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From the academic year (2012-2013)

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<td>II</td>
<td>English Through Literature</td>
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<td>III</td>
<td>Core – 5 Games – III (Football, Cricket, Tennis)</td>
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<td>Allied – 3 Methods in Physical Education</td>
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<td>IV</td>
<td>Basic Tamil/Advanced Tamil/Non-major Elective – 1 from Arts (Sports Injuries &amp; Management)</td>
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| PART | PAPER | Hrs | Cr |
| I | Tamil / Hindi / French | 06 | 04 |
| II | Language Through Literature | 06 | 04 |
| III | Core – 6 Games – IV (Handball, Table Tennis, Hockey) | 03 | 03 |
| Practical | | 02 | 02 |
| III | Allied – 4 Health Education, Safety Education & First Aid | 05 | 04 |
| IV | Basic Tamil/Advanced Tamil/Non-Major Elective-2 from other Sciences (Yoga for Healthy life) | 03 | 02 |
| Skill based Elective Internet and Web Technology | | 04 | 02 |
| F.C – Bioethics, Religions and Peace Studies / Catechism of the Catholic Church | | 01 | 01 |
| V | Extension Activities NSS/ NCC/ Phy.Edn/ YRC/ ROTARACT/ AICUF/ Nature Club | -- | 01 |
| ARISE | | -- | -- |
| Total | | 30 | 24 |

| III | Core |
| Core - 7 Research Methodology & Statistics in Phy.Edn. | 05 | 05 |
| Core – 8 General Theory and Methods of Training | 05 | 04 |
| Core – 9 Teaching Practice | 03 | 02 |
| Practical | | 03 | 03 |
| Core – 10 Test, Measurement and Evaluation in Physical Education and Sports | 03 | 03 |
| Practical | | 02 | 02 |
| Core – 11 Organization and Administration in Physical Education | 05 | 03 |
| Core Elective – 1 Exercise Physiology | 04 | 03 |
| Total | | 30 | 25 |
### VI SEMESTER

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<td>Core – 13 Sports Psychology and Sociology</td>
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<td>Core - 14 Games of Specialization – Theory (Hockey, Football, Volleyball, Basketball, Badminton and Handball )</td>
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<td>Core - 16 Project</td>
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<td>Core Elective – 2 Sports Medicine</td>
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### SELF LEARNING COURSES

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<td>III</td>
<td>Personal Fitness Training</td>
<td>03</td>
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<tr>
<td>IV</td>
<td>Know the Major Games – Football, Hockey, &amp; Cricket</td>
<td>03</td>
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<tr>
<td>V</td>
<td>Nutrition</td>
<td>03</td>
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<tr>
<td>VI</td>
<td>First Aid &amp; Injury Management</td>
<td>03</td>
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Games – I
(Volley ball, Kabaddi, Badminton)
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To Provide Technical informations and thorough knowledge of the following Games.
Volleyball, Kabaddi, Badminton.

Contents:

<table>
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<tr>
<th>Unit</th>
<th>Description</th>
<th>Hours</th>
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<tbody>
<tr>
<td>I</td>
<td>History and Development of Major Games – Organization of Games – conducts of matches and tournaments.</td>
<td>8</td>
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<tr>
<td>II</td>
<td>Fundamental skills and Advanced skills of Volleyball, Kabaddi, and Badminton.</td>
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<tr>
<td>III</td>
<td>Training – Warming up – General and specific – Warming Down – Essential Fitness components – Strength, Speed, endurance, Flexibility, Agility related to the game – lead up Activities.</td>
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<tr>
<td>IV</td>
<td>Ground Marking and Measurements – Equipments – Rules and their Interpretations of Volleyball, Kabaddi and Badminton.</td>
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<tr>
<td>V</td>
<td>Mechanism of Officiating: Methods of Officiating – Duties of Officials – Officials signals and Scoring system for Volleyball, Kabaddi and Badminton.</td>
<td>9</td>
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</tbody>
</table>

Reference Books:

1. Coaching Volleyball Technical & Tactical Skills (Technical and Tactical Skills Series) by American Sport Education Program (May 18, 2011)
2. Volleyball Coach’s Survival Guide: Practical Techniques and Materials for Building an Effective Program and a Winning Team by Sue Gozansky (Nov2001)
Track and Combined Events – I
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To Provide Technical informations on Track and Combined Events.

Contents:

Unit – I: (8 hours)
History of Track Events – Rules and their Interpretations – Warm up – General and specific conditioning – Maintenance of Track.

Unit – II: (10 hours)
Lay out – 200 mts. and 400 mts track. Need for standard Track – Calculations and Marking of Staggered starts Arc Starts, Relay races, Hurdle Races & steeples chase.

Unit – III: (10 hours)
Starts & Finish: Fixing the block - Types of starts – Crouch starts – Standing starts – Semi crouch starts - Techniques in finish.

Unit – IV: (9 hours)
Relay Races: Relay Marking – Style of baton exchange and Specific drills.

Unit – V: Combined Events: (8 hours)
Decathlon and Heptathlon, Order of Events, Rules and Scoring points.

Reference Books:
1. Getting Started in Track and Field Athletics: Advice & ideas for children, parents, and teachers by Gary Barber (Jan 17, 2006)
4. Athletics 2011: The International Track and Field Annual. Edited by Peter Matthews by Peter Matthews (May 2011)
Fundamentals of Physical Education

Class : I Year  Part : III Allied-1
Semester : I  Hours : 75
Subject Code : 15UPEA11  Credit : 4

Objectives:
To Provide Fundamental Informations about Physical Education and the History.

Contents:
Unit – I: (10 hours)
Fundamentals; Meaning & Definition – Importance of Physical Education - Need and Scope of Physical Education – Aim and Objectives of Physical Education.

Unit – II: (15 hours)
History of Physical Education in India and Ancient Greece.
Philosophical Studies – Idealism – Naturalism – Pragmatism – Realism.

Unit – III: (15 hours)

Unit – IV: (20 hours)
Olympic Games: Ancient Olympics and Modern Olympics, Olympic Flag – Olympic Torch and Oath, Asian Games and SAF Games.

Unit – V: (15 hours)

Books for References:
5. Fundamental Statistics in Physical Education and Sports Sciences by Dr. Dhananjoy Shaw (Mar 30, 2007)
Class : I year  
Semester : II  
Subject Code : 15UPEC32

Games – II
(Basketball, Ball-Badminton, Kho-Kho)
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To Provide Technical Informations and thorough Knowledge of the following Games
(Basketball, Ball badminton, Kho-Kho).

Contents:

Unit – I:  
(8 hours)
History and Development of Major Games: Organization of Games – Conducts of matches and Tournaments.

Unit – II:  
(10 hours)
Fundamental and Advanced skills of Basketball, Ball Badminton and Kho-Kho.

Unit – III:  
(9 hours)
Training: Warming up – General and specific – Warming Down – Essential Fitness components – Speed, Strength, Endurance, Flexibility, Coordination, Agility related to the game – Lead-up activities.

Unit – IV:  
(9 hours)

Unit – V:
(9 hours)

Reference Books:
1. Coaches corner.(Basketball competitions): An article from: Coach and Athletic Director by Gale Reference Team (Oct 31, 2006)
Field Events-II  
(Student admitted from the Academic year 2012 -13 onwards)

Objectives:
To provide knowledge on theoretical aspects of field events.

Contents:

Unit – I:  

Unit – II:  
**Long Jump:** Approach Run – Take off – Flying Phase – landing – Specific Exercise.  
**High Jump:** Approach Run – Take off – Bar clearance – landing – Specific Exercises.

Unit – III:  
**Shot Put:** Initial stance – Holding the shot – Grip and Placement of the shot - Glide – Throwing stance - Throw - Follow through – specific exercises.  
**Discus through:** Initial stance – Holding the Discus - Preliminary swing – Turn – Throwing stance – throw – follow through – specific exercises.

Unit – IV:  
**Javelin throw:** Grip – Carry – Approach Run – Stride Rhythm – Throwing stances – Throw - Follow through – specific drills.  
**Triple Jump:** Approach Run – Take off – Hop – Step and Jump – Landing and specific exercises.

Unit – V:  
**Pole Vault:** Grip – Carry – Approach Run – Planting the Pole – Take off – Bar clearance – Landing.  
**Hammer throw:** Initial stance - Grip – Preliminary Swings – turn - Release & Follow through.

Reference Books:
1. Getting Started in Track and Field Athletics: Advice & ideas for children, parents, and teachers by Gary Barber (Jan 17, 2006)
3. Athletics 2011: The International Track and Field Annual. Edited by Peter Matthews by Peter Matthews (May 2011)
Objective:
To provide knowledge on various parts of the human body and their movements.


Unit – III: Muscular System: Voluntary muscle - Involuntary muscle – Cardiac Muscle Digestive System: Structure and Functions of Stomach – Small Intestine – Large Intestine. (15 hours)


Books for Reference:
1. Essentials of Human Anatomy & Physiology Laboratory Manual by Elaine Nicpon Marieb (Jan 20, 2008)
GAMES –III
(FOOTBALL, CRICKET, TENNIS)
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To provide technical information and thorough knowledge of the following games - Football, Cricket and Tennis.

Contents:

Unit – I: History and Development of Football, Cricket and Tennis Games – Organization of Games –Tournaments.

(9 hours)

Unit – II: Fundamental Skills and Advanced Skills of Football, Cricket and Tennis.

(9 hours)

Unit – III: Training – General and Specific Warming up – Warming Down – Physical Fitness Components – Strength, Speed, Endurance, Flexibility, Coordination, Agility related to the Games.

(9 hours)


(9 hours)


(9 hours)

Reference Books:
1. Clive Gifford, 2010 “Tell me about Tennis” 1st Ed., USA
METHODS IN PHYSICAL EDUCATION
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To provide insights on handling Physical Education Programmes.

Contents:
Unit – I:

Unit – II:
Class Management – Teaching Aids - Community – Co-curricular Activities – Audio Visual Aids. (15 Hours)

Unit – III:
Intramural and Extramural Competitions – Methods of organizing – Intramural and Extramural Competitions. (15 Hours)

Unit – IV:
Lesson Plan – Introduction – Importance – Types of lesson Plan. (General & Particular) (15 Hours)

Unit – V:

Reference Books:
SPORTS INJURY AND MANAGEMENT
For Arts Students
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To keep the body fit and healthful.
To give first aid and rehabilitation measures.

Contents:

Unit – I: (9 Hours)
First Aid – Definition – Aim and Scope of First Aid – Common injuries in sports and games.

Unit – II: (9 Hours)
Open Wound: Abrasion - Laceration – Incision - Avulsion - Puncture Wound - First Aid for open wounds.

Unit – III: (9 Hours)
Closed wounds: – Contusion – Sprain – Strain – Dislocation
Fracture – Types of Fracture – First Aid for closed wound.

Unit – IV: (9 Hours)

Unit – V: (9 Hours)

Reference Books
PERSONAL FITNESS TRAINING
(Students admitted from the Academic year 2012-13 onwards)

Objective:
1. Sound mind leads a sound body.

Contents:
Unit – I
Warming up Exercises- Warm down Exercises – Stretching Exercises
Strength Training – Weight Training

Unit – II
Endurance Training – Continuous Training - Slow Continuous- Fast Continuous- Repetition Method - Interval Training – Fartlek Training.

Unit – III
Speed Training - Repetition Method, Plyometric Training.

Unit – IV
Upper Body Fitness – Abdominal conditioning, Lower and Upper Abdominal, Shoulder Fitness, Back Strengthening Exercises.

Unit – V

Reference Books
GAMES –IV
(HANDBALL, TABLE TENNIS, HOCKEY)
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To provide technical information and thorough knowledge of the following Games – Hockey, Handball and Table Tennis.

Contents:
Unit – I:
History and Development of the Games – Organization of Games – Conducts of Matches and Tournaments. (9 hours)

Unit – II:
Fundamental Skills and Advanced skills of Hockey, Handball and Table Tennis. (9 hours)

Unit – III:
Training – General and Specific – Warming up – Warming Down – Physical Fitness Components – Strength, Speed, Endurance, Flexibility, Coordination and Agility related to the Games. (9 hours)

Unit – IV:
Ground Marking and Measurements – Equipment – Rules and their Interpretations of Hockey, Handball and Table Tennis. (9 hours)

Unit – V:
Mechanism of Officiating– Duties of Officials – Official’s Signals – Scoring System - Hockey, Handball and Table Tennis. (9 hours)

Reference Books:
2. Elizabeth Andrus with Sue Myers, 2008 “Field Hockey steps to Success” 2nd Ed. USA
HEALTH EDUCATION, SAFETY EDUCATION & FIRST AID
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To create awareness on Health hazards, preventive measures and immediate treatment.

Contents:

Unit: I
Meaning and Definition of Health- Factors influencing health- Nutrition and Balanced Diet- Health Organizations-World Health Organization (WHO) (15 hours)

Unit: II
Meaning of Mental Health – Fundamental factors for Mental Health –Hygiene –Personal - Family - Food Poisoning and their Prevention- Food Adulteration- School Health Programme (15 hours)

Unit: III
Pollution- Water - Air - Land- Noise - Communicable Diseases (Malaria, Cholera, Typhoid, Dysentery - Chickenpox, Tuberculosis. (15 hours)

Unit: IV
Safety Education and its General Principles - Safety in School, Play Grounds and Home. (15 hours)

Unit: V

Reference Books
2. Cathie Robertson, 2010 “Safety, Nutrition and Health in Early Education”, 4th Ed., USA
ARUL ANANDAR COLLEGE (AUTONOMOUS), KARUMATHUR
DEPARTMENT OF PHYSICAL EDUCATION

Semester : IV  Hours : 45
Code : 12PNES42  Credit : 02

YOGA FOR HEALTHY LIFE
For Other Science Students
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To Experience the Effects of Yogic Practices in day to day life

Contents:

Unit – I: (9hrs)

Unit – II: (9hrs)
Sitting Postures - Procedures - Padmasana - Patchimottanasana- Vakarasana.  
Standing Posture – Procedures- Vrukshasana, Natarajasana, Trikonasana.

Unit – III: (9hrs)
Kneeling Posture – Procedures - Vajrasana - Sputa Vajrasana,- Ushtrasana- 
Head Posture - Sirasasana- Hand Posture - Mayurasana

Unit – IV: (9hrs)
Supine Posture - Sarvangasana, - Halasana - Savasana.

Unit – V: (9hrs)
Effects of Yoga - Pranayama - Puraka – Kumbhaka – Rechaka – Do’s and Don’ts of Yoga.

Reference Books:
4. Trehan. B.k. and Indu Trchaa, 2009 “Effective Yoga for Health and Happiness”  
   Macumillian Publisher India Ltd
5. Chandrasekaran,K.,1999,“Sound Health through Yoga”, Sedapatti, Prem Kalyan
   Publications.
KNOW THE MAJOR GAMES
(Football, Hockey & Cricket)
(For Students admitted from the Academic Year 2008 – 2009 onwards under the New CBCS Pattern)

Objectives:
To know the fundamental skills
To provide knowledge of rules and regulation of the games

Unit – I:
History and Development of Football, Hockey and Cricket.

Unit – II:
Fundamental skills and Advanced Skills of Football, Hockey and Cricket

Unit – III:
Training – Warming up – General and Specific – Warming down – Essential Fitness Components – Strength, Speed, Endurance, Flexibility and Agility related to the Game

Unit – IV:
Measurements – Equipments – Rules and their Interpretations

Unit – V:
Mechanism of Officiating – Methods of Officiating – Duties of Officials – Officials Signals – Scoring system

Reference Books:
ARUL ANANDAR COLLEGE (AUTONOMOUS), KARUMATHUR – 625 514
DEPARTMENT OF PHYSICAL EDUCATION

Class : B.Sc Phy.Edn. Part : III Core-7
Semester : V Hours : 75
Code : 12PEC155 Credits: 05

Research Methodology & Statistics in Physical Education
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To obtain adequate knowledge on research and the statistical methods.

Unit-I (15 hours)
Definition meaning of Research.
Nature and Characteristics of research.
Need and Importance of Research in Physical Education.

Unit-II (15 hours)
Types of Research,
Criteria in selecting the Research problem – Formulations of Hypothesis.
Historical research – Steps – Sources – Criticism.

Unit-III (15 hours)
Surveys: Questionnaire – Interview – Case Study.
Research Proposal – Abstract.
Organization of Thesis Report.
Mechanism of Writing Footnote and Bibliography.

Unit-IV (15 hours)
Statistic – Meaning -Types – Need and Importance Statistics in Physical Education
Constructing a Frequency Table – Range of Scores – Number of Intervals – Size of Interval – Tabulation– Frequency Polygon –Histogram.

Unit – V (15 hours)
Measures of Central Tendency – Mean, Median and Mode
Measures of Variability, Correlation with Ungrouped data, t-ratio.

Reference

2. Rothstein, Anne, L. Research Design & Statistics for Physical Education
General Theory and Methods of Training
(Students admitted from the Academic year 2012 -13 onwards)

Objective:
To know various methods of physical training to enhance sports performance

Unit-I

Unit-II
Training of Motor Qualities
Strength: Forms of Strength – Characteristic of Strength – Strength Training – Means and Methods of Developing Strength

Unit-III
Flexibility: Types of Flexibility -Methods of Developing Flexibility
Speed: Forms of Speed – Speed Training – Means and Methods of Developing Speed

Unit-IV
Training Plans – Long term and Short Term Plans – Periodisation (Single, Double and Multi)

Unit – V
Types of Training – Interval Training, Circuit Training, Plyometric Training, Weight Training.

Reference Books
1. K.O. Bosen teaching in Athletics, NSNIS, Patiala
2. Stephen Ralph, E&Som Bell, 1978, track and Field, John Witley & Sons, INC, Canada
3. Scientific Principles of Coaching - J. Bunn
5. Sports Training – Hardayal Sing
Teaching Practice
(Students admitted from the Academic year 2012 -15 onwards)

Objective:
To provide practical knowledge to handle the physical education class

Unit – 1  
Lesson plan – Types of lesson plan – General Lesson plan, Assembly and Roll Call, Introductory part, Formal part, Special part, Recreational part, Re-assembly and Dismissal.

Unit – 2  
Particular Lesson plan – Assembly and Roll call, Specific Warm-up, Teaching the fundamentals, practicing the fundamentals, Lead up games, Whole Game, Re-assembly and Dismissal.

Unit – 3  
Marching – Left Turn, Right Turn, About Turn, Mark time March, March in, Right Wheel, Left Wheel, Dands, Bithaks, Dances and Aerobics

Unit – 4  
Indigenous Activities – Calisthenics Exercises, - Lezium, Hoops, Wands, Indian club and Dumb-bells

Unit V  
Minor Games – Ball Games, Relay Games, Tag Games, Goal Games and Point Scoring Games.

Reference Books:

Test Measurement and Evaluation in Physical Education and Sports
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To teach the testing procedure to find the performance of the sports persons

Unit-I
Meaning of Test, Measurement and Evaluation – Need and Importance of test, Measurement and Evaluation, Classification of Test – Standardized and Teacher Made Test – Objective and Subjective Tests – contribution of Knowledge Test and Skill Test

Unit-II

Unit – III
Physical Fitness Components – Test for Speed, Strength, Endurance, Agility and Flexibility.

Unit-IV
1. New York State Physical Fitness Test
2. Barrow Motor Ability Test
3. Kraus Weber Test
4. Cooper 12 Minutes Run / Walk Test
5. JCR test
6. Harward Step Test

Unit-V
SKILL TESTS
1. AAPHERD Basketball Test
2. Mc Donald Soccer Test
3. Russel Lange Volleyball Test
4. Harban Singh Hockey Skill Test
5. French Short Service Test (Badminton)

Reference Books:
Organization and Administration in Physical Education
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To know the administrative procedures programmes.
To know the physical education programmes.

Unit - I
Sports organization – Sports management services

Unit – II
Performance appraisal

Unit – III
Schemes of management in physical education – Organizational chart for High school
and higher secondary school – College – University - Organizational chart for

Unit – IV
Play area in institutions – Facilities and standards in physical education – Layout and
maintenance of playgrounds – Sports and Games Equipments

Unit - V
Finance and Budgeting in Physical Education – Preparation of budget – Records and Registers -
Purchase and Care of supplies and Equipments

Reference Books:
   – 1993
5. Tirunarayan, C&S. Hariharsharma, Methods in Physical Education, M/S. CT & SH,
Exercise Physiology
(Students admitted from the Academic year 2012-13 onwards)

Objectives:
To learn the effects of exercises on various systems.
To learn the effects of exercises on various in the human body.

Unit-I
(12 hours)
Meaning and Definitions of Exercise Physiology.
Microscopic Structure of muscle Fiber.
Sliding Filament Theory of Muscular Contraction.

Unit-II
(12 hours)
Aerobic and Anaerobic Metabolism
Carbohydrates, Fat and Protein metabolism

Unit-III
(12 hours)

Unit-IV
(12 hours)

Unit-V
(12 hours)
Muscular Fatigue – Types Prevention
Effect of doping – Alcohol and drugs on sports performance.

Reference Books
1. Exercise Physiology David H. Clarke.
2. Physiology of Muscular Activity- Peter .V.Karpovich
3. Physiology of Exercise – More House and Miller
Nutrition
(For Students admitted from the Academic year 2012 -15 onwards under the New CBCS Pattern)

Objective:
To give information about the healthy food for healthy living.

Unit – I:

Unit – II:

Unit – III:
Mal Nutrition – Pre-game meal – obesity – weight control.

Unit – IV:
Loading Carbohydrate – Protein – Fat – Minerals – Vitamins.

Unit – V:

Reference Books:
Kinesiology and Biomechanics in Physical Education and Sports
(Students admitted from the Academic year 2012 -13 onwards)

Objective:
To realize the movements of the body and mechanical principles of sports and games

Unit-I (15 hours)
Meaning – Aim and Objectives of Kinesiology in sports.

Unit-II (15 hours)
Location and Action of Muscles.
Upper Lymph: Biceps, Triceps, Deltoid.
Lower Lymph: Quadriceps, Hamstring and Gastronomies

Unit-III (15 hours)
Meaning and Definition of Biomechanics – Need and Importance of Biomechanics in the field of Physical Education and Sports.
Motion - Types of Motion - Linear, Rotary motions and their types. Newton’s Laws of Motion and their application to games and sports.

Unit-IV (15 hours)
Centre of Gravity - Equilibrium - Stages of Equilibrium – Factors that determine the degree of stability.

Unit-V (15 hours)

Reference
Sports Psychology and Sociology
(Students admitted from the Academic year 2012 -13 onward)

Objective:
To understand the psychological aspects and the influence of society in sports and games

Unit-I
Definitions of Psychology and Sports Psychology.
Need and Importance of Sports Psychology.

Unit-II
Motivation – Definition – Types of Motivation.
Reward and Punishment - Emotional Effects – Tension,
Anxiety – Types.

Unit-III
Personality – Definition –Meaning – Structure of Personality –Measuring Personality.
Athletic versus Non-Athletic Personality.
Perception – Definition – Theories of Perception- Wrong perception and its types

Unit-IV
Sports Sociology – Nature and scope of Sociology in Physical Education
and Sports – Social Factors influencing in Sports.

Unit-V
Leadership – Meaning – Types – Need and importance – Qualities – Character –
Leadership in Sports and Sports Ethics.

Reference Books
Games of Specialization – Theory
(Hockey, Football, Volleyball, Basketball, Badminton and Handball)
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To learn the history and measurements of the game.
To provide Knowledge of rules and their interpretations of the game.

Unit – I: (9 hours)
History and development of the Game – Trophies and Tournaments.

Unit – II: (9 hours)
Fundamental skills of the Hockey, Football, Volleyball, Basketball, Badminton and Handball.
Advanced skills of the Hockey, Football, Volleyball, Basketball, Badminton and Handball.

Unit – III: (9 hours)
Training – Warming up – General and specific – Warming Down – Essential Fitness components – Strength, Speed, endurance, Flexibility, Agility related to the game – lead up Activity.

Unit – IV: (9 hours)
Ground marking and Measurements – Equipments – Rules and Regulations of the game.

Unit – V: (9 hours)

Reference Books:
1. Ashok Karla, A.P., 1993 Badminton, Surjeet Printing Press, Jlandhar 8
ARUL ANANDAR COLLEGE (AUTONOMOUS), KARUMATHUR – 625 514
DEPARTMENT OF PHYSICAL EDUCATION

Class : III B.Sc. Part : III Core -15
Semester : VI Hours : 45
Sub. Code : 12PEC563 Credits: 03

Yoga for Fitness (Theory)
(Students admitted from the Academic year 2012 -13 onwards)

Objectives:
To Experience the Effects of Yogic Practices in Day today life

Unit – I: (9 hours)
History of Yoga – Meaning of Yoga – Aim and Objectives of Yoga – Stages of Yoga,
Differences between Asana and physical exercise, Role of yoga and fitness.

Unit – II: (9 hours)
Physical and Physiological effects of the following asana - Padmasana,
Paschimottanasana, Vakarasana, Vrukshasana, Trikonasana, Shalabhasana, Bhujangasana,
Makrasana& Surya Namaskar.

Unit – III: (9 hours)
Physical and Physiological effects of the following asana: Sarvangasana, Halasana,
Savasana, Sirasana, Mayurasana, Dhanurasana.

Unit – IV: (9 hours)
Meaning of pranayama – Purka – Kumbhaka – Rechaka. Nadisuddhi, NadiSodhana,
Surya bedhana, Sittalai and Sitkari.

Unit – V: (9 hours)
Meaning of Kriyas :Natikriya, Kabalapathi.
Meaning of Meditation – Breathing Meditation.

Reference Books:
1. Iyenger, B.K.S. Light on Yoga, Great Britain, Geroga Allen and unwin, 1982.
2. Sharma, P.D. Yogasana and Pranayama for health, nanveet Publications Ltd., Ahmedabad,
1984.
ARUL ANANDAR COLLEGE (AUTONOMOUS), KARUMATHUR – 625 514  
DEPARTMENT OF PHYSICAL EDUCATION

Class : III B.Sc.                          Part: III Core -16
Semester : VI                           No. of Credits: 03
Sub.Code :                              Hours :60

(For Students admitted from the Academic year 2012 -15 onwards under the New CBCS Pattern)

Objectives:
To provide the research knowledge in the field of physical education and sports

Contents:
1. Experimental Research
2. Comparative Study
3. Case Study
4. Survey Study
5. Analytical Study

Reference Books:
1. Clarke, David H and H. Harrison Clarke, Research Process in Physical Education
2. Rothstein, Anne, L. “Research Design & Statistics for Physical Education”
PopmpugarPathipagam 1995.
ARUL ANANDAR COLLEGE (AUTONOMOUS), KARUMATHUR – 625 514
DEPARTMENT OF PHYSICAL EDUCATION

Class : III B.Sc. Part : III Core Elective-2
Semester : VI Hours : 60
Sub. Code : 12PEE163 Credits: 03

Sports Medicine
(Student admitted from the Academic year 2012 -13 onwards)

Objectives:
To know about various injuries and its managements in sports and games

Unit-I (12 hours)
Meaning, Nature and Concept of Physiotherapy, Role of Physiotherapy in Sports and Games. Types of Injuries and Injury management. Brief History of Massage - Classifications of Manipulation

Unit-II (12 hours)
Therapeutic Modalities: Cold Modalities – Ice pack – Ice Massage – Ice Immersion – Cryostretch- Cryo kinetics.

Unit-III (12 hours)
Electrical Modalities: Ultra violet Rays.

Unit-IV (12 hours)
Therapeutic Exercise: Classifications – Passive range of motion – Active Range of Motion – Exercise Program to strengthen the injured.

Unit-V (12 hours)
Meaning and Definitions of Physical Rehabilitations.
Need of Rehabilitation.
Scope and methods of Rehabilitation.

Reference Books:
FIRST AID AND INJURY MANAGEMENT
(For Students admitted from the Academic year 2012-15 onwards under the New CBCS Pattern)

Objective:
To keep the body fit and healthful.

Unit – I:
First aid – Definition – Aim and Scope of first Aid – Causes for injuries in day to day life and the sports and games

Unit – II:

Unit – III:
Closed wound: Contusion – Sprain – Strain – Dislocation
Fracture – Types of fracture

Unit – IV:
Bandages – Types of bandages, dressing – Types of dressing,
First aid for suffocation - Snake bite - Dog bite– Burns – Poisons

Unit – V:

Reference Books
SCHEME OF EVALUATION FOR PRACTICAL

MAX  100 Marks

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<thead>
<tr>
<th>1. Demonstration of Skill</th>
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<td>4. Officiating &amp; Coaching</td>
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QUESTION PAPER PATTERN

Section A
Multiple Choice Questions  10X1 =10

Section B
Short Answer Type.
Answer any EIGHT questions out of TWELVE.  8X3 =24

Section C
Answer any FIVE questions out of EIGHT.  5X6 =30

Section D
Answer any THREE questions out of FIVE.  3X12 =36