

# THIRUVALLUVAR UNIVERSITY

## BACHELOR OF SCIENCE

### DEGREE COURSE

## *B.Sc. PHYSICAL EDUCATION*

### UNDER CBCS

(with effect from 2008-2009)

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

Year/ Semester	Part	Subject	Paper	Title of the Paper	Ins hrs/ Week	Credit	Exam hrs	Max. Mark		
								IA	Uni. Exam.	Total
I Year I Semester	I	Language	Paper I		6	3	3	25	75	100
	II	English	Paper I		6	3	3	25	75	100
	III	Core	Paper I	Foundation and History of Physical Education and Sports	5	5	3	25	75	100
		Core Practical	-	Yoga and Sports and Games	4	4	-	-	-	-
	III	Allied	Paper I	Anatomy and Physiology	4	5	3	25	75	100
	III	Allied Practical	-	Sports Injuries and Physiotherapy	3	-	-	-	-	-
	IV			<b>Environmental Studies</b>	2	2	3	25	75	100
I Year II Semester	I	Language	Paper II		6	3	3	25	75	100
	II	English	Paper II		6	3	3	25	75	100
	III	Core	Paper II	Theories of Sports and Games I (Kabaddi, Volleyball and Ballbadminton, Sprint Events, Long Jump and Shot Put)	5	5	3	25	75	100
	III	Core Practical	Practical I	Kabaddi, Volleyball and Ballbadminton, Sprint Events, Long Jump and Shot Put	4	4	3	40	60	100
	III	Allied	Paper II	Sports Injuries and Physiotherapy	4	4	3	25	75	100
	III	Allied Practical	-	Sports Injuries and Physiotherapy	3	2	3	20	30	50
	IV			<b>Value Education</b>	2	2	2	-	50	50
II Year III Semester	I	Language	Paper III		6	3	3	25	75	100
	II	English	Paper III		6	3	3	25	75	100
	III	Core	Paper III	Organisation and Administration in Physical Education	3	5	3	25	75	100

*B.Sc. Physical Education: Syllabus (CBCS)*

Year/ Semester	Part	Subject	Paper	Title of the Paper	Ins hrs/ Week	Credit	Exam hrs	Max. Mark		
								IA	Uni. Exam.	Total
	III	Core Practical		Gymnastics and Games and Sports	3	4	-	-	-	-
	III	Allied	Paper III	Statistics in Physical Education	4	4	3	25	75	100
	III	Allied Practical	-	Computer Applications in Physical Education and Sports	3	-	-	-	-	-
	IV	Skill Based Subject I		Yoga and Holistic Life	3	3	3	25	75	100
		Non-Major Elective I		Occupational Recreation	2	2	3	25	75	100
<b>II Year</b>										
IV Semester	I	Language	Paper IV		6	3	3	25	75	100
	II	English	Paper IV		6	3	3	25	75	100
	III	Core	Paper IV	Theories of Sports and Games II (Football, Basketball and Softball, Middle and Long Distance Running, High Jump and Javelin Throw)	3	4	3	25	75	100
	III	Core Practical	Practical II	Football, Basketball and Softball, Middle and Long Distance Running, High Jump and Javelin Throw	3	3	3	40	60	100
	III	Allied	Paper IV	Computer Applications in Physical Education and Sports	4	4	3	25	75	100
	III	Allied Practical	-	Computer Applications in Physical Education and Sports	3	2	3	20	30	50
	IV	Skill Based Subject II		Sports Journalism	3	3	3	25	75	100
			Non-Major Elective II		Sports Management	2	2	3	25	75
<b>III Year</b>										
V Semester	III	Core	Paper V	Methods in Physical Education	6	4	3	25	75	100
	III	Core	Paper VI	Theories of Sports and Games - III (Cricket, Kho-Kho and Badminton, Relay, Triple, Jump, Discus Throw and Heptathlon)	6	4	3	25	75	100
	III	Core Practical	-	Cricket, Kho-Kho and Badminton, Relay, Triple, Jump, Discus Throw and Heptathlon	5	3	-	-	-	-
		Elective I	Paper I	Test and Measurement in Physical Education	5	5	3	25	75	100
	IV	Skill Based Subject III		Health Education and Safety Education	3	3	3	25	75	100
<b>III Year</b>										
VI Semester	III	Core	Paper VII	Health Education, Safety Education and First Aid	6	4	3	25	75	100
	III	Core	Paper VIII	Theories of Sports and Games -	6	4	3	25	75	100

*B.Sc. Physical Education: Syllabus (CBCS)*

Year/ Semester	Part	Subject	Paper	Title of the Paper	Ins hrs/ Week	Credit	Exam hrs	Max. Mark		
								IA	Uni. Exam.	Total
				IV (Hockey, Handball and Tennis, Hurdles, Pole Vault, Hammer Throw and Decathlon)						
	III	Core Practical	Practical III	Cricket, Kho-Kho and Badminton, Relay, Triple, Jump, Discus Throw and Heptathlon	5	3		25	75	100
	III	Core Practical	Practical IV	Hockey, Handball and Tennis, Hurdles, Pole Vault, Hammer Throw and Decathlon	5	3		25	75	100
		Elective II	Paper II	Science of Sports Training	5	5	3	25	75	100
		Elective III	Paper III	Fitness and nutritional care	5	5	3	25	75	100
	IV	Skill Based Subject IV		Fitness and Wellness	3	3	3	25	75	100
	V	Extension Activities			-	1		-	-	50
				<b>Total</b>	<b>180</b>	<b>140</b>				<b>3600</b>

# **THIRUVALLUVAR UNIVERSITY**

## *B.Sc. PHYSICAL EDUCATION*

### **SYLLABUS**

UNDER CBCS

[with effect from 2008-2009]

**I SEMESTER**

**PAPER I**

#### **FOUNDATION AND HISTORY OF PHYSICAL EDUCATION AND SPORTS**

##### **UNIT - I**

Meaning, Need, Nature and Scope of Physical Education,

Aim and objectives of Physical - Education

[Physical, Cognitive, Neuromuscular, Affective, Social, emotional, spiritual and recreational]

Physical Training and Physical Culture

##### **UNIT - II**

Philosophy and Physical Education,

General Philosophies (Idealism, Realism, Pragmatism, Naturalism, and Existentialism)

Modern humanistic view of Physical Education.

##### **UNIT - III**

Scientific basis of Physical Education: Contributions of Allied Sciences –

Anatomy, Physiology, Kinesiology, Biomechanics, Sports Medicine, Computer Science, Psychology and Sociology.

Body Type - Sheldon and Kerthmer classification

Biological Foundation of Physical Education

#### **UNIT - IV**

Physical Education in United States, Germany, China,

Physical Education in India,

Recent Developments, SAI, NSNIS, LNIPE, SDAT, Sports Academics,

National Awards and Honors in Sports, Sports Scholarships.

National and International Trophies - (Santhosh trophy - Ranji trophy - Federation cup- Rengasamy cup- Thomas cup- Sivanthi gold cup- Davis cup- Wimbledon cup- Euro cup.)

Sports competitions - (Asian games - Commonwealth games- Asia- Afro games- SAF,SGF,RDS and BDS).

Olympic Games (Ancient and Modern), Olympic flag, Olympic Torch.

Teacher training institutions in physical education in Tamil Nadu.

#### **UNIT - V**

Physical education in ancient India, vedic period, Epic period, Budhist period.

Physical education in the city states of Sparta and Athens.

Physical education in ancient Rome.

Contribution to the growth of physical education by leaders and movements in various countries.

Youth welfare programmes: NCC, NSS, NSO, Scouting and Guiding, Youth Hostels, Youth Festivals, Camping, Mountaineering.

**References:**

1. Kamlesh M.L., (1998) Physical Education : Facts and Foundation, New Delhi, P.B. Publication.
2. Wuest, Deborah, A. and Charles A. Bucher, Foundations of Physical Education and Sport, New Delhi : B.L. Publication Pvt., Ltd.
3. Wellman and Cowell, Philosophy and Principles of Physical Education, Amarvati: Suyog Prakasan.
4. Thirunarayanan, C. and Hariharan, S. (1990) Analytical History of Physical Education, Karaikudi: C.T. & S.H. Publications.
5. Sharma, O.P. (1998) History of Physical Education, New Delhi : Khel Shitya Kendra.
6. Jackson Sharman/Modern Principles of Physical Education, New York: A.A. Barnes & Co.
7. Khan, Eraj Ahmed, History of Physical Education, Patna Scientific Book Co.
8. Rice Emmett, A. Hutchinson John L. and Lee Marbal, (1960) A brief History of Physical Education, New York: The Ronald Press Co.

**CORE PRACTICAL**  
**YOGA AND SPORTS AND GAMES \***

**Asanas**

i) Padmasana	xi Sarvangasana	xxi Sirsasana
ii) Sukhasana	xii Halasana	xxii Padahastasana
iii) Vajrasana	xiii Makarasana	xxiii Mayurasana
iv) Samasana	xiv Salabasana	
v) Pascimottanasana	xv Ardha Salabasana	
vi) Matyasana	xvi Bhjungasana	
vii) Yogamudra	xvii Tadasana	
viii) Vakrasana	xviii Vrksana	
ix) Ardha Matsyendrasana	xix Trikonasana	
x) Savasana	xx Viparita Karani	

**Kriyas**

Jalaneti, Nauli, Uddyan, Kapalabhatti\

**Pranayama**

Nadi Suddhi, Nadi Shodana, Kapalabi, Sitali, Sitakari, Bhastrika,

**References:-**

1. Kumerasen, P, (2002) Yogasanam, Tirunelveli : Abinaya Publications.
2. Chandrasekaran, K. (1999) Sound Health through Yoga, Sedapatti: Prem Kalyam Publications.
3. Iyengar, B.K.S. Light on Yoga, London: George Allen and Unworn Ltd.
4. Kuvalayanandan Swamy, Pranayama Bombay.

\* Depends upon availability of time light apparatus, rhythmic exercises and other activities can teach.

**ALLIED I**

**PAPER I**

**ANATOMY AND PHYSIOLOGY**

**UNIT - I**

**Skeletal System**

The arrangement of the Skeleton - Functions of the Skeleton - Classification of Joints with examples- Structure of the synovial joints- Movement of the joint.

**Muscular System**

Functional Classification of Muscles and its significance, General characteristics of Muscles.

**UNIT - II**

**Cardio- Vascular System**

Constituents of blood and their functions - Functions of Blood Groups - clotting of blood, Structure and function of the heart and -major blood vessels in different parts of the body - properties of the heart muscle – circulation of the Blood - Cardiac cycle - blood pressure - Pulse rate, cardiac output.

**UNIT - III**

**Respiratory System**

Structure of lungs and Bronchial tree - Mechanism and regulation and respiration - exchange of Gases, Second wind, vital capacity and oxygen debt. Excretory system - Kidney and skin



## **UNIT - IV**

### **Digestive System**

Structure and function of various parts (Gastro intestinal system) – Movement of digestive tract - Function of liver.

## **UNIT - V**

### **Nervous System**

The Nerves- structure and function of cerebrum and Cerebellum - Medulla and Spinal Cord - Reflex arc - Automatic Nervous System.

### **References:**

1. Curton, A.C. [1986] *Function of the Human Body*, London: W.B. Saunders Company.
2. Srivastava, et al. [1976] *Text Book of Practical Physiology*, Calcutta: Scientific Book Agency.
3. Morehous and Miller, *Physiology of Exercise*, St. Louis: The C.V. Mosp Company.
4. Kapovich and Sinnser, [1965] *Physiology of Muscular Activity*, London: W.B. Saunders Company.
5. Anderson T.M. [1961] *Human Kinetics and Analysing Body Measurements*, London: William Heinmann Medical Books Ltd.
6. Davis, D.V. [1967] *Gray's Anatomy*, London: Longman Green and Company Ltd.
7. Pearse Evelyn, B., [1967] *Anatomy and Physiology for Nurses*, London: Faber and Faber Ltd.
8. Pearce J.W., [1959] *Anatomy for Students and Teachers of Physical Education*, London: Edward Arnold and Company.

**ALLIED PRACTICAL**  
**SPORTS INJURIES AND PHYSIOTHERAPY**

**Treatment for**

Sprain

Strain

Fracture

Dislocation

Muscle cramp

Bleeding

Wounds

**Massage**

Stroking manipulation

Pressure manipulation

Percussion manipulation

Shaking manipulation

## **ENVIRONMENTAL STUDIES**

(For all UG Degree Courses)

### **UNIT-I: INTRODUCTION TO ENVIRONMENTAL SCIENCES: NATURAL RESOURCES :**

Environmental Sciences - Relevance - Significance - Public awareness - Forest resources - Water resources - Mineral resources - Food resources - conflicts over resource sharing - Exploitation - Land use pattern - Environmental impact - fertilizer - Pesticide Problems - case studies.

### **UNIT-II: ECOSYSTEM, BIODIVERSITY AND ITS CONSERVATION:**

Ecosystem - concept - structure and function - producers, consumers and decomposers - Food chain - Food web - Ecological pyramids - Energy flow - Forest, Grassland, desert and aquatic ecosystem.

Biodiversity - Definition - genetic, species and ecosystem diversity - Values and uses of biodiversity - biodiversity at global, national (India) and local levels - Hotspots, threats to biodiversity - conservation of biodiversity - Insitu & Exsitu.

### **UNIT-III: ENVIRONMENTAL POLLUTION AND MANAGEMENT**

Environmental Pollution - Causes - Effects and control measures of Air, Water, Marine, soil, solid waste, Thermal, Nuclear pollution and Disaster Management - Floods, Earth quake, Cyclone and Land slides. Role of individuals in prevention of pollution - pollution case studies.

### **UNIT-IV: SOCIAL ISSUES - HUMAN POPULATION**

Urban issues - Energy - water conservation - Environmental Ethics - Global warming - Resettlement and Rehabilitation issues - Environmental legislations - Environmental production Act. 1986 - Air, Water, Wildlife and forest conservation Act - Population growth and Explosion - Human rights and Value Education - Environmental Health - HIV/AIDS - Role of IT in Environment and Human Health - Women and child welfare - Public awareness - Case studies.

## UNIT-V: FIELD WORK

Visit to a local area / local polluted site / local simple ecosystem - Report submission

## REFERENCES

1. KUMARASAMY, K., A.ALAGAPPA MOSES AND M.VASANTHY, 2004. ENVIRONMENTAL STUDIES, BHARATHIDSAN UNIVERSITY PUB, 1, TRICHY
2. RAJAMANNAR, 2004, ENVIRONEMNTAL STUDIES, EVR COLLEGE PUB, TRICHY
3. KALAVATHY,S. (ED.) 2004, ENVIRONMENTAL STUDIES, BISHOP HEBER COLLEGE PUB., TRICHY

**II SEMESTER  
PAPER II**

**THEORIES OF SPORTS AND GAMES - I  
(KABADDI, VOLLEYBALL AND BALLBADMINTON,  
*SPRINT EVENTS, LONG JUMP & SHOT PUT*)**

**UNIT - I**

History of Track and Field: India, Asia, and World.

Organisation of Track and Field, Federations: India, Asia, World

Warm-up, Warm down, Physical fitness and Motor qualities needed for various athletic events-Techniques and tactics for athletic events- equipments and specifications.

**UNIT - II**

Lay out and maintenance of Track and field events. Marking for track and field events.

Athletic Competitions, Rules, Officials and officiating.

**UNIT - III**

History and development of the Games : World, India.

Organisation of Games: Working Federation of World, India.

Fundamental Skills

**UNIT - IV**

Tactics and Strategy, Systems in the Games, Leadup Games, Evaluation.

Training : Warm up, Warming-down, Essential fitness components, training load.

## UNIT - V: Rules of the Game

- a) Rules and their Interpretations.
- b) Method of officiating and Scoring, officials.
- c) Layout and Maintenance of play fields.

### References:

1. Doherty, J., Track and Field, Engle wood Cliffs: Prentice Hall Inc.
2. Dyoon and Geoffray, G.H., (1962) The Mechanics of Athletics London: University of London Press Ltd.
3. Ken O Bosen, Track and Field Fundamental Techniques, Patiala: MS Publications.
4. Handbook, AAFI, New Delhi.
5. Rogres, L. Joseph., Track & Field Coaching Manual, USA: Herman Kinetics.
6. Johnson L. Barry and Jack K. Nelson, (1982) Practical Measurements for Evaluation in Physical Education, Delhi: Surjeet Publications, 1982.
7. Narayanan N.C. (1993) A Hand Book of Weight lifting, Tiruneveli, TWDWC Association.

**CORE PRACTICAL I  
KABADDI, VOLLEYBALL AND BALLBADMINTON,**

**SPRINT EVENTS, LONG JUMP & SHOT PUT**

**GAME**

General and specific conditioning exercise  
Fundamental Skills

Drills for developing the skills

Team Tactics and Strategy

Systems of Play  
Standardized skill test  
Scouting of performance  
Rules  
Officiating system

**ATHLETICS**

General and specific conditioning exercise  
Teaching of Skills

Practicing the Skills

Equipments

Scouting of performance  
Rules

Officiating techniques

**ALLIED  
PAPER II**

**SPORTS INJURIES AND PHYSIOTHERAPY**

**UNIT - I**

Common athletic injuries and their treatment

Sprain

Strain

Types of fracture and their treatment

**UNIT - II**

*Dislocation*

Muscle cramp

Bleeding

Wound and its types

Contusion

Abrasion and

Puncture wounds

**UNIT - III**

Meaning, Nature, need and importance of Physiotherapy

Short wave diathermy, Microwave diathermy, Diapulse Diathermy, Ultra Sound Waves, Infra red rays, Ultra violent rays.

**UNIT - IV**

Brief History of Massage classification of the Manipulations used in massage the techniques and uses indication and contra- Indications of all manipulations.



## UNIT - V

### Rhumatic Conditions

1. Classification - Rheumatoid Arthritis
2. Spondylitis
3. Acute respiratory conditions
4. Chronic respiratory conditions
5. Conditions of the Nervous System.

Introduction, Sign and Symptoms of neurological dis-orders like Paraplegia, Hemiplegia, Cerebral Palsy.

### References:

- 1) Thorndike, Athletic Injuries.
- 2) I.B. Clayton, Text Book of Electro therapy and Action therapy.
- 3) Edwin M. Prasnet, Manual of Massage and Movements.
- 4) R. Foracks, Exercise Therapy.
- 5) M.V.Locs, Manual of Massages.
- 6) Adish Luchwald, Physical Rehabilitation for Daily Living.

**ALLIED PRACTICAL I**  
**SPORTS INJURIES AND PHYSIOTHERAPY**

**Treatment for**

Sprain  
Strain  
Fracture  
Dislocation  
Muscle cramp  
Bleeding  
Wounds

**Massage**

Stroking manipulation  
Pressure manipulation  
Percussion manipulation  
Shaking manipulation

**VALUE EDUCATION**  
**(For all UG Degree Courses)**

**UNIT-I**

Value Education - Definition - relevance to present day - Concept of Human Values - self introspection - Self esteem.

**UNIT-II**

Family values - Components, structure and responsibilities of family - Neutralization of anger - Adjustability - Threats of family life - Status of women in family and society - Caring for needy and elderly - Time allotment for sharing ideas and concerns.

**UNIT-III**

Ethical values - Professional ethics - Mass media ethics - Advertising ethics - Influence of ethics on family life - psychology of children and youth - Leadership qualities - Personality development.

**UNIT-IV**

Social values - Faith, service and secularism - Social sense and commitment - Students and Politics - Social awareness, Consumer awareness, Consumer rights and responsibilities - Redressal mechanisms.

**UNIT-V**

Effect of international affairs on values of life/ Issue of Globalization - Modern warfare - Terrorism. Environmental issues - mutual respect of different cultures, religions and their beliefs.

### Reference Books

1. T. Anchukandam and J. Kuttainimathathil (Ed) Grow Free Live Free, Krisitu Jyoti Publications, Bangalore (1995)
2. Mani Jacob (Ed) Resource Book for Value Education, Institute for Value Education, New Delhi 2002.
3. DBNI, NCERT, SCERT, Dharma Bharti National Institute of Peace and Value Education, Secunderabad, 2002.
4. Daniel and Selvamony - Value Education Today, (Madras Christian College, Tambaram and ALACHE, New Delhi, 1990)
5. S. Ignacimuthu - Values for Life - Better Yourself Books, Mumbai, 1991.
6. M.M.M.Mascaronhas Centre for Research Education Science and Training for Family Life Promotion - Family Life Education, Bangalore, 1993.

### WEBSITES AND e-LEARNING SOURCES:

[www.rkmissiondhe.org/education.html/](http://www.rkmissiondhe.org/education.html/)

[www.clallam.org/lifestyle/education.html/](http://www.clallam.org/lifestyle/education.html/)

[www.sun.com/./edu/progrmws/star.html/](http://www.sun.com/./edu/progrmws/star.html/)

[www.infoscouts.com](http://www.infoscouts.com)

[www.secretofsucccess.com](http://www.secretofsucccess.com)

[www.1millionpapers.com](http://www.1millionpapers.com)

<http://militaryfinance.umuc.edu/education/edu-network.html/>

**III SEMESTER  
PAPER III  
ORGANIZATION AND ADMINISTRATION IN  
PHYSICAL EDUCATION**

**UNIT - I**

Meaning and importance of organization and Administration - Scheme of Physical Education in Schools, Colleges, Universities, District State and National level.

**UNIT - II**

Finance-Budgeting - maintaining Records and Registers

**UNIT - III**

Need for equipment - Types of equipment - Procedure for purchase of equipments- Care and maintenance of equipment.

**UNIT - IV**

Construction and maintenance of gymnasium - Types of swimming pools - Construction of multipurpose swimming pools

**UNIT - V**

Preparation of time table - types of physical education periods - before and after school hour physical activities.

**References:**

1. Kamlesh, M.L., Management concepts of physical education and sport, New Delhi: Metropolitan Book Co., Pvt., Ltd.
2. Joseph, P., Organization and administration of Physical Education, Gwalior.
3. Bucher, Chales and Krotee, Mar L, (1997) Management of physical Education and Sport, London: Mospay Publishing Co.
4. Sharma, (1997) Organisation and Administration of Games and Sports, Jaipur: Book Enclave.
5. Sarriran Chakraborty, (1998) Sports Management, Delhi: Sport Publication.

**CORE PRACTICAL**  
**GYMNASTICS AND GAMES AND SPORTS \***

**Floor Exercise [Compulsory]**

1. Forward Roll
2. Backward Roll
3. Hand Stand Forward Roll
4. Cart Wheel
5. Round off
6. Jump forward to Roll forward
7. Head Spring
8. Hand Spring
9. Standing scales

Any one - apparatus in the following:

**Pommel Horse**

1.
  - a) Front Support
  - b) Rear Support
  - c) Straddle Leg support
  - d) Split Leg support
  - e) Feint Support
2.
  - a) Single Leg Circle Clockways Right Leg.
  - b) Single Leg Circle Clockways left Leg.
  - c) Single Leg Circle anticlockways Right Leg.
  - d) Single Leg Circle anticlockways left Leg.
3. Double leg circle
4. Scissors

### **Parallel Bar**

1. Perfect swing
2. Straddle Seat
3. L-Support
4. Forward Roll
5. Backward Roll
6. Shoulder stand
7. Hand Stand
8. Dismount

### **Horizontal Bar**

1. Perfect swing
2. Free hip circle
3. Mill circle Forward
4. Mill circle Backward
5. Dismount

### **Roman Rings**

1. Perfect swing
2. Invested Hang
3. Rear Hang
4. Upstart
5. L-support
6. Shoulder Stand
7. Dismount

Exercises on vault, Asymmetric Bars, Balance beam are for women.

*\* Depends upon availability of time light apparatus, rhythmic exercises and other activities can teach.*



**ALLIED PAPER III**  
**STATISTICS IN PHYSICAL EDUCATION**

**UNIT - I**

Meaning and Definition of Statistics,  
Nature, Need and Importance of Statistics  
Types of Statistics.  
Data- Quantitative and Qualitative data

**UNIT - II**

Frequency Distribution.  
Measure of Central Tendency, Mean, Median and Mode Definition- Computation of mean and median and mode from the ungrouped and discrete data.  
Computation of combined mean from ungrouped data  
Specific characteristics and use of measure of central tendency

**UNIT - III**

Measure of variability - Range - Quartile deviation- Mean deviation- Standard deviation- Definition- Computation of Quartile deviation, Mean deviation, Standard deviation from the ungrouped and discrete data - Computation of combined standard deviation from the ungrouped data.

**UNIT - IV**

Measure of relative position- Meaning of percentiles, deciles and quartiles - computation of percentiles, deciles and quartiles from the ungrouped and discrete data.

## UNIT - V

Measure of Relationship- Meaning and definition of correlation- computation of product moment correlation from the ungrouped data- rank order correlation- Partial correlation.

### References:-

1. Gupta, (1982) Advanced Practical Statistics, New Delhi : Chand & Co.
2. Wilks, S.S., (1984) Elementary Statistical Analysis, Calcutta: IBH publishing Co.
3. Harry E. Garre (1958) Statistics in Psychology and Education, Bombay: Allied Publishers Ltd.

**ALLIED PRACTICAL  
COMPUTER APPLICATIONS IN PHYSICAL  
EDUCATION AND SPORTS**

M.S. Word 2000

- I. Performing the following :
  - a) Type three paragraphs
  - b) Move para 1 after para 3
  - c) Copy para 2 after para 3
- II. Type invitation card using various colour and styles
- III. Perform the following
  - a) Type three paragraph using paragraph indent
  - b) Align Left - Para 1
  - c) Align Right -Para 2
  - d) Underline Para 3
  - e) Bold paragraph 1-2
  - f) Italic - paragraph 3
- IV. Insert object into word document
- V. Prepare a table with three column of various width.

Excel 2000

- I. Entering a simple spreadsheet with three columns, Roll Numbers, Name, Mark I, for ten students
- II. Find the total marks of ten students
- III. Find the average marks of ten students in problem I.

- IV. Editing the spreadsheet in problem 1 and printing
- V. Perform the following
  - a) Copy the content of cell A3 into C3.
  - b) Delete the content of cell B3.
  - c) Border the cell range form C5 to D8

**SKILL BASED SUBJECT I**

**PAPER I**

**YOGA AND HOLISTIC LIFE**

**UNIT-I**

Introduction to Yogasanas - Philosophy of Yoga - Purpose of Yoga - Science awareness - Inadequacy Science Practice of Yoga - Eight Limbs of Yoga - Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.

**UNIT-II**

Phase of Yoga - The Body - Entry phase - Static phase and the Exit phase. Effect of Yogasanas - Stretching, Pressure Effect, Gravitation Effect, Relaxation and Mental Experience.

The Breath - Kinds of Breathing - Exhalation - The flow in the Nostrils and Posture in Yogic Breathing - The Mind - Concentration of Asanas - Performance - Static phase on Breath and on the body as a whole.

**UNIT-III**

Techniques and Practice of Yogasanas - Important facts and Precautions, Warming up and Preliminary Exercises for Neck, Eyes, Shoulders, Back, Abdominal Muscles, Legs, Feet and Hands - Technique of Yogasana posture - Do's and Don't's.

**UNIT-IV**

Beneficial Effects of Yogasana - Time Schedule for Practising Yogasanas and Pranayama - Yoga Stretching and Pranayama for competitive players - Physiological Aspects - Physical and Mental Relaxation - Guide to practice Contemplation - Mediation - Concentration Exercises.

**UNIT-V**

Yoga Therapy - Yoga for Arthritics - Osteoarthritis - Rheumatoid Arthritis - Spondylosis - Diabetes - Obesity - Hypertension - Stress. Diet for Yoga - Discussion of Diet. Basic Food Values - The 'Hay' Diet Food Classification - Cleansing Diet - Health Diet - Reducing Diet for Adults.

**REFERENCE BOOKS**

1. Erling Peterson, 'Yoga step by step'
2. Indra Devi, 'Yoga for you'
3. Rasalind Widdowson, 'Yoga made Easy'
4. M. Rajan, 'Yoga Stretching and Relaxation for Sportsmen'
5. M. Narayana Menon, 'Yogasanas For Health and Longevity'
6. Rameshwar Dass Gupta, 'Daily Yog'

**NON-MAJOR ELECTIVE I**

**PAPER I**

**OCCUPATIONAL RECREATION**

**UNIT-I**

Meaning of Occupational recreation - Theoretical Explanation - Scope and Philosophy of Recreation - Relationship of Recreation - Relationship between work, Play and leisure objectives of Recreation.

**UNIT-II**

Historical Development of Recreation in Rome, United States, Greece and India, Since Independence - Agencies offering recreation facilities to the public - Individual and home recreation, Government Agencies, Commercial Agencies. Areas - facilities and equipment needed for recreation.

**UNIT-III**

Activities and Programme planning:

- a) Arts and Crafts, Athletics and Sports, Drama, Music, Gardening and other activities and other programme features.
- b) The Municipal Recreation Programme - Important factors in programme & planning.

**UNIT-IV**

Leisure and Recreation in modern society - Leisure as a Social problem - Technological and Industrial process - Medical sciences - Environment - Wealth - Education - Changing Social Attitudes - Leisure and the work - life - Man's need to work - Creating environment.

## UNIT-V

Leisure on an Economic factor - Local, Public Relation systems - Voluntary Agencies - Departments of state and federal governments - Institution - Industries - Commercial Enterprises - Recreation in expandry economy.

## REFERENCE BOOKS

1. Introduction to Community recreation by George D. Butler
2. Recreation Leadership - H. Dau Corbin
3. Principles of Recreation by John S. Hutchinson
4. Community Recreation - By Major and Bright bill
5. Williams & Bronald - Administration of Physical Education



**IV SEMESTER**

**PAPER IV**

***THEORIES OF SPORTS AND GAMES II***

*(FOOTBALL, BASKETBALL AND SOFTBALL,  
MIDDLE & LONG DISTANCE RUNNING, HIGH JUMP  
AND JAVELIN THROW)*

**UNIT - I**

History of Track and Field: India, Asia, and World.

Organisation of Track and Field, Federations: India, Asia, World

Warm-up, Warm down, Physical fitness and Motor qualities needed for various athletic events-Techniques and tactics for athletic events- equipments and specifications.

**UNIT - II**

Lay out and maintenance of Track and field events. Marking for track and field events.

Athletic Competitions, Rules, Officials and officiating.

**UNIT - III**

History and development of the Games : World, India.

Organisation of Games: Working Federation of World, India.

Fundamental Skills

**UNIT - IV**

Tactics and Strategy, Systems in the Games, Leadup Games, Evaluation.

Training : Warm up, Warming-down, Essential fitness components, training load.

## UNIT - V

Rules and their Interpretations.

Method of officiating and Scoring, officials.

Layout and Maintenance of play fields.

### *References:*

1. Doherty, J., Track and Field, Engle wood Cliffs: Prentice Hall Inc.
2. Dyoon and Geoffray, G.H., [1962] The Mechanics of Athletics London: University of London Press Ltd.
3. Ken O Bosen, Track and Field Fundamental Techniques, Patiala: MS Publications.
4. Handbook, AAFI, New Delhi.
5. Rogres, L. Joseph., Track & Field Coaching Manual, USA: Herman Kinetics.
6. Johnson L. Barry and Jack K. Nelson, [1982] Practical Measurements for Evaluation in Physical Education, Delhi: Surjeet Publications, 1982.
7. Narayanan N.C. [1993] A Hand Book of Weight lifting, Tiruneveli, TWDWC Association.

**CORE PRACTICAL II**

**FOOTBALL, BASKETBALL AND SOFTBALL,  
MIDDLE & LONG DISTANCE RUNNING, HIGH JUMP  
AND JAVELIN THROW**

**GAME**

General and specific conditioning exercise

Fundamental Skills

Drills for developing the skills

Team Tactics and Strategy

Systems of Play

Standardized skill test

Scouting of performance

Rules

Officiating system

**ATHLETICS**

General and specific conditioning exercise

Teaching of Skills

Practicing the Skills

Equipments

Scouting of performance

Rules

Officiating techniques

**ALLIED PAPER IV**

**COMPUTER APPLICATIONS IN PHYSICAL EDUCATION AND SPORTS**

**UNIT - I**

Computer - Meaning, History, Users - Components of Computer - Input Devices (Punch Card, Paper tape, Light pen, Screen touch, Keyboard, joystick, Track ball, Mouse, Plotter) Output device (Printer, Dot Matrix, Laser Printer, inkjet Printer, Visual Display unit) External Storage Devices - Floppy Disks & Hard Disk.

**UNIT - II**

Software and Hardware - Languages (Machine, Assembly, High level) - Local Area Network (LAN - Internet - Multimedia - Overview of windows 95 and 98 overview.

**UNIT - III**

Introduction to MS Word 2000 - Creating Word documents - Editing document text - Selecting - Copying - Deleting and moving text - Aligning and formatting text - setting line space - using table - finding and replacing text - Spelling Grammar - Aligning text vertically - setting Marging - Pinting option - Using mail merge.

**UNIT - IV**

Introduction to MS Excel 2000. Entering and Editing cell entries - creating formulas - Adjusting Column width and row height, inserting and deleting rows and cells, moving and copying contents - Naming work sheet - selecting with sheet - copying and moving worksheet - Entry and deleting worksheet.

## UNIT - V

Computer Applications in Physical Education - Preparing entries for athletics and tournaments - Preparing Score sheet for athletic events and tournaments.

Office Management Teaching, learning and coaching modules statistical calculations.

### References:

1. *Vikas Gupta, (1995) Computer Course, Delhi: Putak Mahal.*
2. *French, C.S. (1986) Data Processing, New Delhi: Galgotia Book Source.*
3. *Haggery, T., The Administrative use of computers in professional Sport Organization, New York.*
4. *Maria Langer, World of Windows, Barkeley: Peachpit Press.*

**ALLIED PRACTICAL II**  
**COMPUTER APPLICATIONS IN PHYSICAL**  
**EDUCATION AND SPORTS**

M.S. Word 2000

- I. Performing the following:
  - a) Type three paragraphs
  - b) Move para 1 after para 3
  - c) Copy para 2 after para 3
- II. Type invitation card using various colour and styles
- III. Perform the following
  - a) Type three paragraph using paragraph indent
  - b) Align Left - Para 1
  - c) Align Right -Para 2
  - d) Underline Para 3
  - e) Bold paragraph 1-2
  - f) Italic - paragraph 3
- VI. Insert object into word document
- VII. Prepare a table with three column of various width.

Excel 2000

- I. Entering a simple spreadsheet with three columns, Roll Numbers, Name, Mark I, for ten students
- II. Find the total marks of ten students

- III. Find the average marks of ten students in problem I.
- IV. Editing the spreadsheet in problem 1 and printing
- V. Perform the following
  - a. Copy the content of cell A3 into C3.
  - b. Delete the content of cell B3.
  - c. Border the cell range form C5 to D8

**SKILL BASED SUBJECT II**

**PAPER II**

**FITNESS AND WELLNESS**

**UNIT-I**

Definition and meaning of physical fitness - Brief Historical relevance of exercise and physical fitness - Future challenges, Strategies for increasing physical fitness in India - Values of Physical fitness - Components of Health related physical fitness and Athletic related physical fitness - Factors influencing fitness - Definition and components of wellness - Relationship between fitness, health and wellness.

**UNIT-II**

Factors influencing fitness - (Age, Sex, Climate, Diet, Exercise and Training) - Types of exercises used in Fitness (Aerobic, Anaerobic, Isometric, Stretching, Agility and balancing). The acute and chronic effects of Physical Activity on various systems of the body - Health benefits of Physical Activity - Assessment of cardio - respiratory Fitness, Musculo Skeletal fitness, Flexibility and body composition.

**UNIT-III**

Prescription for aerobic exercise - modes of aerobic exercise - Implementing an aerobic fitness - Programme - Principles of cardiovascular exercise prescription - aerobic exercise programme (Walk-jog-run) aerobic dancing, rope jumping, treadmill running, jogging in place, stair climbing, Stationary bicycling.

**UNIT-IV**

Wellness - Meaning - Concept of wellness - Importance - health and wellness - Types of exercise programme - Components of wellness - Physical fitness - Cardio Vascular Risk factors.



## UNIT-V

Health habits: Alcohol and Drugs - Smoking - Tension and stress - Proper Nutrition - Cancer Prevention - Spiritual well-being - The wellness challenge.

## REFERENCE

1. Bartels, Oliver - All Around Fitness, honeran, Germany
2. William J. Stone, Fitness for You, West Publishing Co., New York.
3. Batman P and Van Capelle M(1995) The Exercise Guide to Resistance Training ITAU. Publications, Australia.
4. Siedntop Daryl, (1994) Introduction to Physical Education Fitness and Sport, Mayfield publishing company, Mountain view, California.
5. Williams H. Melvin (1995), Life time fitness and wellness, Brown publications, Dubugue.

## **NON-MAJOR ELECTIVE II**

### **PAPER II**

#### **SPORTS MANAGEMENT**

##### **UNIT-I**

Meaning and Definition of Sports management - Scope of Sports management - Basic principles of Sports management - Functions of sports management.

##### **UNIT-II**

Personal management: Objectives - Personal policies - Personal Recruitment - Role of Personal manager. Programme management: Importance of Programme development - Factors influencing programme development - Competitive sports programs.

##### **UNIT-III**

Sports marketing: Meaning - Factors involved in the marketing of sports - Market awareness - Developing a target market strategy - Quality and price of sports products.

##### **UNIT-IV**

Supplies of sports Equipments: Guidelines for selection and supply of equipments - Equipment room, Equipment and supply manager - Guidelines for checking, storing and issuing - Care and maintenance of equipments.

##### **UNIT-V**

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.

**REFERENCE BOOKS**

1. Bucher A. Charles (1993) Management of physical Education and sports (10<sup>th</sup> ed.,) St.Louis : Mobsy Publishing Company.
2. Chelladurai. P (1999) Human Resource Management in sport and Recreation, Human kinetics.
3. Chakraborty, Samiram (1988), Sports Management, Sports publications, New Delhi.
4. Lazer. W and Culley. J Marketing Management. Boston Houghton Miffling Co.
5. Ruben Acosta Hernandez, Managing sport organizations, Human kinetics.

**V SEMESTER**

**PAPER V**

**METHODS IN PHYSICAL EDUCATION**

**UNIT - I**

Meaning of method - Factors influencing method - Presentation technique - Planning and presentation - Personal preparation - Technical preparation -common characteristics of good preparation - step in the way of presentation. Teaching aids - Class management-Principles to be adopted for good class management.

**UNIT - II**

Lesson plan-Values of lesson plan-Types of lesson plan-General lesson plan- particular lesson plan-Variou methods of teaching physical activities.

**UNIT - III**

Intramural and Extramural competitions- Incentives and awards-methods of organizing and conducting tournaments and sports meet-Game tours.

**UNIT - IV**

Teaching activities of minor games, major games track and Field, Yogic Practice, Suryanamaskar, Calisthenics, Light apparatus, Rhythmic activities, Commands, Marching.

**UNIT - V**

Tournaments - Types of Tournament, Knock Out, League, Combination Tournaments, Methods of drawing Fixtures.

**References:**

1. Thirunarayanan C and S. Harihara Sharma, [1989] Methods in Physical Education, Karaikudi.
2. Kamelsh M.L. [1994] Scientific Art of Teaching Physical Education, New Delhi: Metropolitan Book Company.

3. Bucher, Charles and Krotee, Mar, L. [1993] Management of Physical Education and Sport, London: Mosby Company.
4. Kozman and Jackson, Methods in Physical Education, New York: W.B. Saunders Co.
5. Bacher and Barnhard, Methods and Materials for Secondary School Physical Education, New York: C.V. Mosby Co.

**PAPER VI**

**THEORIES OF SPORTS AND GAMES III**

(CRICKET, KHO-KHO AND BADMINTON, RELAY, TRIPLE JUMP, DISCUS  
THROW & HEPTATHLON\*)

**UNIT - I**

History of Track and Field: India, Asia, and World.

Organisation of Track and Field, Federations: India, Asia, World

Warm-up, Warm down, Physical fitness and Motor qualities needed for various athletic events-Techniques and tactics for athletic events- equipments and specifications.

**UNIT - II**

Lay out and maintenance of Track and field events. Marking for track and field events.

Athletic Competitions, Rules, Officials and officiating.

**UNIT - III**

History and development of the Games: World, India.

Organisation of Games: Working Federation of World, India.

Fundamental Skills

**UNIT - IV**

Tactics and Strategy, Systems in the Games, Leadup Games, Evaluation.

Training : Warm up, Warming-down, Essential fitness components, training load.

## UNIT - V

Rules and their Interpretations.

Method of officiating and Scoring, officials.

Layout and Maintenance of play fields.

### *References:-*

1. Doherty, J., Track and Field, Engle wood Cliffs: Prentice Hall Inc.
2. Dyoon and Geoffray, G.H., [1962] The Mechanics of Athletics London: University of London Press Ltd.
3. Ken O Bosen, Track and Field Fundamental Techniques, Patiala: MS Publications.
4. Handbook, AAFI, New Delhi.
5. Rogres, L. Joseph., Track & Field Coaching Manual, USA: Herman Kinetics.
6. Johnson L. Barry and Jack K. Nelson, [1982] Practical Measurements for Evaluation in Physical Education, Delhi: Surjeet Publications, 1982.
7. Narayanan N.C. [1993] A Hand Book of Weight lifting, Tirunelveli, TWDWC Association.

**CORE PRACTICAL III  
CRICKET, KHO-KHO AND BADMINTON,**

**RELAY, TRIPLE JUMP, DISCUS THROW & HEPTATHLON\***

**GAME**

General and specific conditioning exercise

Fundamental Skills

Drills for developing the skills

Team Tactics and Strategy

Systems of Play

Standardized skill test

Scouting of performance

Rules

Officiating system

**ATHLETICS**

General and specific conditioning exercise

Teaching of Skills

Practicing the Skills

Equipments

Scouting of performance

Rules

Officiating techniques

- \* Specialization in any one of the game
- Specialization in one track, one field and one jumping event
- Prepare coaching lesson plan



**ELECTIVE I**

**PAPER I**

**TEST AND MEASUREMENT IN PHYSICAL EDUCATION**

**UNIT - I**

Meaning of Test, Measurement and Evaluation. Need and importance of Test, measurement and Evaluation in physical education.

**UNIT - II**

Classification of test - Standardised and Teacher made test - Skill test and knowledge test - Objective test - Subjective test. Administration of the test - Advance preparation - Duties during testing - Duties after testing

**UNIT - III**

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 12 minute Run / Walk test.-Explosive strength test - Standing Broad Jump

**UNIT - IV**

AAHPERD Youth Fitness test.

JCR test

Barrow motor ability test

Harward step test

Margaria - Kalamen power test

## UNIT - V

Test of Specific sport skills.

Badminton: French Short Serve Test.

Basketball : Johnson Basketball Ability test.

Hockey : Hendry Friedal Field Hockey test.

Soccer : McDonald Volleying Soccer Test.

Tennis: Broer - Miller Tennis Test.

Volleyball : Helmen Volley ball test

### *References:-*

1. Safrit Margarat J. (1986) Measurement in Physical Education and Exercise Science. St. Louis, Times Mirror Mosby College Publishing Co.
2. Bosco, James S. (1983) Measurement and Evaluation in physical Education and Sports, New Jersey: Prentice Hall Inc.
3. Clarke H. (1967) Application of measurement in Health and Physical Education, New York: Prentice Hall Inc.
4. Mathews K. Donald, (1973) Measurement in Physical Education, London: W.B. Saunders Company.

**SKILL BASED SUBJECT III**

**PAPER III**

**HEALTH EDUCATION AND SAFETY EDUCATION**

**UNIT-I:**

Health Education: Health Definition and concepts; factors influencing health - Health determinants - Heredity and Environment - Health problems of India - Population and Health - Environmental pollutions.

**UNIT-II:**

Personal Hygiene: Desirable hygienic habits; health requirement. Infection - Immunity: Causes of diseases - Mode of infection - Spread of infection - Public Health measures to combat infection - Public Health Administration - Sanitation - Water Supply.

**UNIT-III:**

Communicable Diseases: Role of insect - Vectors in spreading infection in Malaria, Filariasis, Typhoid, Cholera and Dysentery - School health problems.

**UNIT-IV:**

Safety Education: The need for teaching principles of safety education. Safety at school - Structure and environment. Collection of information, address of parents, hospitals and doctors, police, fire station, ambulance service. Accident reporting and maintenance of records. Safety in physical education and sports - Principles of safety with respect to buildings and playfields.

**UNIT-V:**

Safety at home - Environment and structure, Electrical connections, Bathroom and lavatory, storing articles, kitchen and fire place, storing medicines, principles of movements in daily living.

## REFERENCE

1. Dalrymple: "Foundation of Health" - Harper and Brothers.
2. Moss & Others: "Health Education" - National Education Annual U.S.A
3. Nemiah: "School Health Education" - Harper & Brothers.
4. J.E. Park: Text book of preventive and Social Medicine.
5. Safe a School - (Education Pamphlet Number 53) London: Her Majesty's stationary office.
6. School / Safety policies - Washington D.C. American Association for Health, Physical Education and Recreation.
7. Stack, Harbert J. Duke Elkow - Education for safe living. Englewood chiffs, New Jersey, Prentice Hall Inc.
8. Florio, A.A. and Stafford - Safety Education, New York. Mc Graw Hill Book Co.
9. Evans, A.William. Everyday Safety, Chicago, Lyons and carnahan.

## **VI SEMESTER**

### **PAPER VII**

#### **HEALTH EDUCATION, SAFETY EDUCATION AND FIRST AID**

##### **UNIT - I**

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, Environmental health, Occupational health

Personal hygiene school health programme.

##### **UNIT - II**

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.

##### **UNIT - III**

Definition - Characteristics - Principles of Safety Education - Need for safety Education in Physical Education.

Factors affecting safety - Need and importance of safety for preventing injuries.

##### **UNIT - IV**

Definition and importance of first aid - first aid for athletic injuries - sprain, strain - dislocation - cramp - Fracture and its types.

## UNIT - V

Sign , Symptoms and first aid for Poisoning, Drowning, Dog Bit and Burns. Types of Bleeding - Wound and its Type - Contusion - Abrasion - Puncher wound- Laceration. Artificial respiration.

### References:

1. Mangal S.K. and Chandra, P.C. (1979) Health and Physical Education, Ludhiana: Tandon Brothers Publication.
2. Neiniah, (1978) School Health Education, New York: Harper and Brothers.
3. Royappa, Daisy Joseph and Govindararajulu, J.K. (1972) Safet Education.
4. First Aid to the Injured, New Delhi: St. John Ambulance Association.
5. School Safety Policies, Washington: American Association for Health, Physical Education and Recreation.
6. Florio, A.E and Stafford, G.T., (1969) Safety Education, New York: Mc Graw Hill Book Company.
7. William, Evans, A, (1952) Everyday Safety, Lyons and Carnahan.
8. Strasser, Marland, et al. (1983) Fundamentals of Safety Education, New York: The Mac Millan Company.
9. Miller, David. E, (1976) Occupational Safety, Health and Fire Index, New York: Marcel Dekker Inc.

**PAPER VIII**

**THEORIES OF SPORTS AND GAMES - IV  
(HOCKEY, HANDBALL AND TENNIS. HURDLES,  
POLE VAULT, HAMMER THROW AND DECATHLON)**

**UNIT - I**

History of Track and Field: India, Asia, and World.

Organisation of Track and Field, Federations: India, Asia, World

Warm-up, Warm down, Physical fitness and Motor qualities needed for various athletic events-Techniques and tactics for athletic events- equipments and specifications.

**UNIT - II**

Lay out and maintenance of Track and field events. Marking for track and field events.

Athletic Competitions, Rules, Officials and officiating.

**UNIT - III**

History and development of the Games : World, India.

Organisation of Games: Working Federation of World, India.

Fundamental Skills

**UNIT - IV**

Tactics and Strategy, Systems in the Games, Leadup Games, Evaluation.

Training : Warm up, Warming-down, Essential fitness components, training load.

## UNIT - V

Rules and their Interpretations.

Method of officiating and Scoring, officials.

Layout and Maintenance of play fields.

### *References:-*

1. Doherty, J., Track and Field, Engle wood Cliffs: Prentice Hall Inc.
2. Dyoon and Geoffray, G.H., (1962) The Mechanics of Athletics London: University of London Press Ltd.
3. Ken O Bosen, Track and Field Fundamental Techniques, Patiala: MS Publications.
4. Handbook, AAFI, New Delhi.
5. Rogres, L. Joseph., Track & Field Coaching Manual, USA: Herman Kinetics.
6. Johnson L. Barry and Jack K. Nelson, (1982) Practical Measurements for Evaluation in Physical Education, Delhi: Surjeet Publications, 1982.
7. Narayanan N.C. (1993) A Hand Book of Weight lifting, Tiruneveli, TWDWC Association.



**CORE PRACTICAL III  
CRICKET, KHO-KHO AND BADMINTON,**

**RELAY, TRIPLE JUMP, DISCUS THROW & HEPTATHLON \***

**GAME**

General and specific conditioning exercise  
Fundamental Skills

Drills for developing the skills

Team Tactics and Strategy

Systems of Play  
Standardized skill test  
Scouting of performance  
Rules  
Officiating system

**ATHLETICS**

General and specific conditioning exercise  
Teaching of Skills

Practicing the Skills

Equipments

Scouting of performance  
Rules

Officiating techniques

- \* Specialization in any one of the game  
Specialization in one track, one field and one jumping event  
Prepare coaching lesson plan

**CORE PRACTICAL IV  
HOCKEY, HANDBALL AND TENNIS**

**HURDLES, POLE VAULT, HAMMER THROW AND DECATHLON \***

**GAME**

General and specific conditioning exercise

Fundamental Skills

Drills for developing the skills

Team Tactics and Strategy

Systems of Play

Standardized skill test

Scouting of performance

Rules

Officiating system

**ATHLETICS**

General and specific conditioning exercise

Teaching of Skills

Practicing the Skills

Equipments

Scouting of performance

Rules

Officiating techniques

- \* Specialization in any one of the game
- Specialization in one track, one field and one jumping event
- Prepare coaching lesson plan

**ELECTIVE II  
PAPER II  
SCIENCE OF SPORTS TRAINING**

**UNIT - I**

Introduction - Meaning and Definition of Sports Training - Principles of Sports Training.

**UNIT - II**

Training Load and Recovery - Factors of Load - Load intensity, Load volume- Judgement of Load - Relationships between Load and Adaptation. Over load.

**UNIT - III**

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.

**UNIT - IV**

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.

## UNIT - V

Technical preparation - Aims to techniques in sports - Fundamentals and methods for development of technique in sports - Stages of technical development. Aims of Tactics - Method of tactical development.

### References:

1. Hardayal Singh (1991) Science of Sports Training, New Delhi: DVS Publications.
2. John Bunn, Scientific Principles of Coaching.
3. Miller, Fundamentals of Track and Field Coaching.

**ELECTIVE III**

**PAPER III**

**FITNESS AND NUTRITIONAL CARE**

**UNIT - I**

Meaning, need and importance of fitness and wellness.

Physical Fitness components.

Exercise prescription for enhancing fitness components.

**UNIT - II**

A healthy lifestyle approach- cardiovascular risk reduction- substance abuse control of smoking cessation, sexuality, stress management, spirituality.

**UNIT - III**

Meaning, Need, Nature and Importance of Nutrition

Basics of Nutrition, Carbohydrates, Fats, Proteins, Vitamins, Minerals, Water, Balanced diet, Nutritive value of Food stuffs.

**UNIT - IV**

Classification of food

Adulteration of food

Nutrition for Athletes and players, Energy requirements in Sports.

**UNIT - V**

Principles of weight control, Exercise is the key to successful weight loss - management for weight loss.

*References:*

1. Hoeger werner W.K, and Hoeger Sharan A. (1990) Fitness and Welness, New Jersey: Morton Publishing Company.
2. Hazedine, (1985) Fitness for Sports, Ramsburg: The Crowood Ress Ltd.
3. Pande P.K. and L.C. Gupta, (1987) Sports Medicine, New Delhi: Jaypee Brothers.
4. Goswami Shashikant, (1996) Nutrition for Sports, Patiala: SAINSNIS.

**SKILL BASED SUBJECT IV**

**PAPER IV**

**SPORTS JOURNALISM**

**UNIT-I:**

Ethics of Journalism and sports Bulletins - Canons of Journalism - News, Information and Ideas - Journalism and sports Education.

**UNIT-II:**

Structure of sports Bulletin - Compiling a bulletin - Types of Bulletin - Hourly bulletin and special bulletin - External bulletins.

**UNIT-III:**

Sports as an integral part of Physical Education - Sports organization and Sports journalism - General news reporting and Sports reporting.

**UNIT-IV:**

Brief review of Olympic Games, Asian Games, Common Wealth Games and Indian Traditional Games.

**UNIT-V:**

Mass Media in Journalism - Radio and T.V Commentary - Running Commentary on the radio - Sports experts comments - Sports reviews for the Radio and T.V.

## REFERENCE

1. Ahiya, B.N. Theory and practice of Journalism; Set to Indian context Ed. 3, Delhi, subject publications, 1998.
2. Ahiya, B.N. and Choabra, S.S.A Concise course in Reporting Etc., Delhi., Subject publications 1990.
3. Bhaft, S.C. Broadcast Journalism Basic Principles, New Delhi, Har Anand Publications, 1993.
4. Parthasarathy, R. Journalism in India from the Earliest Time to the President day II road, Sterling Publication Pvt., Ltd. 1991.
5. Varma, A.K. Advanced Journalism, Har Anand Publications, New Delhi, 1993.

\*\*\*\*\*