

BHARATHIDASAN UNIVERSITY, TIRUCHIRAPALLI - 620 024

B.Sc., PHYSICAL EDUCATION - Course Structure under CBCS

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

Sem	Part	COURSE	COURSE TITLE	Instru. Hours	Credit	Exam Hours	Marks		TOTAL
							Int	Ext.	
I	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
	III	Core Course – I (CC)	Foundations of Physical Education and Sports	6	5	3	25	75	100
		Core Course – II (CC)	Practical – I Major Games-I and Track &Field-I	3	-	***	--	--	100
		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	--	***	--	--	--	
II	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
	III	Core Course – II (CC)	Practical – I Major Games-I and Track &Field-I	3	5	3	40	60	100
		Core Course – III (CC)	Theories of Major Games-I and Track & Field-I	6	4	3	25	75	100
		First Allied Course – II (AC)	Practical – II Yoga and Gymnastics Theory	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	
II I	I	Language Course – III (LC) Tamil * / Other Language**#		6	3	3	25	75	100
	II	English Language Course– III (ELC)		6	3	3	25	75	100
	III	Core Course – IV (CC)	Organization administration and Methods in Physical Education	6	5	3	25	75	100
		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	1. Sports Management 2. Kinesiology 3. Fundamentals of Yoga Education	2	2	3	25	75	100
IV	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
	III	Core Course – V (CC)	Practical-III Major Games - II	4	3	3	40	60	100
		Core Course – VI (CC)	Practical-IV Track and Field - II	4	3	3	40	60	100
		Second Allied Course – II	Exercise Physiology	2	3	3	25	75	100
		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	1. Modern Trends in Physical Education 2. Sports Bio-Mechanics 3. Methods of Yogic Practices	2	2	3	25	75	100
	Skill Based Elective – II		2	2	3	25	75	100	

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

Books for References :

1. Bucher Charles A., Foundations 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.

Semester – I & II

Core Course – II (CC)**PRACTICAL – I MAJOR GAMES – I and TRACK & FIELD – I****(Major Games : Football, Kabaddi & Volleyball****Track & Field : Sprint and Middle Distance Race)****Testing on :**

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

Books for Reference :

1. Conling David, Athletics, 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 – Tissues – 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, Scapula, Femur 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 : V

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

Books for References :

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

Semester – I & II

First Allied Course – II (AC)**PRACTICAL – II YOGA AND GYMNASTICS**

YOGA :

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

GYMNASTICS :

Testing the Elementary Skills on :

- Floor
- 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, Surjeet Publications, Delhi, 1982

Scheme of Assessment:

Fundamental Skills & Defensive and Offensive Skills	:	35
Playing ability / Performance	:	20
Officiating Technique		10
Record note	:	10
TOTAL	:	75

Semester – II

Core Course – III (CC)

**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

Books for References :

1. Conling David, Athletics, 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.

Semester – II

First Allied Course – III (AC)

THEORIES OF YOGA AND GYMNASTICS

UNIT : I

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

Yogic Techniques : Methods & Benefits **Asanas** : *Relaxative Asanas* – Shanthiasana / Savasana, Makarasana. *Meditative Asanas* – Padmasana, Vajrasana, Sukhasana

UNIT : II

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

UNIT : III

Yogic Techniques : Methods & Benefits: **Pranayama** : Nadi 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

Books for Reference :

1. SWAMI KUNVALAYANANDA, Asanas, Kaivalyadhama, Lonavala, Pune.
2. B.K.S. IYANKAR, Light on Yoga Harper Collins Publications, Delhi.
3. Dr. P. MARIAYAH, Asanas, Sports Publishers, Raja Street, Coimbatore-1
4. Dr.P.MARIAYAH, 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, Surjeet Publications, Delhi, 1982

Semester - III

Core Course – IV (CC)

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 Pool – 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 – V

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

Books for Reference

1. Kamlesh M.L. Scientific “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”.

Semester – III

Second Allied Course – I (AC)

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, Filariasis, 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.

Books for Reference:

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

Semester – III & IV

Second Allied Course – II (AC)

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.

Books for Reference

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.

Semester – III

Non-Major Elective Course– I / 1 (NMEC)**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.

Books for reference

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.

Semester – III

Non-Major Elective Course– I / 2 (NMEC)**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, Quartericeps groups, Gastrocnemius. Rectus abdominus and Trapezius.

Unit - V

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

Books for Reference

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”

Semester – III

Non-Major Elective Course– I / 3 (NMEC)**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

Books for Reference

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.

Semester - IV

Core Course – V (CC)**PRACTICAL – III****SPECIALISATION MAJOR GAMES: II**

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL)

Testing On

- 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.
3. 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 Offensive Skills	:	35
Playing ability / Performance	:	20
Officiating Technique	:	10
Record note	:	10
TOTAL	:	75

Semester - IV

Core Course – VI (CC)

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 Offensive Skills	:	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 – Affective –Psychomotor?

Unit - III

Definition of Perception – Theory of Perception Gestalt 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

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.

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.

Books For Refesrence

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.

Books for Reference

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

Books for Reference

1. Yogic Therapy – Swami Kuvalayananda and Dr. S. L. Vinekar
2. Asanas – Swami Kuvalayananda. Kaivalyadhama, Lonavla
3. Pranayama – Swami Kuvalayananda. 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 Jersey: Prentice Hall Inc.