

**ALAGAPPA UNIVERSITY, KARAIKUDI**  
**SYLLABUS UNDER CBCS PATTERN FOR AFFILIATED COLLEGES WITH**  
**EFFECT FROM THE ACADEMIC YEAR 2022-23 ONWARDS**

**B.Sc. PHYSICAL EDUCATION**  
**Programme Structure**

Sem.	Part	Course Code	Courses	Title of the Paper	T/P	Credits	Hours/Week	Max. Marks		
								Int.	Ext.	Total
I	I	2211T	T/OL	Tamil /Other Languages -I	T	3	6	25	75	100
	II	712CE	E	Communicative English - I	T	3	6	25	75	100
	III	22BPE1C1	CC	Foundation of Physical Education and Sports	T	5	5	25	75	100
		22BPE1C2	CC	Anatomy and Physiology	T	4	4	25	75	100
		-	AL - IA	BCA/Information Technology/Computer Science/Software	T	3	3	25	75	100
		-	AL - IA	Practical – Respective Allied Theory Course	P	2	2	40	60	100
IV	22BVE1	SEC -I	Value Education	T	2	2	25	75	100	
		-	-	Library	-	-	2	-	-	-
				<b>Total</b>		<b>22</b>	<b>30</b>	<b>205</b>	<b>495</b>	<b>700</b>
II	I	2221T	T/OL	Tamil/Other Languages-II	T	3	6	25	75	100
	II	722CE	E	Communicative English - II	T	3	6	25	75	100
	III	22BPE2C1	CC	Organisation Administration and Methods in Physical Education	T	5	5	25	75	100
		22BPE2P1	CC	Practical-I: Theories Major Games and Track & Field- I	P	4	4	40	60	100
		-	AL - IB	BCA/Information Technology/Computer Science/Software	T	3	3	25	75	100
		-	AL - IB	Practical – Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BES2	SEC -II	Environmental Studies	T	2	2	25	75	100
		Naan Mudhalvan Course		Language Proficiency for Employability(Effective English)	-	2	2	25	75	100
				<b>Total</b>		<b>24</b>	<b>30</b>	<b>235</b>	<b>570</b>	<b>800</b>
III	I	2231T	T/OL	Tamil/Other Languages-III	T	3	6	25	75	100
	II	2232E	E	English for Enrichment - I	T	3	6	25	75	100
	III	22BPE3C1	CC	Yoga Education	T	3	3	25	75	100
		22BPE3C2	CC	Scientific Principles of Sports Training	T	3	3	25	75	100
		22BPE3C3	CC	Test and Measurement & Evaluation	T	3	3	25	75	100
		-	AL -IIA	BCA/Information Technology/Computer Science/Software	T	3	3	25	75	100
		-	AL -IIA	Practical – Respective Allied Theory Course	P	2	2	40	60	100
IV	22BE3	SEC -III	Entrepreneurship	T	2	2	25	75	100	
	-	NME- I	1.Adipadai Tamil / 2.Advance Tamil / 3.IT Skills for Employment / MOOC'S	T	2	2	25	75	100	

				<b>Total</b>		<b>24</b>	<b>30</b>	<b>255</b>	<b>645</b>	<b>900</b>	
IV	I	2241T	T/OL	Tamil /Other Languages -IV	T	3	6	25	75	100	
	II	2242E	E	English for Enrichment - II	T	3	3	25	75	100	
	III	22BPE4C1	CC	Exercise Physiology	T	4	4	25	75	100	
		22BPE4C2	CC	Theories of Major Games – I and Track & Field – II	T	4	4	25	75	100	
		22BPE4P1	CC	Practical –II: Theories of Major Games – I and Track & Field – II	P	3	3	40	60	100	
		-	AL - IIB	BCA/Information Technology/ Computer Science/Software	T	3	3	25	75	100	
		-	AL - IIB	Practical – Respective Allied Theory Course	T	2	2	40	60	100	
	IV	-	NME- II	1.Adipadai Tamil/ 2.Advance Tamil/ 3. Small Business Management / MOOC'S	T	2	2	25	75	100	
		Naan Mudhalvan Course		Digital Skills for Employability – (Microsoft-Office Fundamentals)	-	2	3	25	75	100	
			<b>Total</b>		<b>26</b>	<b>30</b>	<b>255</b>	<b>645</b>	<b>900</b>		
V	III	22BPE5C1	CC	Sports Biomechanics and Kinesiology	T	4	4	25	75	100	
		22BPE5C2	CC	Sports Psychology and Sociology	T	4	4	25	75	100	
		22BPE5C3	CC	Computer Application in Physical Education	T	4	4	25	75	100	
		22BPE5C4	CC	Research and Elementary Statistics	T	4	4	25	75	100	
		22BPE5C5	CC	Sports Medicine and Physiotherapy	T	4	6	25	75	100	
		22BPE5C6	CC	Sports Nutrition	T	4	6	25	75	100	
		-	-	Career development/ employability skills	-	4	2	25	75	100	
			<b>Total</b>		<b>24</b>	<b>30</b>	<b>180</b>	<b>420</b>	<b>600</b>		
VI	III	22BMB6I	DSE	Internship		24	26	150	250	400	
	IV	Naan Mudhalvan Course		Employability Readiness* (Naandi/Unnati/Quest/IBM Skills build)	-	2	4	25	75	100	
				<b>Total</b>		<b>26</b>	<b>30</b>	<b>175</b>	<b>325</b>	<b>500</b>	
		<b>(Or)</b>									
	III			DSE	Sports Management	T	6	6	25	75	100
					Health Education and First Aid	T	6	6	25	75	100
					Theories Major Games and Track & Field- III	T	6	6	25	75	100
					Practical III : Theories of Major Games and Track & Field- III	P	6	6	40	60	100
	IV	-		Library / Yoga etc	-	-	2	-	-	-	
		Naan Mudhalvan Course		Employability Readiness* (Naandi/Unnati/Quest/IBM Skills build)	-	2	4	25	75	100	
			<b>Total</b>		<b>26</b>	<b>30</b>	<b>125</b>	<b>375</b>	<b>500</b>		
	<b>(Or)</b>										
III			DSE	Project		6	8	25	75	100	
				Care and Prevention of Athletic Injuries	T	6	6	25	75	100	

		22BPE6E3		Theories Major Games and Track & Field- III	T	6	6	25	75	100
		22BPE6E4		Practical III: Theories of Major Games and Track & Field- III	P	6	6	40	60	100
		Naan Mudhalvan Course		Employability Readiness* (Naandi /Unnati/Quest/IBM Skills build)	-	2	4	25	75	100
				<b>Total</b>		<b>26</b>	<b>30</b>	<b>125</b>	<b>375</b>	<b>500</b>
				<b>Grand Total</b>		<b>146</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4400</b>

\*Employability Readiness -Women's Colleges Naandi course and for all other Colleges IBM Skills build Course.

Sem.	Part	Course Code	Title of the Paper	Credits	Hours/Week	Marks		
						Int.	Ext.	Total
I	III	71BEPA	Professional English for Arts and Social Science -I	4	5	25	75	100
II		72BEPA	Professional English for Arts and Social Science –II	4	5	25	75	100
III		*	Professional English for Arts and Social Science –III	4	5	25	75	100
IV			Professional English for Arts and Social Science –IV	4	5	25	75	100

\*The Syllabus of Professional English for III & IV Semester will be provided after Receiving the syllabus from TANSCHÉ.

**As per TANSCHÉ, the Professional English book will be taught to all four streams apart from the existing hours of teaching/additional hours of teaching (1hour/day) as a 4 credit paper as an add on course on par with Major paper and completion of the paper is a must to continue his/her studies further.**

- T/OL-Tamil or Other Language,
- E – English
- CC-Core course –Core competency, critical thinking, analytical reasoning, research skill & team work
- Allied / GEC -Exposure beyond the discipline
- AECC- -Ability Enhancement Compulsory Course (Professional English & Environmental Studies) - Additional academic knowledge, psychology and problem solving etc.,
- SEC-Skill Enhancement Course - Exposure beyond the discipline (Value Education, Entrepreneurship Course, Computer application for Science, etc.,
- NME -Non Major Elective – Exposure beyond the discipline
- DSE – Discipline specific elective –Additional academic knowledge, critical thinking, and analytical reasoning-Student choice - either Internship or Theory papers or Project + 2 theory paper.
  - If internship – Marks = Internal- 150 (75+75) two midterm evaluation through Viva voce + Report- 150+ External Viva voce- 100 = 400.
  - If Project – Marks = Internal- 50 +Thesis- 100 + Viva voce- 50 = 200 + 2 theory paper- 200 = 400
- MOOCs - Massive Open Online Courses
- T-Theory, P- Practical

<b>Semester – I</b>				
<b>Course Code 22BPE1C1</b>	<b>CORE COUSE - I</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
		<b>FOUNDATION OF PHYSICAL EDUCATION AND SPORTS</b>	<b>T</b>	<b>5</b>
<b>Unit-I</b>	Meaning and Definition of Education and Physical Education – Need, Nature and Scope of Physical Education – Physical Training and Physical Culture.			
<b>Unit-II</b>	Aim and Objectives of Physical Education – Development of Physical , Cognitive, Neuro-muscular, Affective, Social, Emotional, Spiritual and Recreational – Theories of Learning – Laws of Learning.			
<b>Unit-III</b>	Scientific basis of Physical Education – Contribution of Allied Sciences – Anatomy, Physiology, Biomechanics, Kinesiology, Sports Medicine, Psychology, Sociology and Computer Science.			
<b>Unit-IV</b>	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.			
<b>Unit -V</b>	Recent development in India: SAI, NSNIS, SNIPES, LNIPE, Sports Academics – Award and Scholarships: Arjuna Award, Dhronochariya Award, Rajiv Gandhi Khela Ratna Award – International and National Competitions: Asian Games, SAF, SGF, RDS and BDS.			
<b>Books for References:</b>				
<p>Bucher Charles A., <i>Foundations of Physical Education</i>, St. Louis the C.V. Mosby Company, 1983.</p> <p>Kamlesh M.L., <i>Physical Education : Facts and Foundation</i>, New Delhi, P.B. Publications, 1988.</p> <p>Thirunarayanan, C. and Hariharan, S., <i>Analytical History of Physical Education</i>, Karaikudi, C.T. &amp; S.H., Publications, 1990.</p> <p>Sharma, O.P., <i>History of Physical Education</i>, New Delhi, Khel Shitya Kendra, 1998.</p> <p>Wakharkar D.G., <i>Manual of Physical Education in India</i>, Pearl Publicatons Pvt. Ltd., Bombay, 1967.</p> <p>Wuest, Deborah, A. and Charles A. Bucher, <i>Foundations of Physical Education and Sport</i>, New Delhi : BL. Publication Pvt., Ltd.</p> <p>Wellman and Cowell, <i>Philosophy and Principles of Physical Education</i>, A marvati: Suyog Prakasan.</p> <p>Jackson Sharman/ <i>Modern Principles of Physical Education</i>, New York: A.A.Barnes &amp; Co.</p> <p>Khan, Eraj Ahmed, <i>History of Physical Education</i>, Patna Scientific Book Co.</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The pass out would be able to compare the relationship between general education and Physical education.</li> <li>➤ He would be able to if identify and relate with the history of physical education.</li> <li>➤ He would able to identify the words of philosophers of education and physical education.</li> </ul>			

<b>Semester - I</b>				
<b>Course Code: 22BPE1C2</b>	<b>Core Course – II</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>ANATOMY AND PHYSIOLOGY</b>	<b>T</b>	<b>4</b>	<b>4</b>
<b>Unit-I</b>	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.			
<b>Unit-II</b>	Skeleton : Meaning and Functions – Bones: Classification and Functions – General Features of Various Bones: Vertebral Column, Pelvic Bone, Radius and Ulna, Sacula, Femer and Bones of Skill – Joints: Definition and Classification of Joints			
<b>Unit-III</b>	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			
<b>Unit-IV</b>	Respiratory System – Respiration – Respiratory Track – Alveoli – Lungs: Structure & Functions – Gas Exchange – Vital Capacity. Circulatory System – Heart: Structure & Functions – Cardiac Cycle, Cardiac Output, Stroke Volume.			
<b>Unit -V</b>	Endocrine Glands – Functions of Endocrine Glands: Pituitary, Thyroid, Para-Thyroid, Thymus, Pancreas, Adrenal & Sex – their role, in growth, development and regulations of body functions.			
<b>Books for References:</b>				
<p>Guyton A.C., 1969, <i>Functions of the Human Body</i>, London, W.B. Saunders Company,</p> <p>Selvam.V “<i>Anatomy and Physiology</i>” Bodinayakanur.</p> <p>MUTHAYYA N.M “<i>Physiology</i>” J.J. Publications, Madurai.</p> <p>SEELEY et. all <i>Anatomy and Physiology</i> Mc Graw Hill.</p> <p>Srivastava et. 1976, All, Text Book of Practical Physiology, Calcutta Scientific Book Agency,</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The student will be oriented with the basic structure and function of human body by identifying, comparing and relating different systems, organs and their functional and structural units.</li> <li>➤ He would be able to relate and interpret the role of exercise on body systems and its relation to well being, through literature reviews and physical exercises.</li> <li>➤ Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.</li> </ul>			

<b>Semester - I</b>				
<b>Course Code:</b> <b>22BPE2C1</b>	<b>Core Course – III</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>ORGANIZATION ADMINISTRATION AND METHODS IN PHYSICAL EDUCATION</b>	<b>T</b>	<b>5</b>	<b>5</b>
<b>Unit-I</b>	Meaning and Importance of Organization and administration – Scheme of Physical Education in: Schools, Colleges, Universities, Districts State and National Level.			
<b>Unit-II</b>	Facilities – Track, Play Grounds, Gymnasium, Swimming Pole – Layout of Play fields (Basketball, Kabbadi, Hockey, Volleyball, Cricket) Care and Maintenance of Play fields.			
<b>Unit-III</b>	Method in Physical Education – meaning – Factors influencing Method Presentation Technique – Teaching Aids – Principles of Class Management. Teaching of activities: Marching, Calisthenics, light apparatus(Wands, Hooks, Poles) Lezium, Folk dance – Minor Games – Lead up activities.			
<b>Unit-IV</b>	Teaching activities of minor games, major games track and field, Yogic Practice, Suryanamaskar, Calisthenics, Light apparatus, Rhythmic activities, Commands, Marching.			
<b>Unit -V</b>	Tournaments – Types of Tournament, Knock out, League, Combination Tournament, Methods of drawing Fixtures.			
<b>Books for References:</b>				
Kamlesh M.L. Scientific “Art of Teaching Physical Education” New Delhi Metropolitan 1994.				
Thiru. Narayanan C and Harishara Sharma “Methods in Physical Education” Karaikkudi CJ and S.H. 1989				
Joseph. P.M. “Organization of Physical Education”.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ He will able to organize various physical educations Programme.</li> <li>➤ The students would understand the importance of methods of physical education.</li> </ul>			

Semester - II				
Course Code	Core Practical I	T/P	C	H/W
22BPE 2P1	THEORIES OF MAJOR GAMES – I AND TRACK & FIELD – I	P	4	4
<b>(Major Games: Football, Basket Ball &amp; Volleyball Track &amp; Field: Sprint, Middle Distance and Long Distance Race)</b>				
<b>Unit-I</b>	Origin, History and Development of the Game – International, National and State Level Organization.			
<b>Unit-II</b>	Fundamental Skills – Lead – Up Games, Various Symptoms of Play – Selection of Players.			
<b>Unit-III</b>	Training: Warm – up Technical Training – Tactical Training – Coaching Programme			
<b>Unit-IV</b>	Layout of Playfield – Rules and their Interpretations – methods of officiating Duties of Officials – Important Tournaments and Cups.			
<b>Unit -V</b>	Athletics: Sprint, Middle distance and Long Distance Race.			
<b>Books for References:</b>				
Conling David, 1980, <i>Athletics</i> , London, Robert Hale,				
Prabhakar Eric, 1995, <i>The way to Athletic Gold</i> , Madras East – West press Pct. Ltd.,				
Mariayyah P, <i>Football</i> , Sports Publications, Raja Street, Coimbatore.				
P.Mariayyah P, <i>Kabaddi</i> , Sports Publications, Raja Street, Coimbatore.				
P.Mariayyah P, <i>Volleyball</i> , Sports Publications, Raja Street, Coimbatore.				
P.Mariayyah P, <i>Track and Field</i> , Sports Publications, Raja Street, Coimbatore.				
Thompson Ganagon, 1972, <i>Play Better Soccer in all colour</i> , W.B.Saubders Company,.				
Hanaraj D, Hubert V, 1991, <i>Volleyball – A Modern Approach</i> , Patiala, Sainsoris,.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To understand basic skills of the game.</li> <li>➤ To learn officiating and coaching in the game.</li> </ul>			

<b>Semester - III</b>				
<b>Course Code</b> <b>22BPE 3C1</b>	<b>Core Course – IV</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>YOGA EDUCATION</b>	<b>T</b>	<b>3</b>	<b>3</b>
<b>Unit-I</b>	Yoga: Meaning, Definition – Concept of Yoga – Aim and Objectives of Yoga – History of Yoga – Systems of yoga : Bhakthi yoga – Jnana yoga – Hatha yoga – Karma yoga – Kundalini yoga – mantra yoga – Raja yoga – Ashtanga yoga : Yama – Niyama – Asana – Pranayama – Pratyahara – Dharana – Dhayana – Samathi.			
<b>Unit-II</b>	Asanas: Meaning and Definition – Classification of asanas: Meditative, Relaxative, Cultural – Guidelines for practicing asanas – Various types of asanas and their benefits – Difference between physical exercise and yogic asanas.			
<b>Unit-III</b>	Pranayama: Meaning and Definition – Concept of Pranayama – Nadis – Ida nadi – Pingala Nadi – Sushumna nadi – Controlling of breath: Puraka – Kumbhaka – Rechaka – Guidelines for practicing Pranayama – Benefits of Pranayama – Types of Pranayama: Nadi Suddhi – Nadi Shodhana – Surya Bhedana – Kapalabhati – Bhastrika – Sitkari – Sitali – Bhramari – Ujjayi. Bandhas: Meaning and Definition – Types: Jalandra – Uddiyana – Mula.			
<b>Unit-IV</b>	Kriyas – Types of Kriyas – Procedures and Benefits of: Kapalabhati – Tratakka – Neti (Jala neti, Sutra neti) – Dhauti; Vamana Dhauti – Vastra Dhauti – Nauli – Bhasti. Mudra: Meaning – Types : Chin Mudra – Chinmaya Mudra – Yoga Mudra – Brahma Mudra – Appana Mudra.			
<b>Unit -V</b>	Meditation: Meaning and Definition – Concept of meditation – Types of meditation – Physiological benefits of meditation – yoga and competition – Principles of yogic Diet – Integration of Yoga with modern education – yoga institutions in India and Abroad – General Yogic Schedule.			
<b>Books for References:</b>				
Iyengar B.K.S. (1989), <i>Light on Yoga</i> . London: Unwin Publishers New Delhi.				
Chandrsekaran K.(1999) <i>Sound Health through Yoga</i> , Sedapatti: Prem Kalyan Publicaions.				
Moorthy, A.M. and S. Alagesan(2004), <i>Yoga Therapy</i> , Coimbatore				
Swami Sivananda (1983), <i>Practical Lessons I Yoga</i> , Shivananda Nagar : The Devine Life Society.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The study would orient the student in basic concept of yoga education.</li> <li>➤ The study would orient aim is setting through with the yogic techniques.</li> </ul>			

<b>Semester - III</b>				
<b>Course Code 22BPE 3C2</b>	<b>Core Course – V SCIENTIFIC PRINCIPLES OF SPORTS TRAINING</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
		<b>T</b>	<b>3</b>	<b>3</b>
<b>Unit-I</b>	Introduction–Meaning and Definition of Sports Training – Principles of Sports Training.			
<b>Unit-II</b>	Training Load and Recovery – Factors of Load – Load intensity, Load Volume – judgement of Load – Relationship between Load and Adaptation Over Load.			
<b>Unit-III</b>	Training of Motor qualities: Strength : Forms – Means and Methods to improve strength Speed : Forms – Means and Methods to improve speed Endurance : Forms – Means and Methods to improve Endurance Flexibility : Forms – Means and Methods to improve flexibility. Coordination : Forms – Means and Methods to Improve Coordination.			
<b>Unit-IV</b>	Training plan – Periodisation – stages of periodisation – Types of Periodisation – Preparatory period – Competition period – Transitional period – long term and short term plans – Cyclic process of training.			
<b>Unit -V</b>	Techniques preparation – Aims to techniques in sports – Fundamentals and methods for development of techniques in sports – stages of techniques development. Aims of Tactics – Methods of tactical development.			
<b>Books for References:</b>				
Hardayal Singh(1991) Science of sports Training, New Delhi: DVS Publications.				
John Bunn, Scientific Principles of Coaching.				
Miler, Fundamental of Track and Field Coaching.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To learn the principles of sports training.</li> <li>➤ To learn the techniques preparation of sports training.</li> </ul>			

<b>Semester - III</b>				
<b>Course Code</b> <b>22BPE 3C3</b>	<b>Core Course – VI</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>TEST AND MEASUREMENT &amp; EVALUATION</b>	<b>T</b>	<b>3</b>	<b>3</b>
<b>Unit-I</b>	Meaning of Test, Measurement and Evaluation – Brief History of Test, Measurement and Evaluation – Need and Importance of measurement and Evaluation in Physical.			
<b>Unit-II</b>	Classification of Test – Standardized and Teacher Made test - Object and subject Tests – construction of Knowledge’s test and skill Test – Administration of Test– Duties during testing – Duties after Testing.			
<b>Unit-III</b>	Criteria of test selection – Validity, reliability, Objectivity, Norms, Administrative feasibility – Strength test – Bend Knee sit ups test. Flexibility test – Sit and reach test – Speed test – 50 mts run – Cardio respiratory Endurance – Cooper 2 minute Run / Walk test. Explosive strength test – Standing Broad Jump.			
<b>Unit-IV</b>	AAHPERD Youth Fitness test. JCP test Barrow motor ability test Harward step test Magaia – Kalamen power test			
<b>Unit -V</b>	Test of Specific sport skills Badminton : French Short Serve Test Basketball : Johnson Basketball Ability test Hockey : Hendry Friedal Field Hockey test. Soccer : Mc Donald Volleying Soccer test. Tennis Boer : Miller Tennis test Volleyball : Helmen Volleyball test			
<b>Books for References:</b>				
Safrit Margarat J <i>Measurement in Physical Education and Exercises Science</i> , St Louis Times Morrer Mos by college publishing.				
Bosco James <i>Measurement and Evaluation in Physical Education and Sports</i> New Jersey Prenstice Hall in 1983.				
Barry L. Johnson, Jack K. Nelson and <i>Measurement for Evaluation in Physical education</i> the Surjeet Publications.				
A.K.Gupta <i>Tests &amp; Measurement in Physical Education</i> sports publication New Delhi – 52				
Borrow Horold M. <i>A Practical applied to measurement in Physical Education</i>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The students will be able to construct and conduct the physical fitness and sports skill test.</li> <li>➤ The students will be able to implement the criteria of test selection.</li> </ul>			

<b>Semester - IV</b>				
<b>Course Code 22BPE 4C1</b>	<b>Core Course – VII EXERCISE PHYSIOLOGY</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
		<b>T</b>	<b>4</b>	<b>4</b>
<b>Unit-I</b>	Metabolism and Energy Transfer :- Metabolism – Energy – Unit of measuring energy – Sources of energy – Adenosine Triphosphate – Phosphagen system – Anaerobic metabolism – Aerobic metabolism – Fat metabolism – protein metabolism – energy metabolism during rest, exercise and recovery – oxygen debt – oxygen deficit.			
<b>Unit-II</b>	<b>MORPHOLOGICAL FEATURE OF SKELETAL MUSCLE AND FUNCTION.</b> Structure of the skeletal muscle – Chemical composition – Sliding filament theory of muscular contraction – muscle fiber types – fiber distribution and performance – All or none principle – muscle tone – Types of muscular contraction – Staircase Phenomenon or treppe – Heat production in the muscle – Residual muscle soreness – Effect of Training on muscular system.			
<b>Unit-III</b>	<b>RESPIRATORY SYSTEM AND EXERCISE:</b> Mechanism of breathing – Pulmonary ventilation / minute ventilation during rest and exercise – control of ventilation – Lung volumes and capacities - Effect of exercise on Respiratory system.			
<b>Unit-IV</b>	<b>CARDIOVASCULAR SYSTEM AND EXERCISE:</b> Structure properties of the heart and cardiac cycle, cardiac output during rest and exercise Stroke volume and heart rate – control of heart rate – Heart rate response to exercise on stroke volume– Blood pressure – factors affecting blood pressure and heart rate – Regulation of blood flow – effect of exercise on circulatory system.			
<b>Unit -V</b>	<b>EXERCISE AND ENVIRONMENT:</b> Exercise and temperature regulations – Hot humid climate – Exercise and temperature regulations in cold climates – Effect of High altitude on Physical performance – Physiological adaptations to altitude – Physiological changes in under water conditions.			
<b>Books for References:</b>  William D.Mcarole. Frank.I Katch Victor. Exercise Physiology Energy, Nutrition and Human performance Lea & Febiger Philade Richard W.Bowers and Edward L. Fox – Sports Physiology Third Edition wmc Brown Publishers Laurence E Morehouse Augustus T.Miller, JR Seventh Edition Physiology of Exercise The c.v. Mostly Company. David H.Clarke Exercise Physiology prenties Hall, Inc: Englewood Cliffs, new jersey. Larry G.Shaver Essentials of exercise Physiology surjeet publications. Dr.Amrit Kumar R.Moses introduction to exercise physiology poompugar pathipagam. Donald Health. David Reid Williams. Man at high altitude second edition, Churchill livi gstone.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To enrich the knowledge of physiological functions.</li> <li>➤ To understand the systems and functions of the body.</li> </ul>			

<b>Semester - IV</b>																			
<b>Course Code</b>	<b>Core Course – VIII</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>															
<b>22BPE4C2</b>	<b>THEORIES OF MAJOR GAMES – I AND TRACK &amp; FIELD – II</b> <b>(Major Games : Football, Basket Ball &amp; Volleyball</b> <b>Track &amp; Field: Sprint, Middle Distance and Long</b> <b>Distance Race)</b>	<b>T</b>	<b>4</b>	<b>4</b>															
<b>Testing on:</b>																			
<ol style="list-style-type: none"> <li>1. Fundamental Skills</li> <li>2. Finer Skills</li> <li>3. Playing Ability / Performance</li> <li>4. Officiating Techniques</li> </ol>																			
<b>Scheme of Assessment:</b>																			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">1. Fundamental Skill &amp; Defensive and Offensive Skill</td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 15%; text-align: right;">35</td> </tr> <tr> <td>2. Playing ability / Performance</td> <td style="text-align: center;">-</td> <td style="text-align: right;">20</td> </tr> <tr> <td>3. Officiating Technique</td> <td style="text-align: center;">-</td> <td style="text-align: right;">10</td> </tr> <tr> <td>4. Record note</td> <td style="text-align: center;">-</td> <td style="text-align: right;">10</td> </tr> <tr> <td style="text-align: right;"><b>TOTAL</b></td> <td style="text-align: center;">-</td> <td style="text-align: right;"><b>75</b></td> </tr> </table>					1. Fundamental Skill & Defensive and Offensive Skill	-	35	2. Playing ability / Performance	-	20	3. Officiating Technique	-	10	4. Record note	-	10	<b>TOTAL</b>	-	<b>75</b>
1. Fundamental Skill & Defensive and Offensive Skill	-	35																	
2. Playing ability / Performance	-	20																	
3. Officiating Technique	-	10																	
4. Record note	-	10																	
<b>TOTAL</b>	-	<b>75</b>																	
<b>Books for Reference:</b>																			
<p>Conling David, Athletics, London, Robert Hale, 1980.</p> <p>Prabhakar Eric, The way to Athletic Gold, Madras East – West press Pvt. Ltd., 1995.</p> <p>Dr. P. Mariayyah, Football, Sports Publications, Raja Street, Coimbatore.</p> <p>Dr. P. Mariayyah, Kabaddi, Sports Publications, Raja Street, Coimbatore.</p> <p>Dr. P. Mariayyah, volleyball, Sports Publication, Raja Street, Coimbatore.</p> <p>Dr. P. Mariayyah, Track and Field, Sports Publications, Raja Street, Coimbatore.</p> <p>Thompson William, Teaching Soccer, Delhi, Surjeet Publications 1996.</p> <p>Carting Ganagon, Play Better Soccer in All Colour, W.B. Saubders Company, 1972.</p> <p>Dhanaraj V. Hubert, Volleyball – A Modern Approach, Patiala, Sainsoris, 1991.</p>																			
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To develop the Basic skills of the Game.</li> <li>➤ To enrich the knowledge of rules of the game and their interpretation.</li> </ul>																		

<b>Semester - IV</b>				
<b>Course Code</b>	<b>Core Practical – II</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
<b>22BPE4P1</b>	<b>THEORIES OF MAJOR GAMES – I AND TRACK &amp; FIELD – II</b> <b>(Major Games : Football, Basket Ball &amp; Volleyball</b> <b>Track &amp; Field: Sprint, Middle Distance and Long Distance</b> <b>Race)</b>	<b>P</b>	<b>3</b>	<b>3</b>
<b>Testing on:</b>				
<ul style="list-style-type: none"> <li>5. Fundamental Skills</li> <li>6. Finer Skills</li> <li>7. Playing Ability / Performance</li> <li>8. Officiating Techniques</li> </ul>				
<b>Scheme of Assessment:</b>				
<ul style="list-style-type: none"> <li>5. Fundamental Skill &amp; Defensive and Offensive Skill - 35</li> <li>6. Playing ability / Performance - 20</li> <li>7. Officiating Technique - 10</li> <li>8. Record note - 10</li> </ul> <p style="text-align: right;"><b>TOTAL - 75</b></p>				
<b>Books for Reference:</b>				
<p>Conling David 1980, Athletics, London, Robert Hale,.</p> <p>Prabhakar Eric, 1995, The way to Athletic Gold, Madras East – West press Pvt. Ltd.,</p> <p>Mariayyah P., Football, Sports Publications, Raja Street, Coimbatore.</p> <p>Mariayyah P, Kabaddi, Sports Publications, Raja Street, Coimbatore.</p> <p>Mariayyah P, volleyball, Sports Publication, Raja Street, Coimbatore.</p> <p>Mariayyah P, Track and Field, Sports Publications, Raja Street, Coimbatore.</p> <p>Thompson William, 1966, Teaching Soccer, Delhi, Surjeet Publications.</p> <p>Carting Ganagon, 1972, Play Better Soccer in All Colour, W.B. Saubders Company.</p> <p>Dhanaraj V. Hubert, 1991, Volleyball – A Modern Approach, Patiala, Sainsoris.</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To develop the Basic skills of the Game.</li> <li>➤ To enrich the knowledge of rules of the game and their interpretation.</li> </ul>			

<b>Semester - IV</b>				
<b>Course Code 22BPE 5C1</b>	<b>Core Course – IX</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>SPORTS BIOMECHANICS &amp; KINESIOLOGY</b>	<b>T</b>	<b>4</b>	<b>4</b>
<b>Unit-I</b>	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 – Function – air and Water resistance.			
<b>Unit-II</b>	Linear Kinematics – Distance and Displacement, Speed, Velocity and Acceleration and Projectile – Angular Kinematics – Angular distance and Displacement, Angular speed, Velocity and acceleration.			
<b>Unit-III</b>	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.			
<b>Unit-IV</b>	Inertia-Mass and Weight – Force-Factors affecting force-Types of force – Work, Power and Energy-Impact and Elasticity – Newton’s Law of motion.			
<b>Unit -V</b>	Use of the above scientific principles in: Track & Field events – Running, throwing, Jumping – Basketball, football, Volleyball.			
<b>Book for References:</b>				
<p>Greire millor, Paul &amp; smith, 1975, Techniques for the analysis of Human movement lapse books London .</p> <p>Bunn John W “<i>Scientific Principles of coaching</i>”.</p> <p>Charles “<i>Fundamental of Sports Bio-Mechanics Techniques</i>”.</p> <p>Hay, James G “<i>The Biomechanics of Sports</i>”.</p> <p>T. Mc Clurg Anderson Bio Mechanics of Human Motion.</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The student would be oriented with them skeletal structure of human body by identifying the origin and insertion of various muscles.</li> <li>➤ Orient the students in basic structure and functions of primary joints of the body.</li> <li>➤ Relate and interpret the role of various mechanical principles in human movement.</li> </ul>			

<b>Semester - IV</b>				
<b>Course Code 22BPE 5C2</b>	<b>Core Course – X SPORTS PSYCHOLOGY &amp; SOCIOLOGY</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
		<b>T</b>	<b>4</b>	<b>4</b>
<b>Unit-I</b>	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.			
<b>Unit-II</b>	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			
<b>Unit-III</b>	Definition of Perception – Theory of Perception Gestalt Theory , Palror Theory and witkin’s Theory emotional effects tension, anxiety and stress – its role in Physical education and sports.			
<b>Unit-IV</b>	Personality traits of sports person – composition of personality – Aggression – theories of Aggression – Psycho- regulative procedures. Autogenic training, yoga and Music’s.			
<b>Unit -V</b>	Meaning , Nature and Scope of Sociology in Physical education and sports – social factors in sports – Leadership in sports spectators and fans group cohension social Integration.			
<b>Book for References:</b>				
<p>Alderman A.B. Psychology Behavior in sports W.B. Saundar company Saundar 1974.</p> <p>Puni A.T. Sports Psychology Chanduga NIS.</p> <p>Alderman Psychology Behavior</p> <p>Cratty B.J. Psychology and Physical activity.</p> <p>Singer R.N. Coaching, Athletics and Physiology.</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The study would orient the student in basic concepts of psychology.</li> <li>➤ The student would be oriented in identifying factors determining one’s overall personality.</li> <li>➤ He would understand various laws learning and their relevance on teaching learning process.</li> </ul>			

Semester - V				
Course Code 22BPE 5C3	Core Course – XI COMPUTER APPLICATION IN PHYSICAL EDUCATION	T/P	C	H/W
		T	4	4
<b>Unit-I</b>	Introduction to Computer – History of Computers – Block diagram of a Computer – Input Devices, Keyboard and Monitor, Visual Display Terminal, Function Keys, Numeric Key pad, Light Pen and Mouse, Bar Codes – Output Devices, Video Display unit – Dot Matrix Printers, Line Printers.			
<b>Unit-II</b>	Memory, Function of Memory, Read only Memory (ROM), Random Access Memory (RAM), Floppy Disk, Magnetic tape, Hard Disk – Central Processing Unit – Important characteristics of a computer.			
<b>Unit-III</b>	Software and Hardware, Machine Language, Assembly Language, High Level Language, Advantages of High Level Languages, Interpreters, Operating Systems, Basic Knowledge about different Software packages(Dbase, Spread Sheet, Word Processors)			
<b>Unit-IV</b>	Applications in windows – Application and document files, M.S.Dos. Clock and Calendar, Calculator, Paint, WordPad – Working with multiple applications.			
<b>Unit -V</b>	Practical – Windows '98 Word PowerPoint and Excels – 100 Marks			
<b>Book for References:</b>				
Cassel. P and Hart. M 1998, Windows 98, Techmedia , New Delhi,				
Norton. P, 1998, Complete Guide to Windows, BPB Publication, New Delhi,				
Teach Yourself Excel 97 for Windows, BPB Publication, New Delhi, 1998				
Mastering Power Point for Windows, BPB Publication New Delhi, 1996				
<i>Computer Basics</i> , BPBP Publications, New Delhi.				
<i>Computer Concepts and Facts</i> , BPB Publication, New Delhi.				
Handbook for Windows, Power Point and Excel.				
National Institute for Computer Education, Chennai				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The student will be oriented with the basic knowledge of computer applications.</li> <li>➤ The student will be able to apply the knowledge in the framing of training programs.</li> <li>➤ The outcome of this course will help him in gathering, storage and processing of huge information in relation to inputs, outputs and feedback of sports training programs.</li> </ul>			

<b>Semester - V</b>				
<b>Course Code</b>	<b>Core Course – XIV</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
<b>22BPE 5C4</b>	<b>RESEARCH AND ELEMENTARY STATISTIC</b>	<b>T</b>	<b>4</b>	<b>4</b>
<b>Unit-I</b>	<b>INTRODUCTION</b> Definition for Research – Need, importance and scope of research in Physical Education – Basic research – Applied research.			
<b>Unit-II</b>	<b>FORMULATION AND DEVELOPMENT OF RESEARCH PROBLEM</b> Location of research problem – Criteria in selecting the research problem – Hypothesis – Research proposal.			
<b>Unit-III</b>	<b>HISTORICAL RESEARCH</b> Definition of Historical research – Steps in historical research – Sources of Historical data-primary and secondary sources of data – Historical criticism and internal.			
<b>Unit-IV</b>	Definition and meaning of variables, constants, population, sample and parameter – Scales of Measurement - Nominal, Ordinal, Interval and Ratio – Definition and meaning of range, quartile deviation, mean deviation and standard Deviation – Computation of standard deviation and quartile deviation from ungrouped and grouped data- Characteristics and uses of measures of variability.			
<b>Unit -V</b>	Meaning and importance of percentiles – Computation of percentiles from ungrouped data and grouped and grouped data – Construction of percentiles scales – Computing percentiles in deciles and quartiles.			
<b>References:</b>				
Clarke, David Hand Clarke H.Harrison Research process. In physical education (2 <sup>nd</sup> edition) Englewood cliff, new jersey, prentice hall, Inc. 1984  Best John W. 1971, Research in Education, Englewood cliffs, New jersey, prentice hall, Inc				
<b>Outcomes</b>	➤ Knowledge of Research and advances statistics in Physical Education.			

<b>Semester - V</b>				
<b>Course Code</b> <b>22BPE 5C5</b>	<b>Core Course – XIII</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>SPORTS MEDICINE AND PHYSIOTHERAPY</b>	<b>T</b>	<b>4</b>	<b>6</b>
<b>Unit-I</b>	Common Athletic injuries and their treatment, Sprain, Strain. Types of fracture and their treatment			
<b>Unit-II</b>	Dislocation, Muscle cramp, Bleeding, Wound and its types, Contusion, Abrasion and Puncture wounds			
<b>Unit-III</b>	Meaning, Nature, Need and importance of Physiotherapy  Short wave Diathermy, Microwave Diathermy, Diapulse Diathermy, Ultra Sound Waves, Infra red rays, Ultra violet rays.			
<b>Unit-IV</b>	Brief History of Massage Classification of the Manipulations used in massage the techniques and uses indication of all manipulation			
<b>Unit -V</b>	Rhumatic Conditions <ol style="list-style-type: none"> <li>1. Classification – Rhumatoid Arthritis</li> <li>2. Spondylitis</li> <li>3. A cute respiratory conditions</li> <li>4. Chronic respiratory conditions</li> <li>5. Conditions of the Nervous System.</li> </ol> Introduction, Sign and Symptoms of neurological dis-orders like Paralegia, Hemiplegia, Cerebral Palsy.			
<b>Book for References:</b> Thorndike, Athletic injuries. I.B. Clayton, Text Book of Electro therapy and Action therapy. Edwin M. Prasnet, Manual of message and Movements. R. Foracks, Exercise Therapy. M. V. Locs, Manual of Message. Adish Luchwald, Physical Rehabilitation for Daily Living.				
<b>Outcomes</b>	➤ To improve the knowledge about Sports medicine.			

<b>Semester - V</b>				
<b>Course Code</b>	<b>Core Course – XIV</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
<b>22BPE 5C6</b>	<b>SPORTS NUTRITION</b>	<b>T</b>	<b>4</b>	<b>6</b>
<b>Unit-I</b>	<b>INTRODUCTION TO NUTRITION</b> Definition – Meaning – Need of sports Nutrition – Essential nutrition – Energy nutrients minerals and vitamins – Water –basic four food plan - balanced diet – daily recommended allowances.			
<b>Unit-II</b>	<b>CARBHOHYDRATES:</b> The nature of CHO – Kinds and sources of CHO – recommended intake of CHO – Role of carbohydrates in the body – energy sources – protein sparing – metabolic primer Fuel for the central nervous system – CHO balance in exercise – Intense exercise – moderate and prolonged exercise – effect of diet on muscle glycogen – administration of oral glucose.			
<b>Unit-III</b>	<b>FAT</b> Nature of fat – kinds and sources of fat – Recommended intake of fat – Role of fat in the body – energy sources and reserve – protection and insulation – vitamin carrier and Hunger depressor – Fat Balance in Exercise – Role of fat in Glycogen Sparing – Fat rich foods. <b>PROTEIN</b> The nature of protein – kinds and sources of protein – recommended intake of protein Role of protein in the body – Protein balance in exercise – dynamics of protein metabolism – protein rich foods. <b>VITAMINS</b> The nature of vitamins – kinds of vitamins – Role of vitamins in the body – vitamins and exercise performance – Dietary sources – RDA – Vitamins and functions – vitamins deficiency diseases – vitamin rich foods.			
<b>Unit-IV</b>	<b>MINERALS</b> The nature of minerals – kinds and sources of minerals – role of minerals in the body – Minerals and exercise performance – Recommended daily allowances – functions – deficiency – diseases – Dietary sources. <b>WATER:</b> Water in the body – water balance intake versus output – functions of body water – water requirement in exercise – Dehydration – Rehydration – Fluid facts for thirsty Athletes – Liquid meal.			
<b>Unit -V</b>	<b>DIET PLANNING FOR SPORTS PERSON:</b> Diet planning – factors determining diet planning – The Athlete’s diet – Nutrition before exercise – pre game meal carbo-loading for endurance exercise – Nutrition after exercise – electrolytes and its function – sodium – Potassium Chlorine – Sodium Chloride(Salt) – Electrolyte replacement.			
<b>Book for References:</b>				
William D. Mc Arodle Frank I. Katch Victor L Katch Exercise Physiology Energy, Nutrition and Human performance Lea & Febiger Philadelphia Richard W. Bowers on Edward L. Fox sports Physiology Third Edition.WM. C. Brown Publishers. Laurence E. Morehouse Augustus T. Miller, Jr. Seventh edition Physiology of exercise. The C.V. Mosby Company. David H. Clarke exercise Physiology prentice – Hall, Inc. Englewood Cliffs, New Jersey.				

Larry G. Shaver Essentials of Exercise Physiology subject publications.

**Outcomes**

- Will develop skills to establish daily caloric requirement and to design the diet plan.
- Will orient the student to the role of food on physical performance.
- Would make the student understand and prepare weight management plans.
- Will acquaint student with principles of sports nutrition.

Semester - VI				
Course Code 22BPE 6E1	DSE-1	T/P	C	H/W
	SPORTS MANAGEMENT	T	6	6
<b>Unit-I</b>	Meaning and Definition of Sports management – Scope of sports management – Basic principles of sports management – Functions of sports management.			
<b>Unit-II</b>	Personal management: Objectives – Personal policies – Personal Recruitment – Role of Personal manager. Programme management: Importance of programme development – Factors influencing programme development – Competitive sports programs.			
<b>Unit-III</b>	Sports marketing: Meaning – Factors involved in the marketing of sports – Market awareness – Developing a target market strategy – Quality and price of sports products.			
<b>Unit-IV</b>	Supplies of sports Equipment: Guidelines for selection and supply of equipments – Equipment room, Equipment and supply manager – Guidelines for checking, storing and issuing – Care and Maintenance of equipments.			
<b>Unit -V</b>	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.			
<b>Book for References:</b>				
<p>Bucher A. Charles (1993) <i>Management of Physical Education and sports</i> (10<sup>th</sup> ed.,) St. Louis: Mobsy Publishing Company.</p> <p>Chellaldurai. P(1999) <i>Human Resource Management in sport and Recreation, Human kinetics.</i></p> <p>Chakraborty, Samiram (1988), <i>Sports Management</i>, Sports publications, New Delhi.</p> <p>Lazer. W and Cultey. J <i>Marketing Management</i>. Boston Houghton Miffing Co.</p> <p>Ruben Acosta Hernandez, <i>Managing sport organizations</i>, Human kinetics.</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ The students would understand the importance of management of physical education.</li> <li>➤ He will be able to organize various physical education programs.</li> <li>➤ He would know about various schemes and policies of state &amp; central management.</li> <li>➤ He would know about planning of facility and financial management.</li> </ul>			

<b>Semester - VI</b>				
<b>Course Code</b> <b>22BPE 6E2</b>	<b>DSE-2</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
	<b>HEALTH EDUCATION AND FIRST AID</b>	<b>T</b>	<b>6</b>	<b>6</b>
<b>Unit-I</b>	Meaning, Nature, Need and Scope of health Education. Factors influencing Health. State, National and International health organization. Meaning of wellness and Health – components of Health-Physical and Mental Health. Community health, Environment health, Occupational health. Personal hygiene School health programme.			
<b>Unit-II</b>	Communicable diseases – agent, causative organism, Incubation period-Mode of spread, sign and symptoms and preventive measure of typhoid, Cholera, Pulmonary Tuberculosis, Amoebiasis, Malaria, Tetanus, Poliomyelitis, Non-Communicable diseases – Symptoms and Prevention of Peptic ulcer, Malignancy, Cancer, Hypertension, Diabetic mellitus.			
<b>Unit-III</b>	Definition – Characteristics – Principles of Safety Education – Need for Safety Education in Physical Education. Factors affecting safety – Need and Importance of safety for preventing injuries.			
<b>Unit-IV</b>	Definition and importance of first aid – first aid for Athletic injuries – sprain, strain – dislocation – cramp – fracture and its types.			
<b>Unit -V</b>	Sign, Symptoms and first aid for Poisoning, Drowning, Dog Bit and Burns. Types of Bleeding – Wound and its type – Contusion – Abrasion – Puncture wound – Laceration. Artificial respiration.			
<b>Book for References:</b>				
Mangal SK and Chandra, P.C. (1979) Health and Physical Education, Ludhiana Tandon Brothers Publication.				
Neiniah (1978) School Health Education, New York: Harper and Brothers				
Royappa, Daisy Joseph and Govindarajulu, JK. (1972) Safety Education				
First Aid to the Injured, New Delhi: St. John Ambulance Association				
School Safety Policies, Washington: America Association for Health, Physical Education and Recreation.				
Florio, A.E and Stafford, G.T., (1969) Safety Education, New York: Mc Graw Hill Book Company.				
William, Evans, A, (1952) Everyday Safety, Lyons and Carnahan				
Miller, David. E, (1976) Occupational Safety, Health and Fire Index, New York: Marcel Dekker Inc.				

Semester - VI				
Course Code	DSE-3	T/P	C	H/W
22BPE 6E3	<b>THEOIRES OF MAJOR GAMES AND TRACK &amp; FIELD – III</b> (Major Games: Basket ball, Cricket, Hockey and Kho-Kho)	T	6	6
<b>Unit-I</b>	History of Track & Field: Track events, Throws, Jumps, Organizational set up in District, State and National level. Shot Put : Fundamental skills: Grip, Placement of shot, initial stance, Glide, Releasing, Reserve Hammer Throw: Initial stance – rotation – Releasing and Follow through. Javelin : Holding – Approach run – release – reverse.			
<b>Unit-II</b>	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 Rules and their interpretations – methods of officiating – Duties of official – Equipment and their Specification – Layout of the Track Events – Throws and Jumps.			
<b>Unit-III</b>	Origin, History and development of the game – International, National and State Level Organizations. Fundamental Skill – Lead Up Games – Various System of Play – Selection of Players.			
<b>Unit-IV</b>	Training: Warm-Up and Warm down – Technical Training – Tactical Training – Coaching Program. Layout of Playfield with all Measurement, Facilities and equipment and its specifications.			
<b>Unit -V</b>	<ul style="list-style-type: none"> <li>• Rules and their Interpretation</li> <li>• Methods of Officiating</li> <li>• Duties of Officials</li> </ul>			
<b>Books for References:</b>				
Dr. Anil Sharma, O.P. Sharma Rules of Sports, Sports Publication, 4264/3 Ansari Road New Delhi – 2.				
Conling David, Athletics, London Robert Hale 1980				
Dr. P. Mariayyah Track & Field, Sports publication, Raja St. Coimbatore				
Ken O. Bosen, “Track & Field Fundamental Techniques NIS Publications, Patiala.				
Doherty, J. Mennath, “Modern Track & Field”, Englewood cliffs, Prentice Hall. Inc., New Jersey.				
Wein Harat “The Science of Hockey” London Pelham Books, 1979				
Tyson Frank “The Cricket Coaching Manual”, Calcutta, Rupa & Co, 1985				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To develop the Basic skills of the Game.</li> <li>➤ To enrich the knowledge of rules of the game and their interpretation</li> </ul>			

Semester - VI				
Course Code	DSE-4	T/P	C	H/W
22BPE 6E4	<b>PRACTICAL III –THEORIES OF MAJOR GAMES II AND TRACK &amp; FIELD III</b> (Major Games: Basket ball, Cricket, Hockey and Kho-Kho)	T	6	6
<b>GAME</b>				
<p>General and specific conditioning exercise  Fundamental Skills  Drills for developing the skills  Team Tactics and Strategy  System of Play  Standardized skill test  Scouting of Performance  Rules  Officiating</p>				
<b>ATHLETICS</b>				
<p>General and specific conditioning exercise  Teaching of Skill  Practicing the Skills  Equipments  Scouting of Performance  Rules  Officiating techniques  Practicing the Skills  Equipments  Scouting of Performance  Rules  Officiating techniques</p>				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To develop the Basic skills of the Game.</li> <li>➤ To enrich the knowledge of rules of the game and their interpretation</li> </ul>			

<b>Semester - VI</b>				
<b>Course Code</b>	<b>DSE-5</b>	<b>T/P</b>	<b>C</b>	<b>H/W</b>
<b>22BPE 6E5</b>	<b>CARE AND PREVENTION OF ATHLETIC INJURIES</b>	<b>T</b>	<b>6</b>	<b>6</b>
<b>Unit-I</b>	(i) Types of Movements, Concentric, exocentric (Isotonic), Static (Isometric) and Isokinetic exercises. (ii) Posture and body mechanics – Standards of Standing posture, values of good posture, drawback and causes of poor posture.			
<b>Unit-II</b>	(i) Posture Tests – Examination of the spine. New York State posture Rating Chart Test, Organization of special classes for postural correction. (ii) 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.			
<b>Unit-III</b>	(i) A brief history of massage and remedial exercise (ii) Muscle relaxation as an aid to massage (iii) Points to be considered in giving massage (iv) Physiological effects of massage (v) Classification of the manipulations used in massage and their specific uses on the Human body a stroking manipulation. (vi) Effleurage, Stroking, Kneading, Friction, Hacking, Clapping, Beating and Pounding.			
<b>Unit-IV</b>	(i) Common athletic injuries and their treatment (ii) Sprains (iii) Strains (iv) Contusions (v) Abrasions (vi) Type of fractures and their management			
<b>Unit -V</b>	Principles of applying heat/cold, ultra-violet rays, infra-red rays, contrast bath ultrasonic			
<b>Book for References:</b>				
Corrective Physical Education, Rathborne J.I.W.B. Saunders and co., London 1995.				
Manual of massage and movement, Prof E.M. Naro Faber and Faber Ltd.				
Therapeutic Exercise for body Alignment and Education, by William mareuam and Catherine Worthingham, WB. Saunders and Co., 1965				
Massage and Medical Gymnastics, M.V. Lace J. & A. Churchill Ltd., 1951.				
Preventive and Corrective Physical Education Stafford and Kelly, New York. The Ronald Press, 1968.				
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>➤ To develop the Basic skills of the Game.</li> <li>➤ To enrich the knowledge of rules of the game and their interpretation</li> </ul>			