BHARATHIDASAN UNIVERSITY, TIRUCHIRAPALLI - 620 024

B.Sc. Physical Education – Course Structure under CBCS

(For the candidates admitted from the year 2008-2009 onwards)

u	ıt	#		'u. rs	lit	ı. S	Marks		
Sem	Part	COURSE	COURSE TITLE	Instru. Hours	Credit	Exam Hours	Int .	Ext.	TOTAL
	I	Language Course – I (LC) Tamil * / Other Language**#		6	3	3	25	75	100
	II	English Language Course – I (ELC)		6	3	3	25	75	100
I		Core Course – I (CC)	Foundations of Physical Education and Sports	6	5	3	25	75	100
	III	Core Course – II (CC)	Practical – I Major Games-I and Track &Field-I	3	-	***			100
	1111	First Allied Course – I (AC)	Anatomy and Physiology	6	4	3	25	75	100
		First Allied Course – II (AC)	Practical – II Yoga and Gymnastics	3		***			
	I	Language Course - II (LC) Tamil * / Other Language**#		6	3	3	25	75	100
	II	English Language Course - II (ELC)		6	3	3	25	75	100
	Ш	Core Course – II (CC)	Practical – I Major Games-I and Track &Field-I	3	5	3	40	60	100
II		Core Course – III (CC)	Theories of Major Games-I and Track & Field-I	6	4	3	25	75	100
		First Allied Course – II (AC) Theory	Practical – II Yoga and Gymnastics	3	3	3	40	60	100
		First Allied Course – III (AC)	Theories of Yoga and Gymnastics	6	3	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100
	V	Value Education		2	2	3	25	75	100
	I	Language Course – III (LC) Tamil * / Other Language**#		6	3	3	25	75	100
III	II	English Language Course– III (ELC)		6	3	3	25	75	100
		Core Course – IV (CC)	Organization administration and Methods in Physical Education	6	5	3	25	75	100
111	III	Second Allied Course – I (AC)	Health Education, Safety Education and First Aid	6	4	3	25	75	100
		Second Allied Course – II (AC)	Exercise Physiology	2		***			
		Skill Based Elective I		2	2	3	25	75	100

	IV	Non-Major Elective – I – for those who studied Tamil under Part – I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil up to +2 but opt for other languages in degree programme	 Sports Management Kinesiology Fundamentals of Yoga Education 	2	2	3	25	75	100
	I	English Language Course - IV (LC) Tamil * / Other Language**#		6	3	3	25	75	100
	II	English Language Course - IV (ELC)		6	3	3	25	75	100
		Core Course – V (CC)	Practical-III Major Games - II	4	3	3	40	60	100
	III	Core Course – VI (CC)	Practical-IV Track and Field -II	4	3	3	40	60	100
	111	Second Allied Course – II	Exercise Physiology	2	3	3	25	75	100
IV		Second Allied Course – III	Sports Psychology and Sociology	4	3	3	25	75	100
	IV	Non-Major Elective – II – for those who studied Tamil under Part – II c) Basic Tamil for other language students d) Special Tamil for those who studied Tamil up to +2 but opt for other languages in degree programme	 Modern Trends in Physical Education Sports Bio-Mechanics Methods of Yogic Practices 	2	2	3	25	75	100
		Skill Based Elective – II		2	2	3	25	75	100
		Core Course – VII (CC)	Theories of Major Game – II	5	4	3	25	75	100
		Core Course – VIII (CC)	Test, Measurement and Evaluation in Physical Education	5	4	3	25	75	100
	III	Core Course – IX (CC)	Theories of Track and Field – II	5	4	3	25	75	100
V	111	Core Course – X (CC)	Science of Sports Training	6	4	3	25		100
•		Core Course – XI (CC)	Practical – V Specialization Major Games	-	3	*	-	-	-
		Major Based Elective-I	Sports Journalism	5	5	3	25	75	100
	IV	Skill Based Elective – III		2	2	3	25	75	100
	1 4	Skill Based Elective – IV		2	2	3	25	75	100
VI	III	Core Course – XI (CC)	Practical – V Specialization Major Games	4	3	*	-	-	100
V 1	111	Core Course – XII (CC)	Theories of Track and Field – III	4	4	3	25	75	100

	Core Course – XIII (CC)	Theories of Specialization Major Games	4	4	3	25	75	100
	Core Course – XIV (CC)	Practical— VI Track and Field— III	4	3	*	-	-	100
	Major Based Elective - II	Statistics	5	5	3	25	75	100
	Major Based Elective - III	Methods in Physical Education	5	5	3	25	75	100
137	Skill Based Elective – V		2	2	3	25	75	100
IV	Skill Based Elective – VI		2	2	3	25	75	100
V	Extension activities		-	1	-	-	-	-

Note:

	Internal Marks	External Marks
1. Theory	25	75
2. Practical	40	60

3. Separate passing minimum is prescribed for Internal and External marks

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks]

The passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

- * for those who studied Tamil upto +2 (Regular Stream)
- ** Syllabus for other Languages should be on par with Tamil at Degree level
- # those who studied Tamil upto 10th or +2, but opt for other languages in degree level under Part I should study special Tamil in Part IV
- *** Examination at the end of the next semester.

Extension activities shall be out side the instruction hours.

FOUNDATIONS OF PHYSICAL EDUCATION AND SPORTS

UNIT: I

Meaning and Definition of Education and Physical Education – Need, Nature and Scope of Physical Education – Physical Training and Physical Culture

UNIT: II

Aim and Objectives of Physical education – Development of Physical, Cognitive, Neuro-muscular, Affective, Social, Emotional, Spiritual and Recreational – Theories of Learning – Laws of Learning

UNIT: III

Scientific basis of Physical Education – Contribution of Allied Sciences – Anatomy, Physiology, Biomechanics, Kinesiology, Sports Medicine, Psychology, Sociology and Computer Science

UNIT: IV

History of Physical Education in Sparta and Athens – Olympic Games: Ancient, Modern – Origin – Organisation and conduct of the game – Olympic Flag, Torch, Oath, emblem and Motto

UNIT: V

Recent developments in India: SAI, NSNIS, SNIPES, LNIPE, Sports Academics – Awards and Scholarships: Arjuna Award, Dhronochariya Award, Rajiv Gandhi Khela Ratna Award – International and National Competitions: Asian Games, SAF, SGF, RDS, and BDS

- 1. Bucher Charles A., Foundationas of Physical Education, St. Louis the C.V. Mosby Company, 1983.
- 2. Kamalesh M.L., Physical Education: Facts and Foundation, New Delhi, P.B. Publications, 1988.
- 3. Thirunarayanan, C. and Hariharan, S., Analytical History of Physical Education, Karaikudi, C.T. & S.H., Publications, 1990.
- 4. Sharma, O.P., History of Physical Education, New Delhi, Khel Shitya Kendra, 1998.
- 5. Wakharkar D.G., Manual of Physical Education in India, Pearl Publications Pvt. Ltd., Bombay, 1967.

PRACTICAL – I MAJOR GAMES – I and TRACK & FIELD – I

(Major Games : Football, Kabaddi & Volleyball

Track & Field: Sprint and Middle Distance Race)

Testing on:

Ц	Fundamental Skills
	Finer Skills
	Playing Ability / Performance
	Officiating Technique

Books for Reference:

- 1. Conling David, Atheletics, London, Robert Hale, 1980.
- 2. Prabhakar Eric, The way to Athletic Gold, Madras East–West Press Pvt. Ltd, 1995.
- 3. Dr. P. Mariayyah, Football, Sports Publications, Raja Street, Coimbatore.
- 4. Dr. P. Mariayyah, Kabaddi, Sports Publications, Raja Street, Coimbatore.
- 5. Dr. P. Mariayyah, Volleyball, Sports Publications, Raja Street, Coimbatore.
- 6. Dr. P. Mariayyah, Track and Field, Sports Publications, Raja Street, Coimbatore.
- 7. Thompson William, Teaching Soccer, Delhi, Surjeet Publications, 1996.
- 8. Carting Ganagon, Play Better Soccer in All Colour, W.B. Saubders Company, 1972.
- 9. Dhanaraj V. Hubert, Volleyball A Modren Approach, Patiala, Sainsoris, 1991.

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	35
Playing ability / Performance	:	20
Officiating Technique	:	10
Record note	:	10

TOTA : 75

ANATOMY AND PHYSIOLOGY

UNIT: I

Meaning of Anatomy and Physiology – Need and Scope of Anatomy and Physiology in Physical Education – Cell – Structure and Functions – Tisuues – Types and Function

Muscular System – Types of Muscles: Skeletal Muscle, Cardiac Muscle, and Smooth Muscle.

UNIT: II

Skeleton: Meaning and Functions – Bones: Classification and Functions - General Features of Various Bones: Vertebral Column, Pelvic Bone, Radius and Ulna, Sacbula, Femer and Bones of Skull – Joints: Definition and Classification of Joints

UNIT: III

Nervous System: Neuron – Central Nervous System (CNS): Brain and Spinal Cord – Peripheral Nervous System (PNS): Cranial Nerves and Spinal Nerves – Digestive System: Structure & Functions – Digestive Process – Liver, Pancreas – Functions

UNIT: IV

Respiratory System – Respiration – Respiratory Track – Alveoli – Lungs: Structure & Functions – Gas Exchange – Vital Capacity

Circulatory System – Heart: Structure & Functions – Cardiac Cycle, Cardiac Output, Stroke Volume

UNIT: IV

Endocrine Glands – Functions of Endocrine Glands: Pituitary, Thyroid, Para-Thyroid, Thymus, Pancreas, Adrenal, & Sex – their role, in growth, development and regulations of body functions

- 1. Guyton A.C., Functions of the Human Body, London, W.B. Saunders Company, 1969
- 2. Dr.V. Selvam "Anatomy and Physiology" Bodinayakanur.
- 3. Dr. N.M. MUTHAYYA "Physiology" J.J. Publications, Madurai.
- 4. SEELEY et. all Anatomy and Physiology Mc Graw Hill.
- 5. Srivastava et. all, Text Book of Practical Physiology, Calcutta Scientific Book Agency, 1976

PRACTICAL – II YOGA AND GYMNASTICS

YOGA:

Testing the Listed Asanas, Pranayamas and Kriyas in the THEORY Paper.

GYMNASTICS:

Testing the Elementary Skills on

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- ☐ Parallel Bars
- ☐ Horizontal Bar
- ☐ Roman Rings
- ☐ Vaulting Horse
- ☐ Spring Board

Books for Reference:

- 1. SWAMI KUVALAYANANDA, Asanas, Kaivalyadhama, Lonavala, Pune.
- 2. B.K.S. IYANKAR, Light on Yoga Harper Collins Publications, Delhi.
- 3. Dr. P. MARIAYYAH, Asanas, Sports Publishers, Raja Street, Coimbatore-1
- 4. Dr.P.MARIAYYAH, Suriyanamaskar Jaya Publishing House, Perunthurai, Erode.
- 5. Dr. K. CHANDRASEKARAN, Sound Health Through Yoga, Prem Kalyan Publications, Sedapatti, Madurai, 1999.
- 6. Modak Pintu, Gymnastics: A Scientific Approach, Pilani, Runthala Publishers, 1996.
- 7. CoopnPhyllis and Milan Trnka, Teaching Gymnastic Skills to Men and Women, Surject Publications, Delhi, 1982

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	35
Playing ability / Performance	:	20
Officiating Technique		10
Record note	:	10

TOTAL : 75

THEORIES OF MAJOR GAMES – I and TRACK & FIELD – I (Major Games: Football, Kabaddi & Volleyball

Track & Field : Sprint and Middle Distance Race)

UNIT: I

Origin, History and Development of the Game – International, National and State Level Organizations

UNIT: II

Fundamental Skills – Lead-Up Games, Various System of play – Selection of Players

UNIT: III

Training: Warm-Up Technical Training – Tactical Training – Coaching Programme

UNIT: IV

Layout of Playfield – Rules and Their Interpretations – Methods of Officiating Duties of Officials – Important Tournaments and Cups

UNIT: IV

Athletics: Sprint and Middle Distance Race

- 1. Conling David, Atheletics, London, Robert Hale, 1980.
- 2. Prabhakar Eric, The way to Athletic Gold, Madras East West Press Pvt. Ltd, 1995.
- 3. Dr. P. Mariayyah, Football, Sports Publications, Raja Street, Coimbatore.
- 4. Dr. P. Mariayyah, Kabaddi, Sports Publications, Raja Street, Coimbatore.
- 5. Dr. P. Mariayyah, Volleyball, Sports Publications, Raja Street, Coimbatore.
- 6. Dr. P. Mariayyah, Track and Field, Sports Publications, Raja Street, Coimbatore.
- 7. Thompson William, Teaching Soccer, Delhi, Surjeet Publications, 1996.
- 8. Carting Ganagon, Play Better Soccer in All Colour, W.B. Saubders Company, 1972.
- 9. Dhanaraj V. Hubert, Volleyball-A Modren Approach, Patiala, Sainsoris, 1991.

THEORIES OF YOGA AND GYMNASTICS

UNIT: I

History of Yoga – Aims and Objectives of Yoga – Ashtanga Yoga: Patanjalai Eight Limbs of Yoga – Principles of Practising Asana and Pranayama.

<u>Yogic Techniques : Methods & Benefits</u> **Asanas :** *Relaxative Asanas -* Shanthiasana / Savasana, Makarasana. *Meditative Asanas -* Padmasana, Vajrasasna, Sukhasana

UNIT: II

<u>Yogic Techniques : Methods & Benefits</u> **Asanas :** *Cultural Asanas —* Bhujangasana, Salabhasana, Dhanurasana, Pascimottanasana, Vakrasana, Ardha Matsyendrasana, Yogamudra, Viparita Karani, Sarvangasana, Halasana, Mayurasana, Sirshasana, Chakrasana, Parvatasana, Bakasana & Suryanamaskar

UNIT: III

<u>Yogic Techniques : Methods & Benefits:</u> **Pranayama :** Naddi Suddhi, Nadi Shodhana, Kaphalabhathi, Ujjiayi, Sitali, Sitkari.

Meaning of Kriya – Types of Kriyas: Kaphalabhathi, Trataka, Neti, Dhauthi, Nauli, Basti.

Trataka: Practicing Method – Benefits.

Neti: Jala Neti, Sutra Neti – Methods of Practicing Neti and its benefits.

Dhauthi: Vamana Dhauthi, Vastra Dhauthi – Methods of Practicing Dhauthi and its benefits.

UNIT: IV

History of Gymnastics – Meaning of Gymnastics

Types of Gymnastics: Basic, Auxiliary and Sportive – Importance of Gymnastics

UNIT: IV

Safety Measures in Gymnastics

Measurements of Apparatus and Basic Skills on: Parallel Bars, Horizontal Bar, Roman Rings, Vaulting Horse, Floor, Spring Board

- 1. SWAMI KUVALAYANANDA, Asanas, Kaivalyadhama, Lonavala, Pune.
- 2. B.K.S. IYANKAR, Light on Yoga Harper Collins Publications, Delhi.
- 3. Dr. P. MARIAYYAH, Asanas, Sports Publishers, Raja Street, Coimbatore-1
- 4. Dr.P.MARIAYYAH, Suriyanamaskar Jaya Publishing House, Perunthurai, Erode.
- 5. Dr. K. CHANDRASEKARAN, Sound Health Through Yoga, Prem Kalyan Publications, Sedapatti, Madurai, 1999.
- 6. Modak Pintu, Gymnastics: A Scientific Approach, Pilani, Runthala Publishers, 1996.
- 7. CoopnPhyllis and Milan Trnka, Teaching Gymnastic Skills to Men and Women, Surject Publications, Delhi, 1982

ORGANIZATION, ADMINISTRATION AND METHODS IN PHYSICAL EDUCATION

Unit – I

Meaning and Importance of Organization and administration – Scheme of Physical Education in: Schools, Colleges, Universities, Districts.

Unit – II

Facilities - Track, Play Grounds, Gymnasium, Swimming Pole - Layout of play fields (Basketball, Kabaddi, Hockey, Volleyball, Cricket) Care and Maintenance of play fields.

Unit – III

Method in Physical Education – Meaning - Factors influencing Method – Presentation Technique – Teaching Aids – Principles of Class Management.

Unit – IV

Teaching of activities: Marching, Calisthenics, light apparatus (Wands, hooks, Poles), Lezium, folk dance – Minor Games – Lead up activities.

Unit – IV

Organizing Tournaments and sports Meets (closed and open)- Fixtures: Knock out, League, Combination – Intramurals - Extra murals.

- 1. Kamlesh M.L. Scientifie "Art of teaching physical Education" New Delhi Metropolitan 1994.
- 2. Thiru. Narayanan C and & Harihara Sharma "Methods in Physical Education" Karaikudi CJ and S.H. 1989.
- 3. Joseph. P.M. "Organization of Physical Education".

HEALTH EDUCATION, SAFETY EDUCATION AND FIRST AID

UNIT – I

Meaning - Definition of Health Education –Aim, Scope of Health Education- role of International Organizations (WHO, UNICEF), National, State Level Health Organizations

UNIT - II

Physical Health- Physical Fitness – Health related fitness – performance related fitness – components of Health related fitness and performance related fitness – mental health.

UNIT – III

Communicable Diseases - Causes, modes of spread - Prevention of Tuberculosis, Malaria, Filaria, small pox, Chicken pox, and AIDS

UNIT – IV

Definition of Safety Education- factors affecting safety Education –need and Importance of Safety Education - Safety in Play fields, swimming pool, Gymnasium.

UNIT - V

Definition - Importance of First Aid - Athletic injuries: Sprain, Strain, contusion, Fracture, Dislocation, Muscle Cramp, Abrasion and Puncture.

- 1) Park and Park "Preventive and social medicine"
- 2) Anderson "School Health Practice".
- 3) Bedi Yashpal "Social and Preventive medicine".

EXERCISE PHYSIOLOGY

Unit - I

Meaning and scope of Physiology of exercise - Structure and function of skeletal Muscles - Types of Muscle fibers - Red and White - Types of Muscular Contraction - Isotonic Isometric and Isokinetic - Effect of exercise on Muscular system - Hypertrophy, Hypo trophy.

Unit - II

Mechanism of respiration – respiratory muscles – Lung volumes and Capacities - Heart rate – Stroke Volume – Cardiac cycle – Cardiac Output during rest and Exercise – Blood pressure – Systolic, Diastolic – Effect of exercise on Respiratory system and Circulatory system.

Unit - III

Nervous System – Types of Nervous System – Central Nervous System (CNS) and Peripheral Nervous System (PNS) – Structure of Neuron - Effect of exercise on Nervous system.

Unit - IV

Metabolism – Anabolism and catabolism - sources of energy – Aerobic and Anaerobic Metabolism, Fat metabolism and protein metabolism and 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.

- 1. Devrises H.A Physiology of exercise for physical Education and Athletics London, Staples Press 1976.
- 2. More house LE and Milter A.T. Physiology of exercise St Louis, The CV Mosby Company 1976.
- 3. Jonson W.R. Science and Medicine of exercise and sports London Harper & Bros 1974.
- 4. Guyton AC Text book of Medical Physiology W.B. Soundars Company Philadelphia.
- 5. Bourne GH the Structure and function of Muscle London Academic Press.

SPORTS MANAGEMENT

UNIT – I

Meaning –Definition and Functions of Sports Management – Importance and Historical Background of Sports Management –Interpersonal Roles in Manpower planning – Meaning of Recruitment – Sports Organization.

UNIT – II

Nature, Principles and Purpose of Organization – Systems of Organization – Leadership: Meaning - Personal Traits – Attitude and Behavior approach – Qualities of a Leader – Positional power.

UNIT – III

Concepts and Need of Motivation in Sports Organization – Job feed back – Types of Public Relation – Role of Government, Media, and Conference – Finances – Qualities of Good Public Relation Organization.

UNIT - IV

Concepts, Objectives and Need for Strategies for Vocational Guidance; Principles – Approaches – Career Talk – Industrial visit – Personal, Social, Vocational Counseling, Social Guidance; Purpose-Types of Social Problems – Social Needs and Social Life. Personal Guidance: Concepts, Purpose – Emotional Characteristics of Adolescents.

UNIT V

Infrastructure – Equipment – Salaries and Wages – Raising of Funds – Budget, Record maintenance and Purchase of Equipment - Advantages – Essentials – Types of Budget – Research and Development, Budget – Funds collection prices.

- 1. S.S. Roy, Sports Management: Friends Publications: New Delhi.
- 2. Samiran Chakrabarty, Sports Management: Sports Publications: Delhi, 1998.
- 3. Janet A. Wessel, Luke Keely, Achievement Based Curriculum Development in Physical Education: Lea & Febiger, 1986.

KINESIOLOGY

Unit - I

Meaning and definition – Brief history of Kinesiology – Academic and Professional objectives of kinesiology – Need and importance of kinesiology - Role of Kinesiology in Physical Education and Sports.

Unit - II

Classification of joints and Muscles Terminology of fundamental Movements at the joints Flexion, Extension, abduction, Adduction, Rotation Circumduction etc – Multi – Joints Muscles.

Unit - III

Structures and function of Joints – Elbow joint, Wrist Joint, Shoulder joint, Knee joint, and Ankle, Hip Joint.

Unit - IV

Location, Origin, Insertion and action of the following muscles - Biceps, Triceps, Pectoralis Major Hamstring groups, Quarterceps groups, Gartrocnemius. Rectus abdomin us and Trapeziums.

Unit - V

Application of Kinesiology Principles in fundamental Movement – walking, Running, Jumping Throwing, Pulling and Pushing.

- 1. Coper and Glassgow, Kinisiology joint, Louis C.V.Mosby Company 1976.
- 2. Dr.Dhavanjoy Shah Pedagogic Kinesiology sports publications New Delhi 1998.
- 3. Logan and McKinney "Anatomic Kinesiology"
- 4. Raschi and Burke "Kinesiology and Applied Anatomy
- 5. Walks and Lutt gens "Kinesiology"

FUNDAMENTALS OF YOGA EDUCATION

Unit – I

History of Yoga – Meaning of Yoga – Nature and scope of Yoga – Aims and Objectives of Yoga - Yoga Education in the Modern Context – Misconceptions about Yoga

Unit – II

Different Schools of Yoga: Hatha Yoga, Raja Yoga, Gnana Yoga, Bhakti Yoga, Karma Yoga, Ashtange Yoga — Patanjali's eight limbs of yoga.(Yama, Niyama, Asana, Pranayama, Pratiyahara, Dharana, Dhyana and Samadhi

Unit – III

Principles of Yoga practices : Asanas, Pranayama, Kriyas, Bandhas, Mudras and Meditation.

Unit – IV

Yoga and Health – Health related fitness and Yoga – Yoga and Aging – Yoga for Physically Challenged people.

Unit – V

Yoga and Sports – role of yoga in improving sports performance – yoga and development of social qualities – personality, co-operation, tolerance and social adjustments

- 1. Textbook of Yoga George Feuerstein, Rider and Company, London.
- 2. Yogic Therapy Swami Kuvalayananda and Dr. S. L. Vinekar, Govt. of India, Ministry of Health, New Delhi.
- 3. Patanjala Yoga Sutras Translation and Commetary by Dr. P. V. Karambelkar Kaivalyadhama SMYM Samiti, Lonavala.
- 4. ASANAS by Dr. P. Mariayyah, Sports Publications, Coimbatore.
- 5. Sound Health through Yoga by Dr. K. Chandrasekaran, Prem Kalyan Publications, Sedapatti, Madurai, 1999.
- 6. Tirumoolar Thirumanthiram Translation and Commentary in English by Dr. Natarajan, Ramkrishna Math, Mylapore, Madras 600 004.

PRACTICAL - III

SPECIALISATION MAJOR GAMES: II

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL)

Testing On

Semester - IV

- Fundamental Skills
- Finer Skills
- Playing ability / Performance
- Officiating Technique

Book for reference

- 1. Dr.Anil Sharma O.P.Sharma Rules of games sports publication 4264/3
- 2. An sari Road New Delhi -2.
- Dr.P.Mariayyah Sports & Games Sports Publication Raja Street, Coimbature
- 4. Rao C.V.Kabaddi Patiala NIS Publication 1971.
- 5. Dr.P.Mariayyah in "Volley ball"

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	35
Playing ability / Performance	:	20
Officiating Technique	:	10
Record note	:	10

TOTAL : 75

PRACTICAL - IV

TRACK & FIELD-II

TESTING ON

Track & field events:

- ❖ DISCUS THROW
- **❖** SHOT PUT
- **❖** HAMMER THROW
- **❖** JAVELIN THROW
- **❖** LONG JUMP
- HIGH JUMP
- **❖** LONG DISTANCE RUN

Books for Reference

- 1. Dr. P.Mariayyah Track & Fields Sports Publication Raja street coimbatore.
- 2. Dr. Anil Sharma, O.P.Sharma Rules of games, Sports Publications 4264/3 Ansari Road New delhe-2.
- 3. Conling David, Athletics London Robert Hale 1980.
- 4. Ken Bosen Track & Field Fundamental Techniques NIS Publications, Patiala.

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills : 35
Playing ability / Performance : 20
Officiating Technique : 10
Record note : 10

TOTAL : 75

SPORTS PSYCHOLOGY AND SOCIOLOGY

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

Definition Motor Learning – Physical and Motor considerations- Body Build, Height and Weight, strength, Muscular, endurance, Flexibility, Balance Co-Ordination, Reaction time, Movement time and Reflex time Cognitive – Affeative – Psychomotor?

Unit - III

Definition of Perception – Theory of Perception Gestult Theory, Palror Theory and witkins's Theory emotional effects tension, anxiety and stress – its role in Physical Education and sports.

Unit - IV

Personality traits of sports person – Composition of personality – Aggression – Theories of Aggression – Psycho – regulative procedures — Autogenic training, yoga and Music's.

Unit - V

Meaning, Nature and scope of sociology in physical Education and sports – Social factors in sports – Leadership in sports spectators and fans group cohesion Social Integration

- 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.

MODERN TRENDS IN PHYSICAL EDUCATION

UNIT – I

Physical Education Teacher Training programme in India: C.P.Ed: B. Sc., B.P.E., B.P.Ed., M.P.Ed., NIS and M.S. – Avenues for Placements - School: Physical Education Teacher, Physical Director, RIPE, CIPE, – College & University: Asst. Director of Physical Education, Deputy Director of Physical Education, Director of Physical Education, Lecturer, Reader, Professor, Principal – Sports Council: Coaches, DSO, RSM, DGM and GM).

UNIT – II

Meaning of Doping – Anabolic steroids – Blood Doping and side effects – WADA and its function – Influence of Doping on performance – Side effect of Doping.

UNIT – III

Meaning and Definition of research – Types of research – Basic, Action, Applied, all case study and survey method – Need and importance of research in Physical Education and sports – Application of computer in the field of physical education and sports.

UNIT - IV

Talent Identification in sports and games – The compulsory Physical Education programme in Schools and Colleges – Play area – synthetic track – Turf field – Toroflex surface – Grass field – Wooden surface (Preparation is not included) – Indoor stadium – Structure and facilities – Flood lit matches.

UNIT V

Assistance for building infrastructure – playfields, Gymnasium., Swimming pool, Stadium and Equipments – Assistance for coaching and training program – Rural and urban – different levels – advance training and coaching – Assistance for competitions – District, State, National, International – Incentive and awards.

- 1. Bucher A., Charles, **Foundations of Physical Education**, Saint Louis, The C.V.Kosby Company, 1972.
- 2. Bunn, John W. Scientific Principles of Coaching, New York. Prentice Hall Inc. 1955
- 3. Hey.James, G., **The Diomechanics of Sports Techniques**, Prentice Hall Inc. Englewood Cliffs N.S. 1973.

SPORTS BIO-MECHANICS

UNIT I

Meaning and Definition – Aim, Need and Importance of Bio-Mechanics in the field of Physical Education and Sports –Types of motion-linear and angular motion – Friction – air and water resistance.

UNIT II

Linear Kinematics-Distance and Displacement, Speed, Velocity and Acceleration and Projectile- Angular Kinematics- Angular distance and Displacement, Angular speed, Velocity and acceleration.

UNIT III

Center of Gravity Equilibrium - Stages of equilibrium-Factors affecting-equilibrium. Centrifugal and Centripetal, Force-Direction-angle, Point of application - Lever - Principles and its types-Mechanical Advantage-Application of Levers in Physical Education & Sports.

UNIT IV

Inertia-Mass and weight - Force-Factors affecting force-Types of force -Work, Power and Energy-Impact and Elasticity -Newton's Law of motion.

UNIT V

Use of the above scientific principles in: Track and Field events – Running, Throwing, Jumping – Basketball, Football, Volleyball.

- 1. Greire millor, Paul & smith, Techniques for the analysis of Human movement lapse books London 1975.
- 2. Bunn John W "Scientific Principles of coaching".
- 3. Charles "Fundamentals of sports Bio-Mechanics Techniques.
- 4. Hay, James G "The Biomechanics of sports.
- 5. T.Mc Clurg Anderson Bio Mechanics of Human Motion

METHODS OF YOGIC PRACTICES

UNIT I

Meaning of Yogic Practices: Asana, Pranayama, Kriya, Bandha, Mudra, Dhayana. Scope and Limitations of Asanas – Safety Measures and Precautions - Classification of Asanas – Meditative Asanas – Relaxative Asanas – Cultural Asanas

UNIT II

Pranayama – definition - Safety Measures and Precautions –Breathing Ratio in Pranayama Practice -

UNIT III

Define Bandha and Mudra - Different types of Bandhas: Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bhandha.

Different types of Mudra: Brahmma Mudra, Ashwini Mudra, Shanmugi Mudra.

UNIT IV

Define – Kriyas – Types of Kriyas: Kaphalabhathi, Trataka, Neti, Dhauthi, Nauli, Basti. Kaphalabhathi: Practicing Method – Benefits - Trataka: Practicing Method – Benefits

UNIT V

Neti : Jala Neti, Sutra Neti - Methods of Practiving Neti and its benefits - Dhauthi : Vamana Dhauthi, Dhanta Dhauthi, Vastra Dhauthi - Methods of Practicing Dhauthi and its benefits. Nauli : Practiving Method - Benefits - Basti : Practicing Method - Befenits

Definition & Concept of Meditation – Types of Meditation : Breathing Meditation, Object Meditation

- 1. Yogic Therapy Swami Kuvalayananda and Dr. S. L. Vinekar
- 2. Asanas Swami Kuvalayananda. Kaivalyadhama, Lonavla
- 3. Pranayama Swami Kuvalayananada. Kaivalyadhama, Lonavla.
- 4. Dr. Selvam "Anatomy and Physiology" Bodinayakanur.
- 5. Clarke, K. M. and Clarke, H.H., Research Process in Physical Education, Research and Health, New Jersy: Prentice Hall Inc.

THEORIES OF MAJOR GAMES – II

(Major Games: Ball Badminton, Badminton, Basketball, Cricket, Hockey, Kho-Kho)

UNIT - I

Origin, History and Development of the Game – International, National and State Level Organisations.

UNIT - II

Fundamental Skills – Lead-up games, Various system of play – Selection of players.

UNIT - III

Training: Warm-up and cool down - Technical training - Tactical training - Coaching programme.

UNIT - IV

Layout of Playfield with all measurements, facilities & equipment and its specifications.

UNIT - V

- Rules and its interpretations
- System of Officiating
- Duties of Officials

- 1. Ballon B. Ralph (1982). *Teaching Badminton*. Delhi, Surjeet Publication.
- 2. Wein Horst (1979). The Science of Hockey. London, Pelham Books.
- 3. Coleman Brain et al. (1976), Ep Publishing Ltd.
- 4. Tyson Frank (1985). The Cricket Coaching Manual. Calcutta, Rupa & Co.

TEST, MEASUREMENTS AND EVALUATION IN PHYSICAL EDUCATION

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 – Standardised 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 – Follow-up.

Unit - IV

Definition – Health Related fitness – Skill Related Physical fitness – JCR Test – Barrow motor ability Test – Harvard step cooper 12 Minute Run/ Walk Test.

Unit - V

Basket ball – Johnson Basketball ability Test, Hockey – Friedel Field Hockey Test Soccer – Mc Donald Soccer Test, Volleyball – Russel Lange Volley Ball Test, Badminton – French Short Service Test. Tennis – Broer Miller Tennis test.

- 1. Safrit, Margarat, J. (1986). *Measurement in Physical Education and Exercises science*, St louis Times Morror Mos by college publishing.
- 2. Bosco, James. (1983). *Measurement and Evaluation in Physical Education and sports*, New Jersy, Prenstice Hall In.
- 3. Barry L.Johnson, Jack K.Nelson. *Measurements for Evaluation in physical education*. Surject Publications.
- 4. A.K.Gupta. *Tests & Measurements in physical Education*. New Delhi. Sports publication
- 5. Horold, M.Borrow. A Practical applied to measurement in Physical Education.

THEORIES OF TRACK AND FIELD - II

UNIT – I

History of Track & Field: Track events, Throws, Jumps, Organizational set up in District, State and National level.

UNIT - II

Shot Put : Fundamental skills: Grip, Placement of shot, initial stance, Glide, Releasing, Reserve

Discus: Grip, Initial stance, Release, Follow through.

UNIT - III

Hammer Throw : Initial stance – rotation – Releasing and Follow through

Javelin : Holding – Approach run – Release - reverse

UNIT - IV

Long Jump : Fundamental Skills of long Jump: Approach run, Take off, Flying Phase, Landing

High Jump: Approach run, Take off, Flying phase – landing.

Long Distance Running : Correct running style, proper arm and leg action,. Running Tactics.

UNIT - V

Rules and their interpretations – Methods of officiating – Duties of Official – Equipment and their Specification – Layout of the Track Events –Throws and Jumps

- 1. Dr. Anil Sharma, O.P. Sharma. *Rules of sports*, sports publication, Ansari Road, New Delhi.
- 2. Conling David, Athletics, London Robert Hale 1980.
- 3. Dr. P. Mariayyah, *Track and Field*, Teachers publication, Pelamedu. Coimbatore.
- 4. Ken O. Bosen, Track & field Fundamental Techniques, NIS Publications, Patiala.
- 5. Doherty, J. Mennath, *Modern Track and Field*, Englewood cliffs, Prentice Hall. Inc., New Jersey.

Science of Sports Training

Unit - I

Meaning and Definition – Aim, Tasks and characteristics of sports training – Principles of sports training- importance of warm - up and cool – down.

Unit - II

Important features of Training Load- Intensity Density and volume – Type of Training Load – Training and Adaptation – Over Load – Causes, Symptoms and Remedies.

Unit - III

Means and methods of developing: Strength – Endurance –Speed – Flexibility.

Unit - IV

Basic Types of Training: Weight training – Circuit training – Plyometric training – Fartlek training – Interval training – Continuous training.

Unit - V

Training Plan, Types of Cycles, Periodisation- Definitions of Techniques and Tactics.

- 1. Singh Hardhayal, (1984) Sports training General theory and methods, NIS Patiala.
- 2. Williams, J. (1977) *II Athletic Training and Physical fitness*. Allyn and Bacon Inc., Sydney.
- 3. Singh H, (1984). Science of sports Training.
- 4. Dick Frank. Sports Training Principles.
- 5. Mateweyew L.P. Fundamental Sports Training.

PRACTICAL – V SPECIALISATION MAJOR GAMES

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL)

Testing On

- Fundamental Skills
- Finer Skills
- Playing ability / Performance
- Officiating Technique

Reference:

- 1. Dr.Anil Sharma O.P.Sharma. *Rules of games*. New Delhi. Sports publication,
- 2. Dr.P.Mariayyah, Sports & Games, Coimbatore. Teachers Publication.
- 3. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 4. Dr.P.Mariayyah. Volley ball. Coimbatore. Teachers Publication.

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	35
Playing ability / Performance	:	20
Officiating Technique	:	10
Record note	:	10

TOTAL : 75

SPORTS JOURNALISM

Unit – I:

- Definition & Meaning of Mass Communication, theories of Mass Communication
- Purpose of Mass media for the propagation of sports and games.
- Growth of Sports Communication.
- Need for collection of materials and tabulation the same.
- Sports coverage.
- Growth of Periodicals.
- Sports Coverage of AIR, T.V. and Films.

Unit – II:

- Basic principles of sports reporting.
- Difference between the general news reporting and sports reporting.
- Sources of sport news.
- Sports spot news.
- Advance story and flash back.
- Follow up stories.

Unit – III:

- Copy reading and handling sports news.
- Design and make up of the sports page.
- Elementary knowledge of typography and various process of printing.
- News paper styles and slant.

Unit – IV:

Running Commentary on the Radio.

- Difference between the Radio and T.V. Commentary.
- Experts Comments.
- Sports Reviews for the Radio and the T.V.

Unit – V: Advertisement-Print-Electronic

- Theory of Advertising news paper and magazine advertising
- Radio and T.V. advertising
- Newspaper organization and management of newspaper circulation.

- 1. Kathryn T. Stofer, James R. Schaffer, Brian A. Rosenthal (2009). *Sports Journalism: An Introduction to Reporting and Writing*. Rowman & Littlefield Publishers, Inc.
- 2. David Halberstam (2009). Everything They Had: Sports Writing. Rowman & Littlefield Publishers, Inc.

THEORIES OF TRACK AND FIELD - III

Unit - I

History of Events Relay (Visual, Non – Visual) 4X100 Mts Relay 4X400 Mts Relay

Unit – II Combined Events-Decathlon, Pentathlon, Heptathlon

Unit - III Cross Country, walking Events, Steeple Chase, Marathon.

Unit - IV Triple Jump

History of the events

Specific Conditioning exercise

System of Officiating

Unit - V History of the events

Pole vault

System of Officiating

- 1. Dr. P. Mariayyah, *Track and Field*, Coimbatore, Teachers publication.
- 2. Dr. Anil Sharma, O.P. Sharma, *Rules of sports*, sports publication, Ansari Road, New Delhi.
- 3. Conling David, (1980). Athletics, London Robert Hale.
- 4. Ken O. Bosen, Track & Field Fundamental Techniques, MS Publication Patiala.

THEORIES OF SPECIALISATION MAJOR GAMES

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL, NETBALL, HANDBALL)

Unit- I

History of games – National and State level organizations.

Unit – II

Fundamental Skill – lead up Games – Various System of Play.

Unit – III

Training: Warm up – Technical Training coaching Program.

Unit - IV

Layout of Play field with all measurements, facilities and equipment and its specifications.

Unit – V

Rules and their Interpretation. - Methods of Officiating - Duties of Officials.

- 1. Dr.Anil Sharma O.P.Sharma. *Rules of games*, sports publication, An sari Road New Delhi.
- 2. Dr.P.Mariayyah. Sports & Games, Sports Publication Raja Street, Coimbatore.
- 3. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 4. Dr.P.Mariayyah. Volleyball.

PRACTICAL - VI

TRACK AND FIELD – III

(Relay, Combined Events, Triple Jump Pole Vault)

- Relay (4X100, 4X400) Events
- Explain the various stages in relay Events
- Combined Events
- (Pentathlon, Decathlon, Heptathlon)
- Jump (Triple Jump)
- Explain the various styles in Jump Event.
- Pole Vault.

Reference:

- 1. Dr. P.Mariayyah. *Track and Field*, Sports Publications, Coimbatore.
- 2. Conling, David (1980). Athletics, Condon Robert Hale
- 3. Prabhakar Eric. (1995). *The way to Athletic Gold*. Madras, East West press PVT Ltd.

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	35
Playing ability / Performance	:	20
Officiating Technique	:	10
Record note	:	10

TOTAL : 75

STATISTICS

Unit – I:

- a) Meaning and Definition of statistics
- b) Types of statistics
- c) Data- Quantitative and qualitative data- grouped.

Unit – II:

- a) Mean, Median and mode definitions.
- b) Computation of mean, median and mode from the un grouped data Discrete data.
- c) Specific characteristics and uses of measures of central tendency.

Unit – III:

- a) Range Quartile deviation Mean deviation Standard deviation Definitions.
- b) Computation of Quartile deviation Mean deviation and Standard deviation from the un grouped data.
- c) Definition and computation of Co efficient of variation from the un grouped data.
- d) Specific Characteristics and uses of Measures of Variability.

Unit – IV:

- a) Computation combined mean from un grouped data.
- b) Normal curve and its properties Homogeneous and Heterogeneous group.

Unit – V:

- a) Meaning and Definition of Correlation and its types.
- b) Computation of Product Moment Correlation from the un grouped data.
- c) Diagrammatic representation Bar diagram, Pie diagram, Histogram.

- 1. Best, John W and James V.Kahn. (1992). *Research in Education*. New Delhi: Prentice Hall of India.
- 2. Berg, Kris E and Richard W. Latin. (1994). *Essentials of Modern Research Methods in Health, Physical Education, and Recreation*. New Jersey. Prentice Hall.
- 3. Clarke, David H and H.Harrison Clarke. (1984). Research Process in Physical Education, Recreation, and Health. New Jersy: Prentice Hall, 1984
- 4. Rothstein, Anne L. Research design and Statistics for Physical Education. New Jersey: Prentice Hall

METHODS IN PHYSICAL EDUCATION

Unit – I:

- a) Meaning Factors influencing Methods Presentation techniques.
- b) Class Management Principles of Class Management.
- c) Teaching aids.

Unit – II

a) Explain various physical activities in the field of physical education – Calisthenics, Marching, Minor games, Indigenous activities, Rhythmic activities, Gymnastics, Defensive arts and swimming.

Unit – III

- a) Meaning of Tournaments.
- b) Merits and demerits of Knock out and League tournaments.
- c) Methods of deciding winner in the League tournament and Tie breaking in league tournaments.

Unit – IV

- a) Intramural Competition Objectives Methods of Organising and conducting Units for competition Intramurals Committee.
- b) External competition Benefits Drawbacks methods of Organizing and conducting.

Unit $-\mathbf{V}$

- a) Sports meet Standard and Non Standard Methods of organizing and conducting sports meet.
- b) Play day methods of organisation and conduct.

- 1. Colin A. Hardy, Mick Mawer, (1999). *Learning and Teaching in Physical Education*, Falmer Press, Great Britain.
- 2. James Michael Lee (1963). *Principles and Methods of Secondary Education*, McGraw-Hill.
- 3. Susan Capel (2004). Learning to Teach Physical Education in the Secondary School: A Companion to School Experience, RoutledgeFalmer.