T
HBPE20E15/ HBPE20E16	1. Kinesiology and Biomechanics 2. Scientific principles of sports training	4	0	0	4	
HBPE20016	Personality Development and Soft Skills	4	0	0	4	T
HBPE20017	Computer Application in Physical Education	4	0	0	4	T
HBPE20018	Rules of Games and Sports-Part - V Ball Badminton/ Tennis/ Tennikoit	3	1	0	4	T
HBPE20019	Elementary Research Methods and Statistics	3	0	0	3	T
	Practical					
HBPE20L06	Practical- VI Officiating and Coaching	0	0	3	2	T
HBPE20L07	Practical-VII Specialization Games Skill	0	0	3	2	T
	Total Credits.....23					

Semester: 6

Course Code	Course Title	C	L	T/SLr	P/R	T / L/ ETL
HBPE20020	Introduction to Training Methods	4	0	0	4	T
HBPE20E21 / HBPE20E22	Electives – 2 1. Sports Medicine 2. Fundamentals of Human Biology and	4	0	0	4	T
HBPE20022	Care of Athletics and Sports Injuries	3	0	0	3	
HBPE20023	Rules of Games and Sports-Part VI Hockey/ Handball/ Aquatics	3	1	0	4	
HBPE20P01	Project Sports Meet				10	
	Total Credits.....25					
	Total Credits ----- 130					



Semester – I

Paper – I

HBPE20001	Rule of Games and Sports - Part-I Football/Kabaddi/Throws	L	T	P	C
		3	1	0	4

OBJECTIVES

- To Understand the basics of Football, Kabaddi and Throwing Events
- To Gain knowledge on Football, Kabaddi and Throwing Events with rules involved
- To Attain knowledge on the concepts of Playing Football and Kabaddi & how to Throw
- To Acquire Rules involved in Football, Kabaddi and Throwing events
- To Understand Fouls and the punishments for infringing the rules.

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT : II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.



Paper – II

HBPE20002	History and Foundations of Physical Education	L	T	P	C
		4	0	0	4

OBJECTIVES

- To understand the basics of History of Physical Education
- To Apply knowledge on Foundations of Physical Education
- To analyze knowledge on the concepts different Foundations of Physical Education
- To Evaluate History with reference to the Foundations of Physical Education
- To Remember the interdependence of History and Foundations.

Unit– I

Introduction - Meaning, Definition and Scope of Physical Education - Aims and Objective of Physical Education - Importance of Physical Education in present era. - Misconceptions about Physical Education.- Relationship of Physical Education with General Education. - Physical Education as an Art and Science.

Unit- II

Historical Development of Physical Education in India - Vedic Period (2500 BC – 600 BC) -Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD) -British Period (Before 1947) Physical Education in India (After 1947) -Y.M.C.A. and its contributions. -The early history of the Olympic movement -The significant stages in the development of the modern Olympic movement -Educational and cultural values of Olympic movement

Unit- III

Foundation of Physical Education -Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism, Humanism, -Philosophy and Culture-Fitness and wellness movement in the contemporary perspectives -Sports for all and its role in the maintenance and promotion of fitness.

Unit-IV

Principles of Physical Education -Biological -Growth and development -Age and gender characteristics -Body Types - Anthropometric differences -Psychological differences.

Unit – V

Learning - Learning types, learning curve -Laws and principles of learning -Attitude, interest, cognition, emotions and sentiments -Sociological -Society and culture -Social acceptance and recognition -Leadership -Social integration and cohesiveness

References:

- 1 Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co.
- 2 Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.
- 3 Mohan, V. M. (1969). Principles of physical education. Delhi: Metropolitan Book Dep.
- 4 Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co.
- 5 Obertuffer, (1970). Delbert physical education. New York: Harper & Brothers Publisher.
- 5 Sharman, J. R. (1964). Introduction to physical education. New York: A.S. Barnes & Co.



Paper – III

HBPE20003	Organization and Administration in Physical Education	L	T	P	C
		4	0	0	4

OBJECTIVES

- To understand the basics of Organization
- To Apply knowledge of Organization
- To analyze the concepts of Organization
- To Evaluate Administration with reference to Physical Education
- To Remember the interdependence of Organization and Administration

Unit I

Meaning - Nature and scope of organization and administration, principles of organization and administration.- Scheme of organization. - Relationship of physical education and sports with other socializing institutions (family and educational system). - Sports as regulating institution of society-State and religion. How do they influence each other? - Sports and social problems. Behaviour of Sportsmen and spectators. - Leadership through physical education and sports.

Unit II

Facilities: Play field location, standard, preparation, layout and maintenance.- Gymnasium - construction, factors, care and maintenance and allied facilities.- Swimming pool - construction, dimensions, filtration and supervision of pool.

Equipments in physical education: Need and importance - lists of equipments- suggested type of equipments- criteria for selection procedure of purchase- records-maintenance- care and maintenance of equipments.

Unit III

Staff and Leadership: Importance of qualified teacher, qualities & qualifications of good teacher, values, staff cooperation - Selection and training of student leaders, qualities of student leadership, role of student leaders, recognition of student leaders - Time-Table: Physical Education classes, required periods, instruction period, practice period, games period, participation periods, factors affecting time-table.

Unit IV

Programme of Activities: Intramurals. Importance of organizing Intramurals. Units and methods of competition, activities, points systems role, awards and incentives for participation - Extramurals: Training and Coaching - Selection - Training and coaching - extent of participation, Sports tours - Educational emphasis, behaviour & character - Office Management: Management of office correspondence, records and reports filing, relationship with superior officer and assistants - Budget: Physical Education Budget - budget , income and expenditure, accounting, petty cash & settlement.

Unit V

Public Relation: Definition - Need of public relations in physical education. Principles of public relations in physical education. Techniques and Media of Relation with the public, parents, pupils and other agencies - Evaluation: Need and importance - Method of evaluation in terms of objectives. Detection of deficiencies, examination in physical education follow up action for improvement.

Reference Books:

1. Voltmer and Esslinger - Organisation and Administration, Times of India Press, Bombay, 1964.
2. P.M. Joseph, Organisation of Physical Education O.S: A.T.I.P.E.Kaudivali (Bombay), 1956.
3. Hughes and French - Administration of Physical Education. Ronald Press Co., New York, 1954.
4. Irwin Leslie, W and Humyhrey, James H., Principles and Techniques of Supervision in physical education, C.V. Mosby Co., St. Louis, 1960.
5. Bennett, Bruce L. Mapwell L. Howell and Vriel Simri Comparative physical Education and Sports Lea and Fabiger Pub, Philadelphia, 1983.
6. Jay J. Coakley, Sport in society issues and controversics St. Louis, Mosby College Publishing Co., 1986.
7. Edwards, Sociology of Sports - Illinois Dorsey Press, 1986.
8. NI. Ponomorvov, Sports and Society - Moscow: Progress Publisher, 1981.
9. Bryant J. Gatty, Psychology - in contemporary sports, Englewood Cliffs, New Jersey, 1973.



Semester – II Paper – I

HBPE20004	Methods in Physical Education	L	T	P	C
		4	0	0	4

OBJECTIVES

- To understand the basics of Fixtures
- To Apply knowledge of Methods
- To analyze the concepts of Methods
- To Evaluate Methods with reference to Physical Education
- To Remember the different Methods followed in Physical Education

Unit I

Meaning of the Term Method and the factors to be considered in determine the method of teaching learning process and conditions of learning.

Unit II

Methods of teaching (with special reference to different kinds of physical activities).Calisthenics – Gymnastics - Minor games - Major games - Rhythmic activities - Principles of teaching: - Simple to complex - Part to whole - Learning by doing - Intrinsic and extrinsic Motivation - Frequency and duration of instruction – Recognition - Methods of Teaching Physical activities.

Unit III

Presentation technique and steps in the way of presentation - Steps in teaching motor skills, establishing concept providing experienced with whole and parts, analysis of performance etc. - Command and class management: Types of commands - situations when used different commands - Types of formation - Class management - Principles for good class management.

Unit IV

Lesson planning: Types of lesson plan and objectives - values of lesson plan - General Lesson Plan - various parts of lesson. Introductory, preparatory, skill part group activity and concluding part - Coaching Lesson Plan - various parts of lesson Warming - up Physical (General and Special) Technical and Tactical preparation.

Unit V

Tournaments - Meaning and type of tournaments - Knock out or Elimination tournaments - League or Round Robin Tournaments - Combination Tournaments - Challenge tournaments - Different types to be covered under each category.

Reference Books:

1. Knapp. Clyde and Hagmani, E.p.Teaching Methods for Physical Education. New York, Mc Graw Hill Book Co.,Inc., 1948.
2. Kozman, B. Cassidy Rosalind and Jackson, C.O. Methods in Physical Education: London W.B.Saunders Cop., 1960.
3. Thirunarayanan, C. Hariharan. S. Methods in Physical Education: Karaikudi, South India Press, 1962.



Paper – II

HBPE20005	Rules of Games and Sports- Part –II (Cricket, Volleyball, Jumps)	L	T	P	C
		3	1	0	4

OBJECTIVES

- To understand the basics of Cricket, Volleyball and Jumping Events
- To impart knowledge on Cricket, Volleyball and Jumping Events with rules involved
- To impart knowledge on the concepts of Playing Cricket, Volleyball & how to Jump
- To understand Rules involved in Cricket, Volleyball and Jumping events
- To Understand Fouls and the punishments for infringing the rules.

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.



Paper – III

HBPE20006	Health and Safety Education	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Understand the basics of Health
- To Apply knowledge of Safety
- To Analyze the concepts of Health
- To Evaluate Health and Safety Education with reference to Physical Education
- To Remember the different applications of Health and Safety followed in Physical Education

Unit I

Health -Definition - meaning and concept - factors influencing health. Health determinants, Hereditary and Environment - Environment pollutions - Meaning of Health Education, its need, scope for students, aim and objectives of health education - Health Education Principles: Methods and media of health education.

Unit II

Personal Hygiene. Need and importance of personal hygiene - School Health Programme – History - School health problems - Appraisal aspect including morning health instruction - Brief introduction of safety education. First Aid Emergency Care - Healthful school living - School health administration - Mental health and child placement - School Health records - Mid-day school meal programme.

Unit III

Food & Nutrition: Classification of foods - Description of proximate principles - Role of various vitamins and minerals - Balance diet for Indian players and school children - Assessment of Nutritional status Malnutrition, Food Additives. Adulteration of food.

Unit IV

Infection: causes of disease- Mode of infec.tin. Spread of infection - public health measures to combat infection - public health administration - sanitation - water supply - Immunity - prophylactic immunization - programmes – AIDS - Communicable diseases, malaria, typhoid, cholera, dysentery, leprosy, tuberculosis, std, polio, tetanus - Drug abuse - alcohol, smoking - Family Welfare - Sex education.

Unit V

Safety Education: Safety at home- Environment and structure. Electrical connections,, bathrooms and lavatory, storing articles, kitchen and fire place, storing medicines. Principles of movements in daily living - Safety at school structure and Environment, furniture and fixtures, school procedures and policies, precautionary and emergency equipment, collection of information (address of parents, hospitals and doctors, police, fire station, ambulance service.) - Safety in Physical Education and sports - principles of safety with respect to buildings and playfields. Principles of safety with respect to equipments, dress etc., principles of safety with respect to organization of classes demonstration and matches - Policies and practices to prevent accident and rendering first aid and treatment - Accident reporting and maintenance of records - Safety considerations with special reference of specific games in the school and college curriculum - Safety on roads, camps, picnics and tours - Safety in water, firewood, hurricane, thunder and lightning and air raids.

Reference Books:

1. Mangal S.K. and Chandra, P.C. Health and Physical Education, R.D. Tandon Brothers, Ludhiana, 1979.
2. Moss, R. and et.al., Health Education, National Educational Annual, U.S.A.
3. Neiniyah, School Health Education, Harper & Brothers.
4. Park, J.E. Text Book of Preventive and Social Medicine.



Semester – III
Paper – I

HBPE20007	Fundamentals of Anatomy and Physiology	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Understand Need and Importance of Anatomy
- To Apply knowledge of Skeletal Systems
- To Learn the structure of the Human Heart
- To Evaluate the Human Nervous System
- To Remember the basics of Urinary System

Unit I

Introduction: Need and Importance of anatomy and physiology for the students of physical education - Descriptive terms used to describe the human body - Definition of cell, Tissue, Organ and system - Microscopic structure of the Cell - Classification, Structure and functions of various types of tissues.

Unit II

Skeletal systems: Names of the human bones, classification of joints, Definitions of the skeletal system - Joints: Definition and classification of joints - Anatomical structure of synovial joints, terminology of movements around a joint.

Unit III

Structure of the heart, Systematic pulmonary, Coronary circulation - Blood- Functions of blood, composition of blood, lymph and its functions - Respiratory system - Definition of respiration, structure and functions of respiratory system, mechanism for respiration lung volumes.

Unit IV

Nervous systems - Structure and functions of brain, spinal cord and reflex arc - Digestive system- Structure and functions of alimentary canal, Accessory organs of digestive - liver, pancreas, Gall bladder - Muscular system- Structural and functions classification of muscles, (skeletal, cardiac and smooth) and its significance. General characteristics of muscles. (Elasticity, Contractibility & Irritability).

Unit V

Urinary system- Structure and functions of kidney and Urinary tract, formation of Urine. Brief account of Reproductive system - Endocrine system: Pituitary, thyroid, parathyroid, adrenal, pancreas and sex glands - Organs of special senses- Eye, ear, nose, tongue, skin and regulation of body temperature.

Reference Books:

1. Davis, Dv. Wtay's Anatomy, London Longmans Grenn and Co Ltd. 1967.
2. Pearce, Evelyn B. Anatomy and Physiology for Nurses, London Faber and Faber Ltd., 1962.
3. Pearce, J .W. Anatomy for Students and Teachers of Physical Education, London, Edward Arnold and Co., 1959.
4. Anderson, T.Mc. Ierg Human Kinetics and Aealysing Body Movement. London, William Heinman Medical Books Ltd., 1961.



Paper – II

HBPE20008	Tests, Measurements and Evaluation	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Understand Need and Importance of Tests
- To Apply knowledge of Measurements
- To Learn the Methods of Evaluation
- To Evaluate Tests and Measurements
- To Remember the Evaluation

Unit - I

Meaning of Test, Measurement and Evaluation – Brief History of Test, Measurement and Evaluation, - Need and Importance of Measurement and Evaluation in Physical Education.

Unit - II

Classification of Test – Standardized and Teacher Made test – Objective and subjective Tests –Construction of Knowledge’s test and skill Test –Administration of Test – Duties during testing – Duties after Testing.

Unit - III

Criteria for Test Selection – Validity – Reliability – Objectivity – Norms - Administrations Economic Feasibility – Educational Applications - Followup.

Unit - IV

Definition – Health Related fitness – Skill Related Physical fitness – JCR Test – AAPHER youth physical fitness Test – Harvard step cooper 12 Minute Run/ Walk Test.

Unit - V

Basketball – Johnson Basketball ability Test, Hockey - Friedel Field Hockey Test
Soccer – MC Donald

Soccer Test, Volleyball – Russel Lange Volley Ball Test, Badminton – Miller Wall Volley Test. Tennis – Broer Miller Tennis test.

Book for Reference

1. Safrit Margarat J Measurement in Physical Education and Exercises science, St louis Times Morrormos by college publishing 1986.
2. Bosco James Measurement and Evaluation in Physical Education and sports New Jersey Prentice Hall In 1983.
3. Barry L. Johnson, Jack K. Nelson and Measurements for Evaluation in physical education the surjeet Publications.
4. A.K.Gupta Tests & Measurements in physical Education sports publication New Delhi – 52
5. A Practical applied to measurement in Physical Education – HoroldM.Borrow.



Paper – III

HBPE20009	Rules of Games and Sports- Part – III (Basketball, Kho-Kho, Track Events)	L	T	P	C
		4	0	0	4

OBJECTIVES

- To understand the basics of Basketball, Kho-Kho and Track Events
- To impart knowledge on Basketball, Kho-Kho and Track Events with rules involved
- To impart knowledge on the concepts of Playing Basketball, Kho-Kho & how to run on Track
- To understand Rules involved in Basketball, Kho-Kho and Track events
- To Understand Fouls and the punishments for infringing the rules.

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT : II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.



Paper – IV

HBPE20010	Sports Management in Physical Education	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Understand Meaning and Importance of Sports Management
- To Apply knowledge of Personnel Management
- To Learn the Methods of Sports Marketing
- To Learn the Supply of Sports Equipments
- To Acquire knowledge of Accounting and Budgeting

UNIT-I

Meaning and Definition of Sports management - Scope of Sports management - Basic principles of Sports management - Functions of sports management.

UNIT-II

Personal management: Objectives - Personal policies - Personal Recruitment - Role of Personal manager. Programme management: Importance of Programme development - Factors influencing programme development - Competitive sports programs.

UNIT-III

Sports marketing: Meaning - Factors involved in the marketing of sports - Market awareness - Developing a target market strategy - Quality and price of sports products.

UNIT-IV

Supplies of sports Equipments: Guidelines for selection and supply of equipments - Equipment room, Equipment and supply manager - Guidelines for checking, storing and issuing - Care and maintenance of equipments.

UNIT-V

Accounting and Budgeting - Definition and role of accounting in sport and fitness enterprise Raising of funds - Types of Budget - Budget record maintenance - The accounting system.

REFERENCE

1. Bucher A. Charles (1993) Management of physical Education and sports (10th ed.,) St.Louis :Mobsy Publishing Company.
2. Chelladurai. P (1999) Human Resource Management in sport and Recreation, Human kinetics.
3. Chakraborty, Samiram (1988), Sports Management, Sports publications, New Delhi.
4. Lazer. W and Cultey.J Marketing Management. Boston Houghton Miffling Co
5. Ruben Acosta Hernandez, Managing sport organizations, Human kinetics



Paper – V

HBPE20011	Recreational and Camping activities	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Understand Meaning and Importance of Recreation
- To Apply knowledge of Camping
- To Learn the Methods of creating Recreational activities
- To Learn the effects of Recreation
- To Acquire knowledge of the results of Camping activities

Unit I

Meaning and Definition of recreation - Scope and Significance of recreation.

Unit II

Agencies providing recreation. (Municipal Agencies, public, private, voluntary, youth serving Agencies.)

Rural, Urban community and industrial recreation.

Unit III

Types of recreational activities, indoor and outdoor games, leadership in recreation.

Unit IV: CAMPING:

Scope and Significance of camping - Types of camps, selection and lay out of camp sites.

Unit V

Organisation and administration of camps (camp programme and activities). Leadership and supervision - Evaluation of camp work.

Reference Books:

1. Ford, H.G. Recreation in the American community, Harper & Brothers Publishers, New York, 1953.
2. Butler GD. Introduction of Community Recreation McGraw - Hill Book Company, Inc., New York, 1949.
3. Royappa, D.J. and Govind Rajulu, L.K. Camping and Education, Jupiter Press Private Ltd, Madras, 1973.
4. Rubin, R. Book of Camping, N.V. Assn Press, 1949.
5. Torkildsen, G. Leisure and 'recreation Management, E.& F.N. Span Ltd., New York, 1986.



SEMESTER IV

Paper – I

HBPE20012	SPORTS PSYCHOLOGY AND SPORTS JOURNALISM	L	T	P	C
		4	0	0	4

OBJECTIVES

- To be aware of the Meaning and Importance of Sports Psychology
- To Comprehend the Meaning and Importance of Sports Journalism
- To Recognize the different Laws of Learning
- To Understand the effects Motivation on learning
- To Acquire knowledge of Mass Media and influence of Media on Sports

Unit-I

Meaning and definition of Psychology and sports Psychology – Development of sports Psychology in India – Need and importance of sports Psychology in the field Physical Education and sports.

Unit - II

Learning- Meaning, nature and principles of learning. Traditional theories of learning (trial and errors, conditional reflex, learning by insight, learning by imitation). Laws of learning (readiness, effect, exercise). Learning curve and its characteristics.

Unit - III

Motivation and performance- Meaning of motivation, motives, unlearned (innate) and learned (required) motives. Emotions- meaning and type of emotions, influence of emotions on level of achievements.

Unit – IV

Meaning of Journalism and sports Journalism - Canons of Journalism - News, Information and Ideas - Journalism and sports Education.

Unit - V

Mass Media in Journalism, influence of Media on sports and vice-versa. Sports as a social phenomenon and a cultural product.

Books for Reference:

1. Alderman A.B. Psychological Behaviour in sports W.B. Saundar company, Saundar 1974.
2. Puni A.T. Sports psychology chanduga NIS.
3. Alderman Psychology Behavior
4. Cratty B.J. Psychology and Physical activity
5. Singer R.N. Coaching, Athletics and psychology.



Paper – II

HBPE20013	Exercise Physiology	L	T	P	C
		4	0	0	4

OBJECTIVES

- To be aware of the Meaning and Importance Exercises
- To Comprehend the Meaning and Importance of Physiology
- To Recognize Effect of Exercise on the various systems of the body
- To Understand the effects Nerve control of muscular activity
- To Acquire knowledge of Metabolism

Unit I

Meaning, Nature and scope of Exercise Physiology.

Unit II

Effect of Exercise on the various systems of the body with special emphasis on the – circulatory - respiratory - digestive - muscular - endocrine and nervous system - excretory system. Muscle contraction and exercise - Properties and composition of voluntary muscles. Minute structure of voluntary muscle. Changes in muscle contraction

Unit III

Nerve control of muscular activity, control of motor and sensory activity by cerebrum and cerebellum, muscle spindle, Golgi tendon organs, reflex arc and action. Conditions affecting muscular contraction.

Unit - IV

Metabolism – Anabolism and catabolism - Source of Energy - Carbohydrates, proteins and fats, Anaerobic - and Aerobic Glycolysis, Metabolism of protein and fat. - Energy requirements for sports - optional utilization of energy for different activities. Aerobic and Anaerobic Metabolism, endocrine system.

Unit- V

Exercise and temperature regulation in Hot and Cold climate – Exercise and Altitude – Sex differences on exercise – aging and exercise – Physical Conditioning. Factors influencing Sports performance - Warming up - Conditioning - Training - Relation between performance and Exercise

Reference Books:

1. Guyton, AC. Functions of the Human Body, London W.B. Saunders Company, Latest Ed.
2. Srivastara etc. Text Book of Practical Book of Physiology Calcutta scientific Book Agency.
3. More house and Miller. Physiology of exercise, St. Louis, CV. Mosby Company Latest Ed.
4. Karporich and sinning. Physiology of muscular Activity, London W.B. Saunders Company 1955.
5. Shaver. L. Essentials of Exercise physiology.



Paper – III

HBPE20014	Rules of Games and Sports – Part- IV Badminton/ Table Tennis/ Throw ball	L	T	P	C
		4	0	0	4

UNIT: I

OBJECTIVES

- To understand the basics of Badminton, Table Tennis and Throwball
- To impart knowledge on Badminton, Table Tennis and Throwball with rules involved
- To impart knowledge on the concepts of Playing Badminton, Table Tennis and Throwball
- To understand Rules involved in Badminton, Table Tennis and Throwball
- To Understand Fouls and the punishments for infringing the rules.

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT : II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.



Paper - IV

HBMG20001	Environmental Studies	L	T	P	C
		4	0	0	4

UNIT – I

UNIT - ENVIRONMENT AND ECOSYSTEM

OBJECTIVES

- To Be aware of the Meaning and Importance Environment and Ecosystem
- To Comprehend the Environmental Pollution
- To Recognize Natural Resources
- To Understand the Social Issues and the Environment
- To Acquire knowledge of Human Population and Environment

Definition, Scope and Importance of environment – Need for public awareness, Concept, Structure and Function of an eco system – Producers, Consumers, and Decomposers, Energy Flow in the Ecosystem, Biodiversity at National and Local Levels – India

UNIT – II ENVIRONMENT POLLUTION

Definition – Causes, Effects and Control Measures of (a) Air Pollution (b) Water Pollution (c) Soil Pollution (d) Marine Pollution (e) Noise Pollution (f) Nuclear Hazards (g) E – Wastes - Causes, Effects and Control Measures.

UNIT- III - NATURAL RESOURCES

Forest Resources: Use and over exploitation, deforestation - Water Resources: Use and over utilization of surface and ground water, floods, drought, conflicts over water, dams, - benefits and problems - Food Resources – World food problems , changes caused by agriculture and over grazing, effects of modern agriculture , Fertilizer - pesticide problems.

UNIT-IV - SOCIAL ISSUES AND THE ENVIRONMENT

From Unsustainable to Sustainable development – Urban Problems related to Energy - Water conservation – Rain water harvesting – Watershed Management - Resettlement and Rehabilitation of people, its problems and concerns - Climate change, global warming, acid rain, ozone layer depletion - Nuclear accidents – central and state pollution control boards – Public awareness

UNIT-V - HUMAN POPULATION AND THE ENVIRONMENT

Population growth, variation among Nations - Population Explosion , environment and human health - Human rights, Value education – HIV / AIDS – Women and child welfare - Role of information Technology in environment and Human Health.

REFERENCE BOOKS:

1. Gilbert M. Masters, "Introduction to Environmental Engineering and Science", 2nd Edition, Pearson Education (2004)
2. Benny Joseph, "Environmental Science and Engineering", Tata McGraw Hill, New Delhi (2006).



SEMESTER V

Paper – I (ELECTIVE-I)

HBPE20E15	Kinesiology and Bio-Mechanics	L	T	P	C
		4	0	0	4

OBJECTIVES

- To Be Aware of the Meaning, Importance and objectives of Kinesiology
- To Comprehend the Origin and Insertion of the Muscles
- To Recognize Biomechanics and types of motion
- To Understand the Angular Kinematics
- To Acquire knowledge of Linear Kinematics

Unit I - HISTORY, MEANING AND OBJECTIVES OF KINESIOLOGY

Introduction: Meaning, brief history, aim and objectives, importance of Kinesiology for Physical Education and Sports - Fundamental Concept: Structural classification of muscles - types of contraction (concentric eccentric and static), muscle tone postural muscles, reciprocal innervation and inhibition strength reflex, group action, direction and angle of pull and its significance, action of two joint muscles, relation of muscles and bone coverage, center of gravity, line of gravity, axis and planes of motion fundamental, starting positions, terminology of fundamental movements, functional classifications of muscles.

Unit II – ORIGIN AND INSERTION OF MUSCLES

Location, Origin, insertion and action of muscles at various joints - Upper extremity - shoulder girdle, shoulder joints, elbow joint, wrist joint, metapalmar joints. - Lower extremity - hip joint, knee joint, ankle joint, metatarsal joints - Muscular analysis of fundamental movement. Walking, running, jumping, throwing, catching, pulling, pushing, striking, hanging.

Unit III – BIO-MECHANICS – TYPES OF MOTION

Introduction: Meaning, aims, objectives and importance - Types of Motion: Linear motion and angular motion.

Unit IV – ANGULAR KINAMATICS

Angular Kinematics: Angular speed, angular velocity, angular acceleration and relationship between angular motion and projectile - Linear Kinematics: Speed, velocity, acceleration and uniform acceleration, motion and projectile motion.

Unit V – LINEAR KINETICS

Linear Kinetics: Mass, weight, force, pressure, work, power, energy, impulse, momentum, impact, friction and Newton's Law of Motion - Angular Kinetics: Movement of inertia, conservation of momentum, transfer of momentum, levers, equilibrium.

Reference Books:

1. Kinesiology Scientific is of Human motion by Luttgens & Wells.
2. Kelly, D.L. Kinesiology and Fundamentals of Motion Descriptions, Prentice Hall.
3. McClusg, A. Human Kinetics and Analysis of Body Movements, William Heinmann, London.
4. Neil, D.E. Kinesiology and Anatomy and Motion, Mosby & Co..
5. Sunderarajan, G.S. Bio-Mechanics of Sports and Games, Roshan Publications, Chennai 1979.



SEMESTER V

Paper – I (ELECTIVE-II)

HBPE20E16	SCIENTIFIC PRINCIPLES OF SPORTS TRAINING	L	T	P	C
		4	0	0	4

UNIT - I

Introduction to Sports Training & Coaching a) Meaning, definitions, aim and objectives of Sports Training and Coaching. b) Characteristics of Sports Training. c) Principles of Sports Training and Coaching 2. a) Qualities and qualifications of a successful coach. b) Nature and scope of coaching profession

UNIT - II

a) Sports Talent Identification and Development b) Psychological and sociological factors in training competition. 2. a) Technique : Meaning of technique, skill and style, significance of technique training in different sports. b) Factors affecting technique training, phases of technique training and their implications.

UNIT - III.

Training Load and Recovery: a) Factors of training load: quality of movement, types of exercise, load volume, load intensity b) Principles of Loading. c) Over Load : meaning, causes, symptoms and tackling d) Adaptation process- factors affecting recovery, means of faster recovery. 2. Meaning, forms, factors determining and training methods of a Strength, b) Speed c) Endurance d) Flexibility e) Co-ordinative abilities:

UNIT – IV

Tactical Training : Meaning of strategy and tactics, difference between strategy and tactics, significance of tactics, tactical training means. 2. Competitions : Types and importance of competitions as a methods of training. 3. Environmental factors and Sports Training.

UNIT – V

Periodisation - Meaning and types of periodisation, contents of training and coaching for different periods. 2. Planning- Meaning, principles and types of training plans. 3. Monitoring of the training schedule.

REFERENCE BOOKS:

1. Dick Franek W. “ Sports Training Principles” Ist edition 1980: Henry Kimpton Publishers Ltd. Leigon Road London NWS2QL
2. Herre Dictrich , “Principles of Sports Training”, 1982 Sports verlag, Germany.
3. Matyeyer L.P. , “Fundamentals of sports training”, 2nd Edition 1981, Published by Progress Publishers Mosco, Russia
4. Singh Hardyal;”Science of Sports Training” (New Delhi, Dvs Publications) 1997, Kirti Nagar, Kalkaji, New Delhi.
5. Uppal A.K. Principles of Sports Training (Delhi : Friends Publications) 2001
6. Uppal A.K. Science of Sports Training (Delhi : Friends Publications) 2009
7. Lawther John D. Psychology of Coaching (Prentice Hall, Inc. Engle wood Cliffs) COURSE

OUTCOMES: • understand the concept, Scientific principles and forms of sports training. • develop Methods of Training for all of the Fitness components • Technical and Tactical training methods to develop 15 • acquaint the students with dimensions and actual markings of different play fields, courts and arenas. • Factors Influencing Training Programme



Paper – II

HBPE20016	Personality Development and Soft Skills	L	T	P	C
		3	1	0	4

OBJECTIVES

- To Be aware of SWOT analysis
- To Comprehend the Leadership Networking And Team Work
- To Recognize Attitude And Decision Making
- To Understand Intrinsic And Extrinsic Motivation
- To Acquire knowledge of SMART Goals And Time Management

UNIT I - SWOT ANALYSIS

Strength, Weaknesses, Opportunities and Threats (SWOT) Analysis, Who am I, Attributes, Importance of Self Confidence, Self Esteem. Causes of Stress and its impact, how to manage & distress, Circle of control, Stress Busters. Emotional Intelligence What is Emotional Intelligence, emotional quotient why Emotional Intelligence matters, Emotion Scales. Managing Emotions.

UNIT II – LEADERSHIP NETWORKING AND TEAM WORK

Gratitude Understanding the relationship between Leadership Networking & Team work. Assessing Interpersonal Skills Situation description of Interpersonal Skill. Team Work: Necessity of Team Work Personally, Socially and Educationally

UNIT III – ATTITUDE AND DECISION MAKING

Factors influencing Attitude, Challenges and lessons from Attitude, Etiquette. Importance and necessity of Decision Making, Process and practical way of Decision Making, Weighing Positives & Negatives.

UNIT IV – INTRINSIC AND EXTRINSIC MOTIVATION

Factors of motivation, Self talk, Intrinsic & Extrinsic Motivators. Conflicts in Human Relations – Reasons Case Studies, Approaches to conflict resolution. Skills for a good Leader, Assessment of Leadership Skills

UNIT V – SMART GOALS AND TIME MANAGEMENT

Wish List, (**Specific** and **Measurable**.- **Achievable**, **Relevant** and **Time-bound**) SMART Goals, Blue print for success, Short Term, Long Term, Life Time Goals. Time Management Value of time, Diagnosing Time Management, Weekly Planner To do list, Prioritizing work.

REFERENCE

1. Covey Sean, Seven Habits of Highly Effective Teens, New York, Fireside Publishers, 1998.
2. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998.
3. Thomas A Harris, I am ok, You are ok , New York-Harper and Row, 1972
4. Daniel Coleman, Emotional Intelligence, Bantam Book, 2006



Paper – III

HBPE20017	Computer Application in Physical Education	L	T	P	C
		3	1	0	4

UNIT – I – MEANING AND DEFINITION OF COMPUTERS

Meaning and definition of computer, Components of a Computer System, Central Processing Unit, Visual Display Unit, Keyboard. Input and output devices, mouse, joy stick, scanner, printer.

UNIT –II – CONCEPT OF MEMORY

Concept of Memory, primary and secondary memory, RAM and ROM, units of memory – byte, kilobytes, megabytes, gigabytes. Storage devices, floppy disc, hard disc, CD ROM and DVD.

UNIT-III - BASIC WINDOWS ACCESSORIES AND MS WORD

Introduction to word processor, creating and saving a document, editing and formatting a document, inserting symbol, printing a document, adding headers and footers, numbering pages.

UNIT-IV - MS EXCEL & MS POWER POINT

Ms-Excel-Opening – Saving – Editing File – Basic Mathematical Problems – Addition, Subtraction, Multiplication, Division – **Ms Power Point** – Opening – Creating Saving – Deleting Slides / Templates – Slide Show – Important Feature of Power point Presentation.

UNIT- V – USE OF COMPUTER APPLCATION IN PHYSICAL EDUCATION

Word processing to develop documentation - Spreadsheets to manage information and numbers - Database program to manage a database with relationships - Desktop publishing program to enhance text and graphics - Graphics and support tools for graphic design - Web page development - Electronic communication and search - Presentation software - Other computer programs for specific purposes - Application of computers in research - International Journal of Physical Education, Sports and Health - Application of computers in motor learning and control - Application in the field of exercise physiology Exercise physiology research - Using computers in measuring variables Determination of maximum oxygen consumption - Fitness prescription - Body composition - Application in the field of bio-mechanics - Application of computers in sports psychology

References:

1. Vikas Gupta, (1995) Computer Course, Delhi: PutakMahal.
2. French, C.S. (1986) Data Processing, New Delhi: Galgotia Book Source.
3. Haggery, T., The Administrative use of computers in professional Sport Organization, New York.
4. Maria Langer, World of Windows, Barkeley: Peachpit Press.



Paper – IV

HBPE20018	Rules of Games and Sports- Part- V Ball Badminton/ Tennis/ Tennikoit	L	T	P	C
		3	1	0	4

OBJECTIVES

- To understand the basics of Ball Badminton, Tennis and Tennikoit
- To impart knowledge on Ball Badminton, Tennis and Tennikoit with rules involved
- To impart knowledge on the concepts of Playing Ball Badminton, Tennis and Tennikoit
- To understand Rules involved in Ball Badminton, Tennis and Tennikoit
- To Understand Fouls and the punishments for infringing the rules.

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT : II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

Paper – V

Unit	HBPE20019	Elementary Research Methods and Statistics	L	T	P	C
			3	0	0	3

OBJECTIVES

- To Be Aware of the Meaning, Importance of Research Methodology
- To Comprehend the Research Problem
- To Recognize the Research Questions and Hypothesis
- To Understand the Basics of Statistical Analysis
- To Acquire knowledge of Statistical Models in Physical Education and Sports

– I - INTRODUCTION TO RESEARCH METHODOLOGY

Introduction to Research Methodology: Meaning of Research, Objectives of Research, Motivations in Research, types of Research, Research Approaches, Significance of Research, Research Methods v/s Methodology, Research and Scientific Methods, Research Process, Criteria of Good Research.

Unit – II – THE RESEARCH PROBLEM

Defining the Research Problem: Concept and need, Identification of Research problem, defining and delimiting Research problem.

Unit – III – RESEARCH QUESTIONS AND HYPOTHESIS

Research Questions and Hypothesis: Variables and their linkages, characteristics of good Hypothesis. Research question and formulation of hypotheses-directional and non-directional hypotheses, Basis for hypotheses.

Unit- IV – BASICS OF STATISTICAL ANALYSIS

Basics of Statistical Analysis - Statistics: Meaning, Definition, Nature and Importance - Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables -Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram

Unit- V – STATISTICAL MODELS IN PHYSICAL EDUCATION AND SPORTS

Statistical Models in Physical Education and Sports - Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data - Measures of Variability: Meaning, importance, computing from group and ungroup data - Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data

References:

1. Best, J.W. (1963). Research in education. U.S.A.: Prentice Hall.
2. Bompa, T. O. &Haff, G. G. (2009). Periodization: theory and methodology of training, 5thed.
3. Champaign, IL: Human Kinetics. Brown, L. E., &Ferrigno, V. A. (2005). Training for speed, agility and quickness, 2nded.
4. Champaign, IL: Human Kinetics. Brown, L.E. & Miller, J., (2005). How the training work. In: Training Speed, Agility, and Quickness.
5. Carl, E. K., & Daniel, D. A. (1969). Modern principles of athletes training. St. Louis: St. Louis’s Mosby Company.
6. Clark, H. H., & Clark, D. H. (1975). Research process in physical education. Englewood cliffs, New Jersey: Prentice Hall, Inc.
7. Garrett, H.E. (1981). Statistics in psychology and education. New York: VakilsFeffer and Simon Ltd.

SEMESTER VI

Paper – I

HBPE20020	Introduction to Training Methods	L	T	P	C
		4	0	0	4

Unit I - INTRODUCTION TO SPORTS TRAINING & COACHING

a) Meaning, definitions, aim and objectives of Sports Training and Coaching. b) Characteristics of Sports Training. c) Principles of Sports Training and Coaching 2. a) Qualities and qualifications of a successful coach. b) Nature and scope of coaching profession

OBJECTIVES

- To Be Aware of the Meaning, Importance of Research Methodology
- To Comprehend the Research Problem
- To Recognize the Research Questions and Hypothesis
- To Understand the Basics of Statistical Analysis
- To Acquire knowledge of Statistical Models in Physical Education and Sports

Unit II - TRAINING LOAD

Importance features of training load, (Intensity, density, duration and frequency), principles of Training load, relationship between the load and adaptation, conditions of adaptation.

Unit III - DEVELOPMENT OF IMPORTANT MOTOR COMPONENTS

Strength - forms of strength, characteristics of strength, strength training means and methods - Endurance - forms of endurance, characteristics of endurance, endurance training means and methods - Speed - forms of speed, characteristics of speed, speed training means and methods - Flexibility - Forms of flexibility characteristics of flexibility, basis of flexibility methods of development of flexibility - Agility - forms of agility, characteristics of agility methods of development of agility - Co-ordination - Motor development and its implications in relation to sex and age groups.

Unit IV - TECHNICAL AND TACTICAL PREPARATION

Fundamental and methods for the development of technique in sports - Stages technical development - Causes and correction of faults - Tactical concepts, methods of tactical development.

Unit V - TRAINING PLANS

: Long term and short term plans - Periodisation (single and multiple) cyclic process of training - Main and build-up competitions, competition frequency, preparation for competition.

Reference Books:

1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

Paper – II(ELECTIVE –I)

HBPE20E21	SPORTS MEDICINE	L	T	P	C
		4	0	0	4

OBJECTIVES

Importance of sports medicine

- Scope of sports medicine
- Role of sports medicine expert in enhancing sports performance
- Sports injuries, their prevention, management and rehabilitation
- Ill effects of drug use

SPORTS MEDICINE

UNIT - I

Introduction to Sports Medicine i. Meaning, concept and scope of Sports Medicine ii. Historical back ground of Sports Medicine iii. Need and importance of Sports Medicine Hygiene and Athlete : iv. Sports hygiene: Meaning, concept and scope v. Personal hygiene; Bodily cleanliness, personal belongings, vi. Hygiene in camps and competitions

UNIT – II

Health Hazards in sports i. Dope : History, definition, classification and their adverse effects on Health and Sports performance ii. Role of Managers and Coaches in controlling the dope problems iii. Malnutrition among athletes and its correction, Environmental Stress Safety in sports iv. Gymnasium, play ground and swimming pool safety v. Safety appliances in different sports and their uses vi. Provisions of safety rules in competitive sports and principles of safety

UNIT - III

Sports Injuries : 16 i. Classification of injuries in sports ii. Causes of injuries in sports iii. Role of rules and regulations in prevention of injuries iv. General preventive measures to minimize sports injuries v. Specific preventive measures to minimize sports injuries

UNIT - IV

Management of Sports Injuries Soft tissue injuries : Signs, Symptoms and Management of - i. Abrasions, Blisters, Lacerations, Puncture wounds, Corn, Contusions ii. Muscle strains, Tendon injuries, Bursitis & Sprains iii. Dislocations : Causes, Signs, Symptoms and Management iv. Fractures : Types, Causes, Signs, Symptom and Management v. Head Injuries

UNIT - V

Physiotherapy and its use in the treatment and rehabilitation in sports injuries. i. Exercise therapy : Types and Principles ii. Massage Therapy : Types, Techniques, Indication and Contra indications. iii. Therapeutic Modalities iv. Different forms of Hydrotherapy and thermotherapy v. Hot and Cold Packs, Whirlpool, Contrast bath, Parafin bath vi. Infrared, Ultra-violet, Ultra Sonic, Short wave diathermy, Electric Muscle Stimulation, Indications and Contra-indications of each therapy

Reference Books Recommended :

1. Marua K. Anderson, Malissa marlin : "Quick References Guide for sports injury Management" 2. Dr. P.K. Pande Sports Medicine
3. Griffith H. Winter : " Complete guide to sports, injuries.
4. Borozne, Joseph and bechar stanley, safely in team sports.
5. Clarke Kenneth S: Drugs and the coach
6. Borozne, Joseph and Pechar stanly: Administration and Supervision for Safety in Sports.
7. Ryan A.J. and Fred L. Athman : " Sports Medicine"
8. Johnson W.R. : Science and Medicine of exercise and sports.
9. Govindarajulu N. Sports Medicine, Friends Publications, New Delhi, India.

Paper – II(ELECTIVE –II)

HBPE20E22	Fundamentals of Human Biology & Yoga	L	T	P	C
		4	0	0	4

Unit-I

OBJECTIVES

Importance of sports medicine

- Scope of sports medicine
- Role of sports medicine expert in enhancing sports performance
- Sports injuries, their prevention, management and rehabilitation
- Ill effects of drug use

Introduction: Human Body- Meaning and its Importance in Yoga Definition of Anatomy and Physiology Cell: Structure & Function Tissues: Types, Structure

Unit-II

General information, Different parts, Structure, Function and Effect of yogic practices. & Musculo-Skeletal System Function. Digestive system

Unit-III

General information, Different parts, Structure, Function and Effect of yogic practices. Excretory system: Respiratory System

Unit-IV

General information, Different parts, Structure, Function and Effect of yogic practices. - Circulatory system

Unit-V

General information, Different parts, Structure, Function and Effect of yogic practices Nervous System Endocrinal system

Essential Readings:

1. Shirley Teles - A Glimpses of the Human Body, Sw. Vivekanand yoga prakashan, Bangalore.
 2. M.M. Gore - Anatomy and Physiology of yogic Practices, Motilal banarsidass, New Delhi, 2007.
 3. Ross & Wilson - Human Anatomy and Physiology in Health & Illness, Churchill Livingstone; 2010 Suggested Readings
- : 1. Dr. Rakesh Dixit-Sharir Rachana Evam Kriya Vijnan, Bhasha Bhavan, Mathura, 2005.
2. Inderveer Singh-Anatomy and Physiology for Nurses, Jaypee brothers publisher, 2008.

Paper – III

HBPE20022	Care of Athletic and Sports Injuries	L	T	P	C
		3	0	0	3

OBJECTIVES

- To Be Aware of the Meaning, Importance of Types of movements
- To Comprehend the Postural Tests
- To Recognize the a brief history of massage and remedial exercises
- To Understand the Common Athletic Injuries And Their Treatment
- To Acquire knowledge of Heat Treatments

Unit I - TYPES OF MOVEMENTS

Concentric, eccentric (Isotonic), Static (Isometric) and isokinetic exercises. Posture and body mechanics- Standards of standing posture, values of good posture, drawback and causes of poor posture.

Unit II - POSTURAL TESTS

Examination of the spine. New York State posture Rating Chart Test, Organisation of special classes for postural correction - Some common deviation in posture - normal curvature of the spine and its utility, kyphosis, lordosis, kypholordosis, flat back, scoliosis (C and S curve, functional and structural round shoulders) - Knock knees, bow legs, flat foot, causes for these deviations and treatment including exercise.

Unit III - A BRIEF HISTORY OF MASSAGE AND REMEDIAL EXERCISES

Muscle relaxation as an aid to massage - Points to be considered in giving massage - Physiological effects of massage - Classification of the manipulations used in massage and their specific uses on the Human body. a Stroking manipulation - Effleurage, Stroking, Kneading, Friction, Hackinh, Clapping, Beating and Pounding.

Unit IV - COMMON ATHLETIC INJURIES AND THEIR TREATMENT

Sprains - Strains - Contusions – Abrasions - Type of fractures and their management

Unit V – HEAT TREATMENTS

Principles of applying heat/cold, ultra-violet rays, infra-red rays, contrast bath ultrasonic

Reference Books:

1. Corrective Physical Education, Rathborne J. I.W.B. Saunders and Co., London 1965.
2. Manual of Massage and Movement, Prof E.M. Naro Faber and Faber Ltd.
3. Therapeutic Exercise for Body Alignment and Education, by William Mareuam and Catherine Worthingham, WB. Saunders and Co., 1965.
4. Massage and Medical Gymnastics, M.V. Lace J.& A. Churchill Ltd., m 1951.
5. Preventive and Corrective Physical Education Stafford and Kelly, New York. The Ronald Press, 1968.

Paper – IV

HBPE20023	Rules of Games and Sports- Part - VI Hockey/ Handball/ Aquatics	L	T	P	C
		4	0	0	4

OBJECTIVES

- To understand the basics of Hockey, Handball, Aquatics
- To impart knowledge on Hockey, Handball, Aquatics with rules involved
- To impart knowledge on the concepts of Playing Hockey, Handball, Aquatics
- To understand Rules involved in Hockey, Handball, Aquatics
- To Understand Fouls and the punishments for infringing the rules.

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT : II

Fundamental Skill- Lead Up Games - Various System of Play – Selection of Players.

UNIT: III

Layout of Playfield with all Measurements, Facilities and equipment and its specifications

UNIT: IV

General Principles of officiating – Qualification and qualities of officials – Philosophy of officiating.

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

1. Ballon B. Ralph Teaching Badminton Delhi, Surjeet Publication 1982
2. Buck's Rules Book.
3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1986.