**jpUts;StHgy;fiyf;fofk;**

**THIRUVALLUVAR UNIVERSITY**

**BACHELOR OF SCIENCE**

**B.Sc. PHYSICAL EDUCATION**

**DEGREE COURSE**

**(With effect from 2020 - 2021)**

**The Course of Study and the Scheme of Examinations**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Part** | **Study Components** | | **Ins. Hrs / week** | **Credit** | **Title of the Paper** | **Maximum Marks** | | |
| **Course Title** | |
|  |  | **SEMESTER I** | |  |  |  | **CIA** | **Uni. Exam** | **Total** |
|  | I | Language | Paper-1 | 6 | 4 | Tamil/Other Languages | 25 | 75 | 100 |
|  | II | English (CE) | Paper-1 | 6 | 4 | **Communicative English I** | 25 | 75 | 100 |
|  | III | Core Theory | Paper-1 | 6 | 4 | Foundations of Physical Education | 25 | 75 | 100 |
|  | III | Core Practical | Practical-1 | 4 | 0 | Major games -I | 0 | 0 | 0 |
|  | III | Allied -1 | Paper-1 | 4 | 3 | Yoga Education | 25 | 75 | 100 |
|  | III | Allied- 1 | Practical-1 | 2 | 0 | Mass Demonstration | 0 | 0 | 0 |
|  | **III** | **PE** | **Paper 1** | **6** | **3** | **Professional English I** | **25** | **75** | **100** |
|  | IV | Environmental Studies |  | 2 | 2 | Environmental studies | 25 | 75 | 100 |
|  |  | **Sem. Total** |  | **36** | **20** |  | **150** | **450** | **600** |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **SEMESTER II** | |  |  |  | **CIA** | **Uni. Exam** | **Total** |
|  | I | Language | Paper-2 | 6 | 4 | Tamil/Other Languages | 25 | 75 | 100 |
|  | II | English (CE) | Paper-2 | 6 | 4 | **Communicative English II** | 25 | 75 | 100 |
|  | III | Core Theory | Paper-2 | 5 | 4 | Anatomy and Physiology | 25 | 75 | 100 |
|  | III | Core Practical | Practical-1 | 3 | 2 | Major games – I and II | 25 | 75 | 100 |
|  | III | Allied-1 | Paper-2 | 4 | 3 | Theory of Sports and Games | 25 | 75 | 100 |
|  | III | Allied  Practical - 1 | Practical-1 | 2 | 2 | Indigenous activities | 25 | 75 | 100 |
|  | **III** | **PE** | **Paper 1** | **6** | **3** | **Professional English II** | 25 | 75 | 100 |
|  | IV | Value Education |  | 2 | 2 | Value Education | 25 | 75 | 100 |
|  | IV | Soft Skill |  | 2 | 1 | Soft Skill | 25 | 75 | 100 |
|  |  | **Sem. Total** |  | **36** | **25** |  | **225** | **675** | **900** |
|  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SEMESTER III** | | | | | |  | **CIA** | **Uni.**  **Exam** | **Total** |
|  | I | Language | Paper-3 | 6 | 4 | Tamil/other language | 25 | 75 | 100 |
|  | II | English | Paper-3 | 6 | 4 | English | 25 | 75 | 100 |
|  | III | Core theory | Paper-3 | 4 | 4 | Exercise physiology | 25 | 75 | 100 |
|  | III | Core practical | Practical-2 | 3 | - | Major games-III | 0 | 0 | 0 |
|  | III | Allied-2 | Paper-3 | 4 | 3 | Health education | 25 | 75 | 100 |
|  | III | Allied practical | Practical-2 | 3 | 0 | Aerobics and marching | 0 | 0 | 0 |
|  | IV | Skill based subject | Paper-1 | 2 | 2 | Computer Applications | 25 | 75 | 100 |
|  | IV | Non-major elective | Paper-1 | 2 | 2 | Yoga and Health | 25 | 75 | 100 |
|  |  |  |  | **30** | **19** |  | **150** | **450** | **600** |
|  | | | | | | | | | |
| **SEMESTER IV** | | | | | |  | **CIA** | **Uni.**  **Exam** | **Total** |
|  | I | Language | Paper-4 | 6 | 4 | Tamil/other languages English | 25 | 75 | 100 |
|  | II | English | Paper-4 | 6 | 4 | English | 25 | 75 | 100 |
|  | III | Core theory | Paper-4 | 4 | 4 | Organization and administration IPE | 25 | 75 | 100 |
|  | III | Core practical | Practical-2 | 3 | 2 | Major games | 25 | 75 | 100 |
|  | III | Allied-2 | Paper-4 | 4 | 3 | Theories of sports and games | 25 | 75 | 100 |
|  | III | Allied practical | Practical-2 | 3 | 2 | Minor games | 25 | 75 | 100 |
|  | IV | Skill based subject | Paper-2 | 2 | 2 | Leadership and Personality development | 25 | 75 | 100 |
|  | IV | Non-major elective | Paper-2 | 2 | 2 | Weigh Management | 25 | 75 | 100 |
|  |  |  |  | **30** | **23** |  | **200** | **600** | **800** |
|  | | | | | | | | | |
| **SEMESTER V** | | | | | |  | **CIA** | **Uni.**  **Exam** | **Total** |
|  | III | Core theory | Paper-5 | 6 | 6 | Methods in physical education | 25 | 75 | 100 |
|  | III | Core theory | Paper-6 | 6 | 6 | Kinesiology and biomechanics | 25 | 75 | 100 |
|  | III | Core theory | Paper-7 | 6 | 6 | Sports training | 25 | 75 | 100 |
|  | III | core practical | Practical-3 | 3 | - | Track events-I | 0 | 0 | 0 |
|  | III | core practical | practical-4 | 3 | - | Track events-I | 0 | 0 | 0 |
|  | III | Internal Elective | Paper-1 | 3 | 3 | Fitness and wellness | 25 | 75 | 100 |
|  | IV | Skill based subject | Paper-3 | 3 | 2 | Therapeutic Aspects of yoga | 25 | 75 | 100 |
|  |  |  |  | **30** | **23** |  | **125** | **375** | **500** |
|  | | | | | | | | | |
| **SEMESTER VI** | | | | | |  | **CIA** | **Uni.**  **Exam** | **Total** |
|  | III | Core theory | Paper-8 | 5 | 4 | Test and measurement | 25 | 75 | 100 |
|  | III | Core theory | Paper-9 | 4 | 4 | Sports psychology and sociology | 25 | 75 | 100 |
|  | III | Core theory | Paper-10 | 4 | 4 | Sports management | 25 | 75 | 100 |
|  | III | Core Practical | Practical-3 | 2 | 2 | Track events-I | 25 | 75 | 100 |
|  | III | Core Practical | practical-4 | 2 | 2 | Field events-I | 25 | 75 | 100 |
|  | III | Core project (individual/group project) | Paper-1 | 5 | 5 | Field project | 25 | 75 | 100 |
|  | III | Internal Elective | Paper-2 | 3 | 3 | Modern trends in physical education | 25 | 75 | 100 |
|  | III | Internal Elective | Paper-3 | 3 | 3 | Physiotherapy and first aid | 25 | 75 | 100 |
|  | IV | Skill based subject | Paper-4 | 2 | 2 | Fitness Management | 25 | 75 | 100 |
|  | V | Extension activities |  | 0 | 1 |  | 100 | - | 100 |
|  |  | **Total** |  | **30** | **30** |  | **325** | **675** | **1000** |
|  |  |  |  |  |  |  |  |  | **4400** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Part** | **Subject** | **Papers** | **Credit** | **Total Credits** | **Marks** | **Total Marks** |
| Part I | Languages | 4 | 4 | 16 | 100 | 400 |
| Part II | Communicative English& English | 4 | 4 | 16 | 100 | 400 |
| Part III | Allied (Odd Semester) | 2 | 3 | 6 | 100 | 200 |
|  | Allied (Even Semester) | 2 | 3 | 10 | 100 | 200 |
|  | Allied Practical | 2 | 2 | 100 | 200 |
|  | Electives | 3 | 3 | 9 | 100 | 300 |
|  | Core | 10 | (3-5) | 46 | 100 | 1000 |
|  | Core practical | 4 | (2-3) | 8 | 100 | 400 |
|  | Professional English | 2 | 3 | 6 | 100 | 200 |
|  | Compulsory Project (Group/Individual Project) | 1 | 5 | 5 | 100 | 100 |
| Part IV | Environmental Science | 1 | 2 | 2 | 100 | 100 |
|  | Soft skill | 1 | 1 | 1 | 100 | 100 |
|  | Value Education | 1 | 2 | 2 | 100 | 100 |
|  | Lang. & Others /NME | 2 | 2 | 4 | 100 | 200 |
|  | Skill Based | 4 | 2 | 8 | 100 | 400 |
| Part V | Extension Activities | 1 | 1 | 1 | 100 | 100 |
|  | **Total** | **44** |  | **140** |  | **4400** |

**B.Sc. PHYSICAL EDUCATION**

**DEGREE COURSE**

**(With effect from 2020 - 2021)**

**SEMESTER III**

**CORE PAPER - 3**

**EXERCISE PHYSIOLOGY**

UNIT – I

Exercise physiology- Importance of Exercise Physiology in Physical Education- Physiology of Muscular Activity- Mechanism of Muscular Contraction- sliding filament theory – Types of Muscle Fibers- Nerve Muscular Actively- Effects of Training on Muscular System.

UNIT – II

Physiology of Cardio Cycle- Factor Affecting: Heart Rate- Stokes Volume- Cardiac Output- Blood Pressure— Respiratory System: Mechanism of Respiration-Internal respiration- External respiration- Respiratory Regulation During Exercise: Pulmonary Ventilation- Lung Volumes and Capabilities: Tidal Volume- Vital capacity- oxygen debt-second wind-vo2 max- Effect of Training on Circulation and Respiratory System.

UNIT – III

Energy for movement: metabolism and Basic Energy System: ATP Production- Measuring Energy during Exercise- Energy Expenditure at Rest during Exercise- Fatigue and Causes of Fatigue. Hormonels –Nature of Hormones - Endocrine Response to Exercise.

UNIT – IV

Exercise in Extreme Environment: Exercise at High Altitude- Thermoregulation in Exercise- Mechanism of Body Temperature Regulation- Physiological Response to Exercise in the Heart and Humid Environment- Exercise in the Cold Environment- Nerve Control of Muscular Activities- Effects of Training on Nervous System.

UNIT – V

Ergogenic Aids: Amphetamines- Anabolic Steroids- Beta-Blocker – Caffeine- Choline- Carnitine- Clenbuterol- Protein Supplement- Blood Doping-Ergogenic Aids and Performance- Nutritional Agents- Drugs and Doping.

##### REFERENCE BOOKS

1. Sivaramakrishnan.S., 2006, “Anatomy and Physiology for Physical Education”, First Edition, Friends Publication., Chennai.
2. Benardot, Dan., 2012, “Advanced Sports Nutrition”, Second Edition, Friends Publication, Chennai. Budhe, A.A., 2013, “Exercise Physiology”, Sports Publications, Chennai.
3. Rajeev, K., 2015, “Sports Medicine and Exercise Physiology”, Sports Publications, Chennai.
4. Blaisdall, A., 2006, “Human Physiology”, Sports Publications, Chennai.
5. Marieb.N., 2006, “Human Anatomy and Physiology”, Benjamin Publication, New Delhi.

**Core Practical – II (P) MAJOR GAMES – II (** Hockey, Cricket, Tennis, and Football.)

**UNIT – I FUNDAMENTAL AND ADVANCE SKILLS**

Fundamental and advance – skills, techniques, drills and lead-up games in Hockey, Cricket, Tennis, and Football.

**UNIT-II PLAYING ABILITY / PERFORMANCE**

Assessment of playing ability / performance - Hockey, Cricket, Tennis, and Football..Specific conditioning / training for above said sports disciplines.

**UNIT-III MARKING**

Layout & markings of court/field - Hockey, Cricket, Tennis, and Football..

**UNIT –IV OFFICIATING**

Rules and interpretations, duties of the officials, official signals and system of officiating, equipment specifications and score sheet for above said sports disciplines.

**UNIT-V RECORD NOTE**

Preparation of record for Hockey, Cricket, Tennis, and Football. History, organisational set-up at International, national and state level sports bodies, skill, technique, tactics, major competitions for above said sports disciplines.

**TEXT BOOKS**

Anand.R.L. (1986).*Play field manual*, Patiala: NIS publication.

*Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.

Rao, E.Prasad (2002). *The complete hand book on Kabaddi*.Vizianagaram: Jagadamba publication.

**REFERENCE BOOKS**

1. Colberk A.L. (1966).*Modern Basketball-A Fundamental Analysis of Skills and Tactics.*London: Nicholas Kaya.
2. Dhanaraj, V. Hubert, (1991).*Volleyball – A Modern Approach.* Patiala: Sainsoris
3. Part, Davic, (1979) *Better Badminton Learn in yourself Book.*London : Orient Paper Books.
4. Perinbaraj, S.B., & et al. (2009).*Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
5. Rao, C. V. (1971). *Kabaddi,*Patials, N.I.S. Publications.
6. Yadav, Yogesh. (1969). *Kho-Kho*, Maharashtra Kho-Kho Association.

**ALLIED - 2**

**PAPER - 3**

**HEALTH EDUCATION AND NUTRITION**

**UNIT-I**

Heath- Meaning-Definition- Education- Meaning-Definition- Health education- Meaning-Definition- dimensions of health- physical health-mental health-social health- emotional health- intellectual health- spiritual health- Aims of health education- objectives of health education- needs of health education in schools- society.

**UNIT-II**

Principles of health education- health service programmes- health services in schools- health records- health problems- personal hygiene- importance of personal hygiene- environmental hygiene- objectives of school health service- explosive population- impact of explosive population in health problems- pollution: types of pollution: Air- Noise –Water –Thermal –Soil.

**UNIT-III**

Diseases: meaning- Definition- classification- communicable disease- (malaria – cholera –typhoid measles-tuberculosis) non-communicable disease (Diabetes- cancer)- Signs and Symptoms of communicable diseases- non- communicable diseases- preventive measures- obesity- types of obesity- obesities related health problems.

**UNIT-IV**

Nutrition- means- Basic nutrition guidelines-role of nutrition in sports-nutrition plan- factors influencing nutrition plan-food classification of nutrition- relationship between food- nutrition and health-athletic importance of athletic diet-food pyramid.

**UNIT-V**

Balanced diet: carbohydrates-proteins-fat-minerals-vitamins-foot soluble- vitamins-A, D, E and V-water soluble vitamins-riboflavin-vitamin B/2- vitamin C. Loading pattern: carbohydrate- protein- vitamin-minerals-prevent meals- weight management water and regulation of water balance.

**References:**

1. Agrawal,K.C. (2001).***EnvironmentalBiology****.Bikaner:*Nidhipublishers Ltd.Frank,
2. H.&Walter, H.,(1976).***TurnersSchoolHealth Education.***SaintLouis:The C.Y.MosbyCompany.
3. Nemir, A. (n.d.). ***The schoolhealth education***. New York: Harberand Brothers.
4. Odum,E.P.(1971).***Fundamentalofecology****.*U.S.A.:W.B.SaundersCo.
5. Park.k.,(2003), Preventive&socialmedicine.Benarsidasbanot, India
6. ManjuPushpa. 2014. Obesity, Mano Publications

**ALLIED PRACTICAL**

**AEROBICS - AND MARCHING - MARTIAL ARTS**

**Objectives ;**

**To acquire the practical knowledge Of Aerobics And Marching**

**To provide practical exposure in selected Aerobics And Marching**

UNIT I Marching

Marching Drill–Fall In–Fallout-Attention–Stand–At–Ease–Stand easy– Dress–Rightdress–dress–left dress–open order forward march–close order march –

UNIT II

Left Turn– Right Turn– About Turn–Mark Time March–Quick March and Halt– Marching With About Turn–- General Salute- Marching With Salute– Eyes Right (Left)&Eyes Front– Half Stage

UNIT I+II Aerobics

Aerobics **-** Rhythmicaerobics-dance-Types of Aerobics:Low impact aerobics- High impact aerobics-Step Aerobics -Posture-Warm Up AndCool Down- THR zone-

UNIT IV- Martial arts

KarateBasics- Stances-Walking, Hand Positions, Front-Learning, Side- Fighting. Hand technique – Punches (From of APunch,And ReversePunch), Blocks(Eight Basic) Legtechnique-Snap Kicks, StretchingStraightLeg,Thrust Kicks, Round House. Rules and Interpretations - Duties OfOfficials.

UNIT -V**-TAEKWONDO**

Basics: Stances –Walking,ExtendingWalking, LStance, Cat Stance.Fundamental Skill-SittingStancePunch, SinglePunch, Double Punch, TriplesPunch. PunchingSkillFrom SparringPosition– Front-FistPunch, Rear FistPunch, Double Punch, And FourCombination Punch. Foot techniques - Rules and their interpretations and duties of officials.

**SKILL BASED SUBJECT**

**PAPER -1**

**COMPUTER APPLICATIONS**

Learning Outcomes

1. To understand the awareness of computer
2. Ability to prepare documents,
3. Ability to simple calculations, data analysis and present graphical representations
4. Ability to prepare the documents for seminar and class work

Unit 1: Basics in computer: characteristics of a computer- components of a computer system – Central Processing Unit – Memory: storage devices primary (RAM and ROM) and secondary memory. Storage devices .Input and Output devices: Keyboard, Mouse, Monitor, Printer, Scanner, Web Camera

Unit 2: MS Word: Introduction to a MS word - create and save a document. - Edit and format text: text style (B, I, U), font type, font size, text color, alignment of text. Format - paragraphs-. • Insert pictures; change the page setting, -use of drawing tools, shapes and mathematical symbols.

Unit 3: MS Excel: Spreadsheets: concept of a worksheet - creates and save a worksheet. - Working with a spreadsheet: edit and format a worksheet - Enter Formula using the operators - Use simple statistical functions- Prepare charts of various types: line, pie, scatter, bar and area in a worksheet.

Unit 4: MS Power Point : Presentation tool: concept of slide shows - basic elements of a slide – Format of slide layouts - create and save a presentation - views of a slide set – normal view, slide sorter view and hand-outs. - Edit and format a slide:-Insert pictures from files, create animations, add sound effects, and rehearse timings

Unit 5: Multimedia and Internet: Theory: Introduction to multimedia - uses of multimedia - Internet and Multimedia: Use of Internet – Internet: World Wide Web- web sites -web pages, web browsers - Web services:- email - e-Learning.

References:

1. Roberta, B.(n.d.). Computers in Your Future. 2nd edition, India: Prentice Hall.
2. Milke, M.(2007). Absolute Beginner’s Guide to Computer Basics. Pearson Education Asia.
3. Sinha, P.K. &Sinha, P. (n.d.). Computer Fundamentals. 4th edition, BPB Publication.
4. [MangeshBhuvad](https://www.amazon.in/s/ref=dp_byline_sr_ebooks_1?ie=UTF8&field-author=Mangesh+Bhuvad&text=Mangesh+Bhuvad&sort=relevancerank&search-alias=digital-text), 2015. Master Book Of Computer: Learn MS Office,BasicComputer,MSExcel,ExcelFormulas,Tally, Kindle Edition
5. [Bittu Kumar](https://www.amazon.in/s/ref=dp_byline_sr_book_1?ie=UTF8&field-author=Bittu+Kumar&search-alias=stripbooks), 2017. Mastering MS Office: Concise Handbook With Screenshots, Lakhmi Publications

**NON-MAJOR ELECTIVE**

**PAPER - 1**

**YOGA AND HEALTH**

Objectives

1. To understand on knowledge about yoga

2. To maintain health through yogic practices

3. To study about various dimensions of health

4. To study about sources on reducing stress

Unit I – Introduction Meaning and Definition of Yoga. Eight lims of Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi, Concept of Yogic Practices; Principles of Breathing– Awareness – Relaxation, Sequence – Counter pose – Time – Place – Clothes – Bathing – Emptying the bowels – Stomach – Diet – No Straining – Age – Contraindication .

Unit II – Aasanas and Pranayam Loosening exercise: Techniques and benefitsof Asanas: Surya Namaskar: Ekpadasana, Cahkrasana, Trikonasana,parvatasana,Artha matyendarasana,Bhujangasana,Salabasana,Meruasana,Dhanurasana,Pavanamuktasana,Savasana-Methods and benefits of Pranayama: Nadisuddhi,nadishodhana,Ujjayi,Kapalapathi

Unit III – Mudras , Meditation and Kriyas –Shat Kriyas- Meaning, Techniques and Benefits -JalNeti – VamanaDhati – Kapalapathi-Trataka – Nauli – Basti, Mudras-chin mudra, chinmaya mudra, Vayu mudra, Ganesa mudra, Pranamudra,Linga mudra-, Methods and benefits of Meditation

Unit 4 Health – Meaning – Definition - Dimensions of Health : Physical- Mental – Emotional – Social- Spiritual – Intellectual. Factors affecting Health: Physical Environments – Social environments. Life Style and Health – Genetic influences on Health

Unit -5: Yogic program for various Health related disorders: Diabetics – Hypertension – Stress –Insomnia – Asthma – Breathing difficulties – Heart diseases. Yogic diet for Health: Satvic – Tamasic - Rajasic

REFERENCE:

1. Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
2. K. Chandrasekaran, "Sound health through yoga" PremKalyan Publication, Sedapatti, 1999
3. Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
4. Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
5. Vallimurugan.V. 2008. Yoga for Wellness, Rockcity Publications Trichy
6. Hales D (2005). An Invitation to Health. Thomson-Wadsworth, Belmont. California. USA. •
7. Donatelle RJ (2005). Health the Basics. Sixth Edition. Oregon State University.
8. Uppal AK &Gautam GP (2008). Health & Physical Education. Friends Publication. New Delhi

**SEMESTER IV**

**CORE PAPER - 4**

**ORGANISATION AND ADMINISTRATION**

**Core Theory – IV (T) ORGANISATION AND ADMINISTRATION**

**UNIT – I**

Meaning – Nature and Scope of Organization and Administration- Principles of organization and administration. Scheme of organization: School Level – College Level – University Level – District – State – National Level- Program planning : Meaning-Basic principles – Importance of Program planning

**UNIT – II**

Facilities:

Play field: Location – Preparation of layout - Maintenance. Gymnasium – Construction, and Maintenance and Allied Facilities.Swimming pool – Construction, Dimension, Filtration and Supervision of Swimming Pool. Equipment’s in Physical Education: Need and Importance - Lists of Equipment’s - Criteria for Selection Procedure of Purchase- Store- Keeping Routine Care Repairs- Disposal

**UNIT – III**

Staff and Leadership: Importance of Qualified Teacher - Qualifications of Good Teacher, Staff co-operation- Student Leadership, Role of Student Leaders, Recognition of Student leaders. Time – Table: Physical Education Classes- Factors Affecting Time-Table, Required Periods -Instruction Period- Practice Period- Games Period - Participation Periods.

**UNIT – IV**

Programme of Activities: a. Intramurals - Importance of organizing Intramurals. Extra murals: Participation - Selection conditioning of teams- Training team and management, sports tours. Office Managements:Setting up and management of Office Correspondence Records And Reports Filing, Financial Budget: Physical Education Budget –Income And Expenditure, Accounting Petty Cash

**UNIT – V**

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

**Reference Books:**

1. Voltmer and Essliger – Organization and Administration, Times of India Press, Bombay 1964.
2. P.M. Joseph, Organization of Physical Education O.S: A.T.I.P.E. Kaudivali (Bombay), 1956.
3. Hughes and French – Administration of Physical Education. Ronald Press Co., New York, 1954.
4. Forsyth and Duncan, Administration of Physical Education, Prentice Hall, New York 1951.
5. Bucher, Administration of School Health and Physical Education Programmes, C.V. Mosby Co., St. Louis. 1967.

**Core Practical – II (P) MAJOR GAMES - II** ( Gymnastics, Table tennis and Swimming)

**UNIT – I FUNDAMENTAL AND ADVANCE SKILLS**

Fundamental Skills – Advance skills – Techniques - Drills and Lead-up games in: Gymnastics - Table Tennis - Swimming

**UNIT-II PLAYING ABILITY / PERFORMANCE**

Assessment of playing ability - performance - Specific conditioning / training: Gymnastics - Table Tennis and Swimming

**UNIT-III MARKING**

Layout - Markings of court/field :Gymnastics - Table Tennis and Swimming

**UNIT –IV OFFICIATING**

Rules – Interpretations - Duties of the officials - Official signals - System of officiating - - Equipment specifications - Score sheet: Gymnastics - Table Tennis and Swimming

**UNIT-V RECORD NOTE**

Preparation of record for Gymnastics - Table Tennis and Swimming - History - Organizational set-up: International - National and State level sports bodies – Skill – Technique – Tactics - Major competitions

**TEXT BOOKS**

1. Anand.R.L. (1986).*Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Rao, E.Prasad (2002). *The complete hand book on Kabaddi*.Vizianagaram: Jagadamba publication.
4. Perinbaraj, S.B., & et al. (2009).*Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.

**ALLIED - 2**

**PAPER - 4**

**THEORIES OF SPORTS AND GAMES**

**Course Objectives**

1. To study and recognize the basic concepts of Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.
2. To bring sudden spurt of knowledge in Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.
3. To study the various aspects of training in sports and games.
4. To offer adequate information in terminologies.
5. To enable the students to gain knowledge of the rules, regulations and officiating.
6. To gain knowledge in dimensions and court markings.

**Unit-1:**

History and Development, Terminologies:Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.

**Unit-2:**

Association –Federation: National-International level. Important Tournaments and Meets : National And International Levels.

**Unit-3:**

Fundamental Skills -Techniques, Lead Up Games: Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.

**Unit-4:**

Rules and Interpretations - Mechanism Of Officiating: Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.

**Unit-5:**

Dimension of Court and Markings, Equipments :Basketball, Kabaddi, Kho-Kho, Tennis, Table Tennis.

**Reference Items: books, Journal**

1. Bhattacharya (2010). How to play Basketball. Chennai, Mercury Publishers.
2. British Journal of Sports Medicine
3. Gopinath, R. (1985). *Contribution of kho-kho to health*. XIV national kho-kho championship souvenir.
4. Journal of Strength Conditioning Research
5. Journal Sports Medicine Physical Fitness
6. Kunha, S. (2008). *History of Basketball.*Kolkatta, Shravani Publishers
7. Medicine and Science in Sports and Exercise
8. Prasad, E, Rao. (2002). Complete Handbook of Kabaddi. Vizianagaram: Jagadamba publications.
9. Research Sports Medicine
10. Rex Hazeldine. (1985) *Fitness for Sport,* Marlborough: The Crawford Press
11. Singh, H.(1991).*Science of Sports Training.* New Delhi: D.V.S. Publications.
12. Sports Medicine

**Allied Practical: Minor Games**

Unit -1 Tag Games

Tag Games :BandaidTag - Hot Dog Tag.- Dead Ant Tag. -Octopus Tag. - Soccer Ball Tag – Ankle Tag – Hook and Arm Tag- Elimination Tag – Shadow Tag – Cross Tag

Unit – 2 Relay Games

Relay Games :Tunnel ball Relay – Human Obstacle Relay –Elephant Relay – ZigZag Relay –Ball Passing Relay - Frog Jump Relay – Ball Up and Down Relay – Ball Bounce Realy – Double Man Relay –Potatoe Relay

Unit- 3 Circle Games

Circle Games : Good Morning – Hen and Chicken – In the Bond on the Bank – Find out the Leader- Catch the Birds – Catch the Partner – Cat and Rat - Statue Tag – Dodge Ball – King of the ring – Plugging the tail

Unit – 4 Chasing Games

Chasing Games : Golden fish – Snatch the Handkerchief – Raja Rani – Palm Palm Pull Away – Storming the Fort – Robbers and Soldiers - Signal Chase – Circle Chase

Unit -5 General Games

General Games: Push across the line – No more moving – Bomb the Centre – Ball pass and Team Running – Chariot Race – Stealing sticks – Corner Spy – Last Couple out – Three legged Race – Luggage Van

**SKILL BASED SUBJECT**

**PAPER -2**

**LEADERSHIP AND PERSONALITY DEVELOPMENT**

Objectives

1. To understand the leadership qualities.

2. To understand the leadership and sports participation

3. To study about personality and its relation to leadesip

4. To understand the means and methods of development of personality

Unit I: Leadership: Definition – Meaning - Importance of Leadership - Qualities of leadership- Types of Leadership - Leadership in sports – Sport participation and leadership

Unit II: Theories of Leadership: Trait theory - Behavioral theories- Contingency theory -Decision-making skills -Leadership and qualities of a successful leader - Character-building -Team-work - Time management -Work ethics

Unit III: Types of Leaders- Leadership styles: Traditional- Transactional – Transformational - Inspirational and servant leadership. Emerging issues in leadership: Emotional Intelligence and leadership-

Unit IV: Personality: Concept and Definition, Composition of personality- Personality traits- Personality: Types of Personality: - Introvert –Ambivert – Extrovert –Psychotism . Attitude: Positive –Negative- sources of development of positive attitude.Self esteem –Interpersonal relationship

Unit V: Concept of Success and failure: Causes – Factors determine Success and failure. Motivation: Types of Motivation: Extrinsic –Intrinsic –Achievement. Problem-solving - Conflict and Stress Management- Body language-Coping skills

Reference:

1. Heller, Robert.Effective leadership. Essential Manager series. Dk Publishing, 2002
2. Hindle, Tim. Reducing Stress. Essential Manager series. Dk Publishing, 2003
3. Lucas, Stephen. Art of Public Speaking. New Delhi. Tata - Mc-Graw Hill. 2001
4. Mile, D.J Power of positive thinking. Delhi. Rohan Book Company, (2004).
5. Pravesh Kumar. All about Self- Motivation. New Delhi. Goodwill Publishing House. 2005.
6. Smith, B . Body Language. Delhi: Rohan Book Company. 2004
7. Hurlock, E.B (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.

**NON-MAJOR ELECTIVE**

**PAPER-2**

**WEIGHT MANAGEMENT**

Objectives

1. To understand the awareness of weight management

2. To enhance the knowledge the impact of life style

3. To study about obesity and related disorders.

4. To study the value of physical activities on health

Unit -1 Weight management – Meaning – Need of weight management – Weight management and health – Factors affecting weight management: Sedentary life style – Lack of nutrition – Occupational based: Lack of time-– Classification of body weight: Normal – Below – overweight-obesity

Unit-2 Obesity: Meaning – Nature of obesity – Causes of obesity – Types of obesity – Stages of obesity--Health risks associated with obesity – Measures of obesity: Body compositional indices-Skin fold calibre -Body Mass Index- Classification of BMI

Unit -3 Obesity related disorders; Diabetics – Hyper tension – Heart disease and Stroke –Osteoarthritis –Breathing Problems – Digestive Problems – Psychological disorders: Depression -Shame and guilt -Social isolation -Lower work achievement

Unit -4 Planning Weight Management: Balanced Diet – Calorie Intake and expenditure – Nutrition – Behaviour and Modification of Life style – Self monitoring on Diet and Physical Activity - Time management- Stress Mangement

Unit -5 Sources of Weight Management - Physical activity: Types of Physical Activity: - Aerobic activities: Walking-Swimming- dancing – Cycling – Jogging. Calisthenics exercises. Anaerobic activity: Resistance training. Yoga

Reference:

1. ManjuPushpa. 2014. Obesity, Mano Publications
2. Vallimurugan.V. 2008. Yoga for Wellness, Rockcity Publications Trichy
3. Valimurugan,V. 2014. Yoga for Women, Priyam Publications Namkkal
4. Butryn,M .L., Phelan , S., &Hill,J.O.(2007). Consistent Self- Monitoring of Weight: a Key Component of Successful Weight Loss Maintenance. Obesity (Silver Spring).15(12),3091-3096.
5. Chu, S.Y. & Kim, L.J. (2007). Maternal Obesity and Risk of Stillbirth: a Meta analysis, AM J ObstetGynecol, 197(3), 223- 228.
6. Srilakshmi, B. (2015) Human Nutrition (For B.Sc., Nursing students) Delhi: New Age International (p) Limited Publishers.
7. Butryn,M .L., Phelan , S., & Hill, J.O. (2007). Consistent self- monitoring of weight: a key component of successful weight loss maintenance. Obesity (Silver Spring).15 (12), 3091-3096.

**SEMESTER V**

**Core Paper - 5**

**METHODS IN PHYSICAL EDUCATION**

**UNIT I: Method**

Meaning – Factors Influencing Method, Presentation Techniques: Planning - Presentation – Steps in the way of presentation. Teaching Aids – Class Management – General – Specific – Principles of Class Management.

**UNIT II: Lesson Plan**

Lesson plan :Values – Types: General and Particular lesson plan. Commands: Response Command – Rhythmic Command. Methods of Teaching Physical Activities:Oral, Demonstration, Imitation, Dramatization, At-will, Set-drill, Part, Whole, Whole-Part- Whole methods – Audio Visual Method.

**UNIT III: Tournaments**

Meaning-Types. Method of drawing fixtures:Knock out/elimination - league/Round Robin. Combination Tournament: Knock out- Knock Out – Cum – League, league – cum – league, league – cum – knock out. Challenge Tournament. Intramural – Extramural.

**Unit IV: Methods of Teaching**

Methods of teaching with special reference to different kinds of physical activities: Calisthenics - Gymnastics- Minor games- Major games- Rhythmic activities. Organisation and conduct of competition in sports and games: Individual sports- Group competition.

**Unit V: Supervision**

Supervision – Meaning and Need for supervision – Guiding principles of supervision: Qualities and qualification of a supervisor – supervisors relationship with the administrator and the physical education teacher. Techniques of Supervision: Visitation – Periodical – Surprise – Request- Social, Visitation.

**REFERENCES:**

1. Dheer, S., &Radhika Kamal (1991) Organization and Administration of Physical Education, New Delhi :Friends Publication.
2. Michael W. Metzler. (2000). Instructional Models for Physical Education. London: Allyn and Bacon.
3. Sachdeva, M.S (1983) Modern Approach to School Organization and Administration, Ludhina: Parkash Brothers Educational Publisher.
4. Sharad Chandra Mishra. (2009). Methods of Physical Education. New Delhi: Sports Publication.
5. Thirunarayanan, C. &Hariharan, S (1969) Methods in Physical Education Karaikudi: South India press.
6. Voltmer, Edward (1979) The Organization and Administration of Physical Education, New Jersey.: Prentice Hall, Inc.

**Core Paper - 5**

**Core Paper - 6**

KINESIOLOGY AND BIO MECHANICS

**UNIT -I**

Kinesiology –Meaning-Definition- Need Of Kinesiology In Physical Education And Sports. Teaching –Learning –Training .Basic Concepts of Kinesiology. Movements: Types Of Movements: Flexion-Extension –Adduction –Abduction –Inversion –Eversion-Plantor Flexion –Dorsi Flexion –Motion: Desired Motion-Undesired Motion.

**UNIT -II**

Skeletal Muscle:Meaning –Kinesiological Based Grouping of Skeletal Muscle: Flexor –Extensor-Adductor-Abductor –Stabilizer. Muscle contraction: Meaning –Muscle –Length. Tension relationship – Types of Muscle Contraction: Isotonic, Isometric, Isokinetic, Static .Role of Muscle Fiber in MuscularContraction.

**UNIT -III**

Origin –Insertion-Action of Muscle: Pectrolis Minor: Pectrolis Major-Trapezius-Biceps –Triceps – Deltoid- Hamstrings: Semitendinosus –Semimembranosus-Femoris. Quadriceps:Vastus Laterals-VastusMedlis ,VastusIntermedlis – Femoris- Sanstrochennols –Soleus.

**UNIT -IV**

Biomechanics: Meaning –Definition- Need Of Biomechanics In Sports: Teaching –Learning –Training-Mechanics: Statics –Dynamic-Kinetics –kinematics. Basics concepts of Biomechanics: Centre of Gravity- Work-Energy-Line Of Gravity –Planes of Motion –Lever:Types Of Lever

**UNIT -V**

Force: Meaning –Properties of Force: Point Of Application –Direction –Magnitute-Action Line . Motion: Type of Motion: Linear –Angular-Rotation-Laws of Motion: Law Of Inertia- Law Of Acceleration-Law of Equal and Opposite Reaction – Friction: Types: Static –Sliding-Rolling: Equilibrium: Meaning- Types of Equilibrium: Stable- Neutral – Unstable.

**References:**

1. Bunn,J.W.(1972).**Scientificprinciplesofcoaching**.EnglewoodCliffs,N.J.: PrenticeHallInc.
2. Hay,J.G.&Reid,J.G.(1982).**Theanatomicalandmechanicalbasisof humanmotion.**EnglewoodCliffs,N.J.:PrenticeHallInc.
3. Hay,J.G.&Reid,J.G.(1988).**Anatomy,mechanicsandhumanmotion**. EnglewoodCliffs,N.J.:PrenticeHallInc.
4. Hay,J.G.(1970).**TheBiomechanicsofSportsTechniques**.EnglewoodCliffs, N.J.:Prentice Hall, Inc.
5. Simonian, C. (1911). **Fundamentalsof sport biomechanic**s. EnglewoodCliffs,N.J.:PrenticeHallInc.
6. Gladys, Scott., M. (2005). *Text book in Kinesiology*. New York: Warren's Books.
7. Peter, McGinnis**.** (2005). *Biomechanics of Sport and Exercise*. Champaign: Human Kinetics.
8. Shaw, Dhananjoy., (1998). *Pedagogic Kinesiology*, Delhi: Sports publication.
9. Susan, J., Hall. (2004). *Basic Biomechanics.* New York: McGraw Hill Education.

**Core Paper - 7**

SPORTS TRAINING

**Course Objectives**

1. To study and understand the fundamental knowledge of sports training.
2. To acquire the knowledge of physical fitness factors.
3. To gain knowledge on periodization and training schedule.
4. To gain knowledge on load assessment.
5. To gain knowledge onsports injuries.

**Unit-I**

Meaning & Definition of Sports training - Aims of Sports Training- Importance of Sports Training - Characteristics of Sports Training - Principles of Sports Training:Training load – Volume – Intensity- Repetition – Set - Adaptation – Recovery– Warm-up – Cool down -– Bout –– Density

**Unit-II Types of Training – Physical Fitness**

Development of Strength: Resistance training- Weight training – Own body Resistance training. Development of Endurance:– Fartlek training – Sand training. Development of Flexibility: Stretching Exercises – PNF Stretching exercises. Development of Speed: Interval training

**Unit-III Types of Training – Motor Fitness**

Development of Explosive power: Plyometric training –Medicine ball Exercises – Upper extremity – lower extremity. Development of coordinative abilities: Hand eye coordination- Foot eye coordination- Coordinative Drills with Balls – Cones.

**Unit-IV**

Periodization: Aim of Periodization: Preparatory Period- Competitive Period-Transitional Period – Periodical cycles: Macro cycle-Meso Cycle- Micro cycle – Types of periodization and Duration of the periods. Load assessment and fixation for various Motor fitness Components.

**Unit-V**

Meaning and Definition: Fitness, Physical fitness – General and Specific fitness –Types: Performance related Physical fitness Components (Speed, Strength, Endurance, Agility, Power and Flexibility) - Health related Physical fitness Components (Cardio-respiratory Endurance, Muscular Strength, Muscular Endurance, Flexibility and Body Composition).

**References:**

1. Harre,D.(1982)*.****Principlesofsportstraining****.*Berlin:Sporulated.
2. Jensen,R.C..&Fisher,A.G.(1979).***Scientificbasisofathleticconditioning****.*Philadelphia:LeaandFibiger,2ndEdn.
3. Matvyew, L.P. (1981). ***Fundamentalof sports training****.* Moscow: Progress Publishers.
4. Singh,H.(1984).***SportsTraining,GeneralTheory****”,andmethods.Patiala:* NSNIS.
5. Uppal,A.K.(1999*).****SportsTraining****.New*Delhi,FriendsPublication.
6. Singh, Hardayal. (1995). *Science of Sports training*. New Delhi: D.V.S. Publications.
7. Anderson, Bob., Pearl, Bill., and Burke, Edmund R., (2001). *Getting in Shape Workout Programs for Men & Women*. Mumbai: Jaico Publishing House.
8. Baechle, Thomas. R, & Earle, Roger, W. (2000). *Essentials of Strength Training and Conditioning*. Champaign: Human Kinetics.
9. Brooks, Douglas., S. (2004). *The Complete Book of Personal Training*. Champaign: Human Kinetics

**Core Practical - ATHLETICS - TRACK EVENTS**

**UNIT I History**

History –origin-development- Sprint- middle- long distance - Steeple chase-Fundamental skills: sprint events: Startingtechniques: Standingstart -Crouch startand its variations - Bunch Start-Medium Start- Elongated start. Finishingtechniques:Run Through,Forward lunging, ShoulderShrug.-

**UNIT – II Techniques**

Techniques, -drills and lead-up games -– Sprints - Middle distance-Long - distances, Steeple chase, and Cross country.

**UNIT – III Marking**

Markings of 200 m and 400 m track.- Specific marking for Sprints- Middledistance- Long distances- Steeple chase- Equipment’s and their specifications.

**UNIT - IV Officiating**

Rules and interpretations, duties of the officials, official signals and scoresheet for Sprints, Middle distance, Long distances, Relays, Steeple chase,Walking races, Hurdles and Cross country events.

**UNIT – V Record Note**

Preparation of record for Sprints, Middle distance, Long distances, Steeple chase, and Cross country events. History, organizational set- up at International, national and state level athletic federation- association, technique, World & Olympic records and other -major competitions.

**Core Practical- ATHLETICS - FIELD EVENTS -I**

**Objectives;**

To provide training for athletic field events on scientific and systematic lines.

To impart knowledge on coaching, officiating and marking for field events.

**UNIT I History**

History –Origin-Development- Fundamental skills : Long Jump-Triple Jump- Discus Throw- Shot Put

**UNIT – II Techniques**

Techniques -long jump- Hitch –Kick Method-Hang Method-Drills And Lead-Up Games -–.Approach Run-Take –Off-Flying On The Air -Landing-Standing Method –Rotation Method- Shot Put-Glide Method –Rotation Method -Specific Conditioning And Training For Above Said Events.

**UNIT – III MARKING**

Markings:Jumps and Throws: Long Jump-Triple Jump- Discus Throw- Shot Put .. Equipment’s and Specifications.

**UNIT – IV OFFICIATING**

Rules and Interpretations - Duties Of The Officials - Official Signals and Score Sheet: Jumps - Throwing and Combined Events.

**UNIT – V RECORD NOTE**

Preparation of record for Jumps Throwing and Combined Events. Technique and Major Competitions For - Long Jump-Triple Jump-Discus Throw- Shot Put And Combined events. Organizational set-up at International, National And State level

**INTERNAL ELECTIVE**

**PAPER - 1**

**FITNESS and WELLNESS**

**Unit-I**

Fitness- Meaning- Definition-physical fitness-health related physical fitness- components of physical fitness: Cardio respiratory endurance –flexibility- strength- Importance of fitness- benefits of physical fitness: physical aspects- physiological aspects-psychological aspects-sociological aspects.

**Unit-II**

Development of fitness: physical activities: Aerobics exercise-anaerobic exercise- aerobic based activities: --- (free hand exercise –resistance exercise- own body stretch- walking – joking – running) Designing fitness training program- for challenger- for adolescence- for aged people- principle of training- heart rate zone- food progression for varied exercise.

**Unit-III**

Wellness-definition- scope of wellness-------- and health-dimensions of wellness: Physical wellness- emotional wellness- social wellness-spiritual wellness- intellectual wellness- environmental wellness- importance of wellness- relationship between- fitness and wellness- factors affecting wellness.

**Unit-IV**

Physical activity and wellness- effect of physical activities and fundamental health-life style-meaning-life style and wellness-life style related diseases- role of nutrition and exercise to wellness.

**Unit-V**

Body composition: Body density- percent body fat-lean body mass- fat mass effect of body component- over weight- obesity- level of obesity- oboists related disorders: physical- men act- social-emotional mental stress: meaning- understanding stress management of stress: stress reduction technique of yoga- meditation- physical aspects.

References:

1. John W Travis and Regina S Ryan: Wellness Workbook: How To Achieve Enduring Health And Vitality, , Crown Publishing, New York.
2. Rajiv Parti: The Soul of Wellness: 12 Holistic Principles For Achieving A Healthy Body, Mind, Heart And Spirit, , Select book incorporation, New York.
3. Michael Arloski,: Wellness Coaching For Lasting Lifestyle Change, , Whole person associates, Duluth, USA.
4. Elson M Has:,.Staying Healthy with Nutrition: The Complete Guide To Diet And Nutritional Medicine,
5. Charles B.Corbinetal: Concept Of Fitness And Wellness Megraw Hills.inc St lauis Bangkok 3rd 2000 U.S.A

**SKILL BASED SUBJECT**

**PAPER - 3**

**THERAPEUTIC ASPECTS OF YOGA**

Objectives

1. To study the value of yoga

2. To understand the psychophysiological aspects of yoga

3..To study the nature of asana and its relation to health

4. To understand the yoga and impact over diseases.

Unit- 1 Yoga Therapy – Meaning – Definition – Nature – Principles of Yoga Therapy - Formulation of Yogic Treatment. Concepts of Yogic Practices: Astanga Yoga - Yogic Diet: Satva – Thamas – Rajas. Pancha- Khosas: AnnamayaKhosa – ManonmayaKhosa – PranamayaKhosa – AnandhamayaKhosa – VijyanamayaKhosa. Psychophysiological aspects of Yoga

Unit- 2 Diabetics : Meaning – Causes - Symptoms – Yoga Treatment: Padahastansan – Konasana – Pavanamuktasana – Chakrasana – Pashchimothasana - Mayurasana – Matsyasana – Savasana- Pranayama: Bhastrika – Suryabhadena. Back pain – Meaning – Causes – Symptoms – Yoga Treatment: SuptaPadangushtasana- Marjari asana – Marichiyasana - AdhoMukhaShavasana – SaralBhujangasana –

Unit-3 Gastro Intestinal Tract Problems: Meaning – Causes – Symptoms – Yoga Treatment: ParsvaSukhasana) ArdhaMatsyendrasana)-SuptaMatsyendrasana- Apanasana- Marjaryasana-Bitilasana- Bhujangasana)- Dhanurasana - Uttanasana

Unit- 4 Respiratory Problems: Common cold - Asthma – Sinusitis - Respiratory Allergies Meaning - Causes – Symptoms -– Yoga Treatment: JalaNeti – Tadasana – Katishakarasana – Sarvangasana – Chakkrasana – Bhujangasana – Usthrasana- Gomukhasana –Ardhamatsyendrasana – Savasana - Pranayama: Kapalabhati – Bhastrika

Unit- 5 Circulatory Disorders: Meaning – Causes – Symptoms – Yoga Treatment: Stress -Blood Pressure – Ischemia Heart disease - Meaning – Causes – Symptoms – Pranayama : NadiSuddhi – Chandra Bhedana – Tadasana – Meditation: Sukhasana – Vajirasana – Savasana – JalaNeti – Enema –Trikonasana – Parvataasana – Makrasana

Reference

1. K. Chandrasekaran, "Sound health through yoga" PremKalyan Publication, Sedapatti, 1999
2. Dr. Kamkhyakumar (2012), Yoga Education, New Delhi. Shipra publication.
3. Gharote,M.L.&Ganguly,H.(1988). Teaching Methods for Yogic Practices. Lonawala: Kaixydahmoe.
4. Lilly (SUE) (2002), The Complete Guide to Understanding and practicing yoga. Caxton and Editions.
5. Shekar,K.C.(2003). Yoga for Health. Delhi: KhelSahitya Kendra
6. Vallimurugan.V. 2008. Yoga for Wellness, Rockcity Publications Trichy
7. Valimurugan,V. 2014. Yoga for Women, Priyam Publications Namkkal

**SEMESTER VI**

**Core Paper - 8**

TEST AND MEASUREMENT

**Unit-I**

Introduction of test-measurement- meaning-Definition- need and importance of measurement- criteria for food test: scientific authenticity-meaning-definition- establishing validity- reliability- objectivity.

**Unit-II**

Motor fitness- meaning- definition of motor fitness- components-test for motor fitness: elementary high school boys- test of motor fitness: Indiana motor fitness- college boys and girls- JCR test- motor ability test- barrow motor ability- muscle fitness( Kraus Weber)- minimum muscular fitness test.

**Unit-III** Physical fitness test

Physical fitness meaning- Physical fitness components- Health related physical fitness- components- AAHPERD ( Health Related Fitness Battery)- AAHPERD( Youth Fitness Test)-Aerobic capacity- cardio vascular test- Harvard step test- 12 minutes run/ walk test- multi-stage fitness test( Beep test).

**Unit-IV**

Anthropometric: meaning- Anthropometric measurements-methods of measuring height- standing- sitting- method of measuring circumference: Arm- Waist- Hip- Thigh- method of measuring skin folds- triceps- sub scapular- suprailiac.

**Unit-V** Skill test

Sports specific skill test- Basketball: Johnson Basketball test- Volleyball: Russel Lange Volley test, Football: Mor- Christain General Soccer Ability Skill Test- Battery Johnson Soccer Test- McDonald Soccer Test- Tennis: Dyer Tennis Test.

REFERENCE

1. Kansal,O.K.(1996).***Testandmeasurementinsportsandphysicaleducation****.*NewDelhi:D.V.S.Publications. Mahtews,D.K.(1973).***MeasurementinPhysicalEducation***,Philadelphia:W.B.SoundersCompany.
2. Pheasant,S.(1996).*Bodyspace****:anthropometry,ergonomicsanddesignof work****.*Taylor&Francis,NewYork.
3. Phillips, O.A., &Homak, J.E. (1979). ***Measurementand evaluation in PhysicalEducation.***NewYork:JohnWilleyandSons.
4. Sodhi, H.S., &Sidhu, L.S. (1984). ***Physiqueand selection of sports- a kinanthropometricstudy****.*Patiala:PunjabPublishingHouse.
5. Harison.HClarke : ***Application of Measurements to health &Physical Education***

**Core Paper - 9**

**SPORTS PSYCHOLOGY AND SPORTS SOCIOLOGY**

UNIT - I

Psychology – Meaning- Definition..Sports psychology – Meaning – Definition- Need of Sports Psychology –Importance of Sport Psychology in Performance. Learning –Motor Learning –Basic Considerations in Motor Learning- Perception: Meaning- Factors Affecting Perception.

UNIT - II

Personality: Meaning-Definition-Nature Of Personality – Personality Traits- Personality And Sports performance. Anxiety: Meaning –Classification: General Anxiety- Competitive Anxiety- Symptoms of Anxiety .Aggression: Meaning –Definition-Types of Aggression.

UNIT – III

Motivation: Meaning –Definition-Types: Intrinsic Motivation-Extrinsic Motivation .Goal Setting: Concept –Process of Goal Setting –Need of Goal Setting. Psychological Measures: Measuring: Personality –Anxiety: General Competitive .Motivation: Achievement –Competitive Aggression.

UNIT – IV

Sociology: Meaning –Definition. Sports Sociology: Meaning –Definition-Need-Nature-Importance of Sports Sociology. Socialization of Sports – Social Institutions of Sports.Social Significance of Sports –Social Qualities. Leadership: Meaning – Types Of Leadership.

UNIT - V

Cohesion –Group Cohesiveness.Group Dynamic. Gender influences in sports: Women Participation in Sports –Gender Inequalities in Sports. Social and Economic status.Impact of Socio Economic Status in sports. Measures: socio economic status –cohesiveness-leadership.

References:

1. Ball, D. W. & Loy, J.W. (l975).Sport and social order; Contribution to the sociology of sport. London: Addison Wesley Publishing Co., Inc.
2. Blair, J.& Simpson, R.( 1962). Educational Psychology, New York: McMillan Co.
3. Cratty, B.J.(1968). Psychology and Physical Activity. Eaglewood Cliffs. Prentice Hall.
4. Kamlesh, M.L. (1998). Psychology In physical Education and Sport. New Delhi: Metropolitan Book Co.
5. Loy, J.W., Kenyon, G.S. & McPherson, B.D. (1978). Sport and social system. London: Addison Wesley Publishing Company Inc.
6. Loy, J.W., Kenyon, G. S. & McPherson, B. D. (1981).Sports culture and society. Philadelphia: Lea &Febigero
7. )Mathur, S.S. (1962). Educational Psychology. Agra. VinodPustakMandir. 8)Skinnner, C.E, (1984). Education Psychology. New Delhi: Prentice Hall of India.
8. William, F.O. & Meyer, F.N. (1979). A handbook of sociology. New Delhi: Eurasia Publishing House Pvt Ltd. 10)R.Jain : Sports Sociology – KhelSahitya Kendra, Delhi.

**Core Paper - 10**

**SPORTS MANAGEMENT**

**UNIT-I**

Management: Definition-Meaning-Sports Management-Definition-Meaning- Importance of Sports Management-Function of Management- Planning-Organism-Staffing Directing- Controlling- Personal Management-Objectives of Personal Management- Role of Personal Management-Man Power Planning.

**UNIT-II**

ProgrammeManagement: Management Guidelines For Physical Education Program- School-College- Community Based-Facilities Management-Planning Facilities-Team Appears- Indoor- Outdoor Facilities-Maintenance.

**UNIT-III**

Financial Management: Meaning- Importance Of Financial Management- Sources Of Income Grant- Subscript-Rent-Donates-Sportsmanship-Fee Collects- Rules Of Utilization Of Games Few-Preparation and Scheme From Agencies: SAI –AIU-Sports Control Board –Federation –Administration- Budget-Accounting.

**UNIT-IV**

Public Relations: Role of Public Relation in Management-Principles of Public Relation- Planning the Public Relation-Public Relation and Media-Marketing- Sports Marketing.

**UNIT-V**

Leadership: Meaning-Definition-Elements Of Good Leadership- Qualities Of Good Leadership- Leadership Style Autocratic- Laising-Faire- Democratic- Form Of Leadership-Administrative Leader-Criteria Of Administrative Leader-Effect Of Good Leadership On Organisation Performance.

References:

1. Ashton, D. Administration of Physical Education for women. New York: The Ronald Press CI. (1968).
2. Bucher, C.A. Administration of physical education and athletic programme. 7th Edition, St. Louis: The C.V. Mosby Co.
3. Daughtrey, G. & Woods, J.B. Physical education and intramural programmes, organisation and administration. Philadelphia U.S.A. : W.B. Sounders Cp. (1976).
4. Earl, F.Z, & Gary, W.B..Management Competency Development in Sports and Physical Education. Philadelphia: W. Lea and Febiger. (1963)

**Core Practical: Athletics - Track Events-II**

**UNIT I History**

History –Origin-Development- Hurdles-Walking-RelayAnd Combined Events Fundamental Skills- Hurdles-Walking-Relay-Combine Events And Cross Country.

**UNIT – II Techniques**

Techniques, -Drills and Lead-Up Games. Hurdles-Walking-RelayAnd Combined events –Hurdle-Fundamental Skills-Starting, takeoff/ ClearanceandLandingTechniques.-TypesofHurdlesraces- Relays:FundamentalSkill - Various types of Baton Exchange.--UnderstandingRelay Zones –up sweep method –Down Sweep Method- -Visual -Non Visual Method

**UNIT – III MARKING**

Markings of200 m and 400 m track. Specific marking for Hurdles-Walking-Relay:. 4 X 100 MTS – 4 X 400 MTS , Combined Events and Cross Country -

**UNIT - IV OFFICIATING**

Rules and interpretations, duties of the officials, official signals and score sheet for Relays, Walking races, Hurdles, cross country and combined events.

**UNIT – V RECORD NOTE**

Preparation of record for Walking races, relay, Hurdles ,combined events and Cross country events. History, organizational set- up at International, national and state level athletic federation / association, technique, World & Olympic records and other major competitions.

**Core Practical - ATHLETICS - FIELD EVENTS -II**

**Objectives;**

To provide training for athletic field events on scientific and systematic lines.

To impart knowledge on coaching, officiating and marking for track events.

**UNIT I History**

History –Origin-Development- High Jump-Pole Vault Jump-Javelin Throw- Hammer Throw -Fundamental Skills OfHigh Jump -Pole Vault Jump-Javelin Throw- Hammer Throw

**UNIT – II Techniques**

Techniques - -Drills and lead-up games -–Specific conditioning and training for above said events.

**UNIT – III MARKING**

Markings of jumps, throws and combined events. Specific marking for High jump-Pole vault jump-Javelin throw- Hammer throw -. Equipment’s and their specifications.**NIT – IV OFFICIATING**

Rules and interpretations, duties of the officials, official signals and score sheet for High jump-Pole vault jump-Javelin throw- Hammer throw and combined events.

**UNIT – V RECORD NOTE**

Preparation of record for jumps throwing and combined events.. Technique forHigh jump-Pole vault jump-Javelin throw- Hammer throw and combined events. Organizational set-up at International, national and state level Olympic association History, World & Olympic records and other major competitions.

**INTERNAL ELECTIVE**

**PAPER - 2**

**MODERN TRENDS IN PHYSICAL EDUCATION (MBE III)**

**Objectives**

To provide details of various programmes in Physical Education and career option.

To know the modern trends in sports infrastructure facilities.

**UNIT – I PHYSICAL EDUCATION PROGRAMME**

Teacher Education programme in Physical Education : B.Sc.-B.P.Ed.- Allied courses: Post Graduate program: Sports Psychology-Sports Bio Mechanics. Research programme: Master of philosophy- Doctor of philosophy –coaching program – NSNIS Diploma-NSNIS Certificate –Master of Coaching.

**UNIT – II AVENUES FOR PLACEMENTS**

**Government-Aided-Private :**School: Physical Education Teacher- Physical Director. Administrative: Regional Inspector of Physical Education- Chief Inspector of Physical Education. College and University: Director of Physical Education – Professor- Principal – Sports Council: Coaches-Sports Officer,.- Trainer; Recreation clubs –Fitness centers – Sports Academy –Swimming clubs – Tennis clubs. Self-employment; Individual trainer-Establishing sports academy – TENNIS –Table tennis – Swimming –fitness consultant –Sports Psychologist.

**UNIT – III MODERN SPORTS FACILITIES**

Play Area – Synthetic Track – Turf Field – Toro Flex Surface – Grass Field – Wooden Surface – Indoor Stadium – Structure And Facilities – Flood Lit Matches - Nano Technology

**UNIT - IV SPORTS INFRASTRUTURE**

Assistance For Building Infrastructure – Playfields, Gymnasium, Swimming Pool, Stadium and Equipment’s – Assistance For Coaching And Training Programme – Rural And Urban – Different Levels – Advance Training And Coaching – Assistance For Competitions – District, State, National, International – Incentives.

**UNIT – V TALENT IDENTIFICATION**

Talent Identification Programme; Sports Authority Of India-Sports Development Authority Of Tamilnadu- Private sectors –Usha school of excellence –football academy –Health maintenance –compulsory physical education program -;School –Colleges- Designing curriculum in physical e ducation ;NCERT –SCERT.

**INTERNAL ELECTIVE**

**PAPER - 3**

**Physiotherapy and First Aid**

**UNIT-I: Physiotherapy**

Physiotherapy- Meaning, Definition, aim and objective of physiotherapy-Need and Importance of physiotherapy in the field of physical education- Guiding Principles of physiotherapy - Electrotherapy -Massage: History of Massage- Classification of Manipulation (Swedish System) Physiological effect of Massage.

**UNIT-II: Hydrotherapy**

**M**eaning –Method- application of hydrotherapy.Cryo therapy-Thermotherapy-Contrast Bath- Whirlpool Bath-Stream Bath-Sauna Bath- Hot Water Fermentation- Electrotherapy- Infrared Rays-Ultraviolet Rays-Short wave Diathermy-Ultrasonic Rays

**Unit –III Therapeutic Modalities**

Therapeutic exercises; Definition-principles of Therapeutic exercises- effects of Therapeutic exercises- Active movements(concentric- eccentric-static)Passive movement (relaxative) Stretching ;Types of Stretching-Application of Therapeutic exercises – shoulder-Hip-Knee-Ankle-Trunk-Head-Neck.

**UNIT- IV First Aid**

Definition – Meaning- Aims – Scope - Principles of first aid - D R A B C Formulas (Danger-Response –Airways- Breathing and Circulation) Artificial Respiration techniques- Mouth to Mouth –Mouth to Nose –C P R –Cardio pulmonary resuscitation

**UNIT V Sport injuries Management**

Meaning –First aid procedure-Sports injuries - First Aid-Treatment- Laceration- Blisters- Contusion-Strain-Sprain-Fracture- Dislocation and Cramps- Trapping and supports. Bandages - Types of Bandages.

References:

1. Christine, M.D., (1999). Physiology of sports and Exercise. USA: Human Kinetics.
2. Conley, M. (2000). Bioenergetics of exercise training. In T.R. Baechle, & R.W. Earle, (Eds.),. David, R.M. (2005). Drugs in sports, (4th Ed). Routledge Taylor and Francis Group.
3. Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2oo3.
4. Khanna, G.L., (1990). Exercise physiology & sports medicine. Delhi: Lucky Enterprises. Mathew, D.K. & Fox, 9)E.L, (1971). Physiological Basis of Physical Education and Athletics. Philadelphia: W.B. Saunders Co.
5. Pandey, P.K. (1987). Outline of Sports Medicine, New Delhi: J.P. Brothers Pub.
6. Williams, J.G.P. (1962). Sports medicine. London: Edward Arnold Ltd. 12)Gareth Jones, Edwillson, Markers Hardy, (2010) U.K. The BMA Guide to Sports Injuries, Dorling Kindersley Limited, London WCZR ORL
7. William E. Garret Jr Donald T.KirkendallDebarah 10 Squire “Principles of Practice of Primary care Sports Medicine” – Williams of Wilking Publishers.

**SKILL BASED SUBJECT**

**PAPER - 4**

**FITNESS MANAGEMENT**

Objectives

1. To study the need of fitness management

2. To formulate the training schedule for varied population

3. To enhance the knowledge of fitness equipment

4. To study about nutritional values in fitness management

Unit-I Physical Fitness: Meaning- Definition – Importance of Physical Fitness – Classification of Physical Fitness: Concepts of Health related Physical Fitness – Skill Related Physical Fitness. Fitness Management: Meaning- Definition – Need of Fitness Management

Unit-2 Components Health related Fitness components: Strength – Cardio respiratory endurance – flexibility – Abdominal Muscular strength endurance- Body composition. Components of Skill related fitness components: Explosive power - Agility – Balance – Coordination.

Unit- 3 Physical activity:  Calisthenics- Aerobics and Dance- Weight Training-Yoga , Designing fitness program: Sedentary people and active people- Different Age groups -Different fitness levels

Unit- 4 Equipment facilities – Multi gym - weight plates – Dumbbells – Barbells – Bench press – lat pull down – Low pully – Shoulder press – Triceps extension – Peck duck – lateral raise – leg extension – leg curl – Hip adductor – Hip abductor –- Abdominal conditioner – Electrical machines – Exercise bikes – Treadmill – Hydraulic machines –– Body wraps – Elastic straps – Vibrating machines.

Unit- 5 Nutrition - Assessment of nutritional status. - Utilization of lipid and carbohydrate in relation to exercise type, intensity and duration.-Diets for physical fitness & training.- Formulating dietary guidelines for fitness- health - disease conditions.

Reference:

1. William C. Grantham , R.W. Patton , Tracy D. York , Mitchel L., Health Fitness Management, Human Kinetics,1998.
2. Melvin H. Williams, Eric S. Rawson, J. David Branch, Nutrition for health, fitness and sport, McGraw Hill,2016.
3. Hardayal Singh (1991). Science of sports Training. New Delhi. D.V.S Publications
4. Frank W. Dick,” Sports Training Principles”, London, Lepus Book Co. 1980
5. Bhait and Savur, S (1998) Fitness for Life.,Jaico Pub. House
6. W.D. Mc Ardle &Katch (2005) “ Sports& Exercise Nutrition”, 4th ed.,Williams & Wilkins, A Waverly Company 4. Williams C &Delvin JT (1992) Foods, Nutrition & Sports Performance”, 1st ed., E&FN Sons’Pub.