TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

CHENNAI – 600 127

BACHELOR OF PHYSICAL EDUCATION AND SPORTS (B.P.E.S)

(THREE YEARS)

REGULATIONS AND SYLLABUS

WITH EFFECT FROM THE ACADEMIC YEAR 2016-2017

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY
Chennai- 600 127

BACHELOR OF PHYSICAL EDUCATION AND SPORTS (B.P.E.S)

(THREE YEARS)

REGULATIONS

1. Eligibility for Admission to the Course

a. Applicants should have passed the +2 examination in 10 + 2 pattern of the Government of Tamil Nadu or any other equivalent examination recognized by the Government of Tamil Nadu or approved by the Tamil Nadu Physical Education and Sports University.

b. School representation in any game or sport is mandatory for the applicants.

c. The candidates should not have completed 21 years of age as on 1st July. However, relaxation of 3 years shall be given for SC/ST candidates.

d. He/ she must be medically fit and free from any deformities students will undergo medical examination at the time of admission.

e. The married women should not be in family way during the course of study. If it is violated, they will not be permitted to continue the course.

f. Admission shall be made on the basis of ranking for a total of 150 marks as detailed below.

1.	Qualifying Examination	25 marks
2.	Participation in Games & Sports	25 marks
3.	Games Skill test	50 marks
4.	Track and Field Skill test	50 marks
	a) 100 m – 20 Marks	
	b) Shot-put – 15 Marks	
	c) Long Jump – 15 Marks	
	Total	150 Marks

Note: Marks obtained in Qualifying Examination shall be converted to a maximum of 25 marks. For example if a candidate secured 800 marks out of 1200. His / Her marks for qualifying examinations is [800 / 1200] x 25 = **16.67marks.**

2. Duration of the Course

The course for the degree of Bachelor of Physical Education shall extend over a period of three academic years for six semesters: The total working days for a semester shall not be less than 100 working days excluding examination days. The curriculum and syllabi for the course shall be as prescribed from time to time.

3. Attendance

1) A Student must have 80% attendance in theory and practical classes to appear for university examination.
2) A maximum of 10 % of relaxation shall be permitted for the medical reasons . He / she must produce a reliable Medical Certificate with prior permission and following the due procedures.
3) In other cases, if a student attained less than 80% of attendance he/she should **REDO** the semester.

4.. Continuous Assessment for Part I , II & III – Theory Papers.

a. Written Examination - 20 Marks :

I. Continuous assessment shall be graded by the concerned subject teachers. Three tests will be conducted for each paper.
II. Each test carries a maximum of 20 marks and the average of best two tests shall be considered.
III. However, in the case of students who miss the tests for any valid reasons with prior permission from the Head of the Department /Principal of the College (Viz. Participating in Sports and Games competitions), he/she may be granted special permission to write the tests before the commencement of semester examination.

b. Assignment / Seminar - 3 Marks:

The teachers shall give assignments to the students and 3 marks are allotted for assignments. This may be of any accepted method such as Seminar, Project, Written materials, Record etc.

c. Attendance - 2 Marks:

Regularity in attending theory and Practical classes shall be graded as per the percentage of attendance.

Percentage of Attendance	Marks
96- 100	2
91-95	1.5
86-90	1
81- 85	0.5

Method of Calculation :

First Test - 20 Marks.

Second Test - 20 Marks.

Third Test - 20 Marks.

Average of the best two tests = 20 Marks

Assignment = 03 Marks

Attendance = 02 Marks.

Total = 25 Marks .

d. Pre-Semester/ Model Examination (75 Marks)

i. Pre-Semester/ Model examination shall be held at the end of each semester before the final semester examination covering all the portions and 75 marks are awarded for this examination.

ii. Each paper carries 75 marks and this will be converted into 25 marks.

iii. The Continuous assessment marks plus Pre semester/Model Examination divided by two shall be the final internal mark for 25.

5. Requirement for Passing

No candidate shall be eligible for the award of the B.P.E.S degree unless he / she has passed the examinations in Part I, II, III, IV and V .

VII. Grading System

To pass in an examination a student has to score a minimum of 50% marks in each paper – Theory, Practical.and Village Placement Progamme.

Minimum Passing - 50% Marks.

50 to 59% - Second Class.

60% and above - First Class.

A Candidate shall be declared to have passed with distinction if he/she obtains 75% or more of the aggregate marks at his/her first appearance.

Inter University Sports Participation and Special Permission for University Examination

a) University Examination – Special Permission

A student representing the University / State / Nation in a game or sport and misses the University Semester Examination will appear for a special supplementary University Examination as stipulated by the University.

b) Internal Test – Special Permission

In case, a student misses to appear for an internal test due to participation in inter collegiate/ university sports competition / any such programme of the University with prior permission from the concerned head of the faculty / department, he / she may be permitted to appear for a special test / tests before the pre-semester examination.

Such a student appearing for a special supplementary University Examination shall not be considered as an arrear / arrears in a paper / papers and shall not be deprived of ***RANK in the University***.

A student who fails in any one or more papers in the semester examination will be permitted to rewrite the paper or papers in the subsequent semester examination.

To quality for the degree, supplementary candidates are required to pass all the papers prescribed for the course within a period of three years after he/she complete the course. Beyond this period, the candidate shall follow the current syllabi for the examination if applicable. Examination fee will be collected normally according to the rules and regulations of the university. A Separate examination fee will be collected in this case.

Students who fail in a paper/papers are permitted to apply for recounting or re valuation in examination section of the University within the prescribed period with specified fee.

Appeal against the results of the semester examination shall be made to the controller of examinations by the student concerned through the Head of the Department/ Principal of the affiliated college within 15 days of the publication of results by paying retotalling /revaluation fee.

SYLLABUS

PART I – Language: Tamil

Part II - English

Part III – Major and Allied

Part IV – Practical

Part V - Extension Activities: Village Placement Programme

FIRST YEAR		
I SEMESTER		
		SUBJECT
PART	**PAPER**	
I	**I**	Tamil – I
II	**II**	English –I
III	**III**	General Knowledge and History of Physical Education
	IV	Rules of Games and Sports-Part I (Basketball, Badminton, Kabaddi, Softball)
	II SEMESTER	
I	**V**	Tamil – II
II	**VI**	English –II
III	**VII**	Anatomy and Physiology
	VIII	Rules of Games and Sports-Part II (Volleyball, Table Tennis, Swimming, Throwball, Kho-Kho)
	SECOND YEAR	
	III SEMESTER	
I	**IX**	Tamil – III
II	**X**	English –III
III	**XI**	Health and Safety Education
	XII	Rules of Games and Sports-Part III (Track and Field and Cross Country)

	IV SEMESTER	
I	**XIII**	Tamil – IV
II	**XIV**	English –IV
III	**XV**	Methods in Physical Education
	XVI	Rules of Games and Sports-Part IV (Tennis, Tennikoit, Ball Badminton, Football, Gymnastics)
	THIRD YEAR	
	V SEMESTER	
III	**XVII**	Science of Yoga
	XVIII	Care and Prevention of Sports Trauma
	XIX	Kinesiology and Biomechanics
	XX	Educational Psychology and Sports Journalism
	VI SEMESTER	
III	**XXI**	Exercise Physiology and Nutrition
	XXII	Test, Measurement and Evaluation
	XXIII	Scientific Principles of Sports Training
	XXIV	Rules of Games and Sports-Part V (Hockey, Handball, Cricket, Netball)

SCHEME OF EXAMINATION

B.P.E.S I YEAR

I SEMESTER

PART	Paper	Subject	Internal	External	Total
I	I	Tamil – I	**25**	**75**	**100**
II	II	English –I	**25**	**75**	**100**
III	III	General Knowledge and History of Physical Education	**25**	**75**	**100**
	IV	Rules of Games and Sports-Part I (Basketball, Badminton, Kabaddi, Softball)	**25**	**75**	**100**
	Total Marks				**400**

II SEMESTER

PART	Paper	Subject	Internal	External	Total
I	V	Tamil – II	**25**	**75**	**100**
II	VI	English –II	**25**	**75**	**100**
III	VII	Anatomy and Physiology	**25**	**75**	**100**
	VIII	Rules of Games and Sports-Part II (Volleyball, Table Tennis, Swimming, Throwball, Kho-Kho)	**25**	**75**	**100**
	Total Marks				**400**

I Semester + II Semester = Total 400 + 400 = 800 Marks

B.P.E. S. PRACTICALS

PART - IV : PRACTICAL (Internal)

I SEMESTER

Game / Activity: Internal Marks	Internal Max. Marks
1. Calisthenics & Minor Games	50
2. Drill & Marching	50
3. Basketball & Softball	50
4. Badminton & Kabaddi	50
Total	**200**

PART IV PRACTICALS

II SEMESTER

Game / Activity: Internal Assessment	nternal Marks
1. Dands & Baiteks	50
2. Light Apparatusc & Lezium	50
3. Kho-Kho & Swimming	50
4. Volleyball & Throwball	50
Total	**200**

B.P.E.S II YEAR

III SEMESTER

PART	Paper	Subject	Internal	External	Total
I	IX	Tamil – III	**25**	**75**	**100**
II	X	English –III	**25**	**75**	**100**
III	XI	Health and Safety Education	**25**	**75**	**100**
	XII	Rules of Games and Sports-Part III (Track and Field and Cross Country)	**25**	**75**	**100**
	Total Marks				**400**

IV SEMESTER

PART	Paper	Subject	Internal	External	Total
I	XIII	Tamil – IV	**25**	**75**	**100**
II	XIV	English –IV	**25**	**75**	**100**
III	XV	Methods in Physical Education	**25**	**75**	**100**
	XVI	Rules of Games and Sports-Part IV (Tennis, Ball Badminton, Football, Gymnastics)	**25**	**75**	**100**
	Total Marks				**400**

III Semester + IV Semester = Total 400 + 400 = 800 Marks

PART IV PRACTICALS

III SEMESTER

Game / Activity: Internal Assessment	Internal Marks
Track and Field Activity	
1. Short, Middle, Long Distance Running & Relay Races	25
2. Long Jump	25
3. Triple Jump	25
4. Shot put & Hammer	25
5. Discus	25
6. Javelin	25
7. High Jump & Pole Vault	25
8. Hurdles	25
Total	**200**

PART IV PRACTICALS

IV SEMESTER

Game / Activity: Internal Assessment	
1. Marking (Track & Field) [Marking manual for Track & Field events must be submitted to the concerned staff]	50
2. Yoga, Gymnastics, Pyramid Malkhamb, Martial Arts	50
3. Ball Badminton Tennis, Tennikoit	50
4. Football	50
Total	**200**
University External Practical Examination	
Track and Field	
Internal	**100**
External	**100**
Total	**200**

B.P.E.S. III YEAR

V SEMESTER

Part	Paper	Subject	Internal	External	Total
III	XVII	Science of Yoga	**25**	**75**	**100**
	XVIII	Care and Prevention of Sports Trauma	**25**	**75**	**100**
	XIX	Kinesiology and Biomechanics	**25**	**75**	**100**
	XX	Educational Psychology and Sports Journalism	**25**	**75**	**100**
	Total Marks				**400**

VI SEMESTER

Part	Paper	Subject	Internal	External	Total
III	XXI	Exercise Physiology and Nutrition	**25**	**75**	**100**
	XXII	Test, Measurement and Evaluation	**25**	**75**	**100**
	XXIII	Scientific Principles of Sports Training	**25**	**75**	**100**
	XXIV	Rules of Games and Sports-Part V (Hockey, Handball, Cricket, Netball)	**25**	**75**	**100**
	Total Marks				**400**

V Semester + VI Semester = Total 400 + 400 = 800 Marks

PART IV - PRACTICALS

V Semester : Internal Assessment	Marks
1. Marking (Ground) [Marking manual for Sports & Games must be submitted to the concern staff]	50
2. Training Methods I: Conditioning Exercises: General and Specific. Training Methods: Weight Training (Free Weights and Machine Weights), Circuit Training, Plyometrics.	50
3. Hockey	50
4. Handball, Netball & Table Tennis	50
Total	**200**

VI Semester: Internal Assessment	Marks
1. Bharathiam & Aerobics	50
2. Test and Measurement	50
3. Training Methods II: Interval Training- Fartlek Training - Swiss ball Training – Medicine Ball Training – Core Board Training, Cross Training.	50
4. Cricket	50
Total	**200**
University External Practical Examination	
Game of Specialization	
Internal	**100**
External	**100**
Total	**200**

PART-V

Extension Activities

Village Placement Programme

In the Second year of the B.P.E.S course for the Village Placement programme the students required to visit of neighbouring village at least for a minimum period of five days and to organise the programmes such as

1. Physical Education/ Physical Exercise related programmes
2. Awareness Programmes related to health and fitness
3. Cleaning, creation of place for physical activities, sports and games.
4. Survey of related health and fitness

The Village Placement programme record with details of programmes organised and photo graphs should be submitted at the time of the Vi Semester B.P.E .S University practical examinations for evaluation.

Village Placement Programme

Internal 100 Marks

External 100 Marks

Total 200 Marks

The Village Placement programme record with details of programmes organised and photo graphs should be submitted for evaluation.

SUMMARY OF MARKS

Part	Category		Marks	Marks
I	Tamil	Internal (4 Papers * 25)	100	400
		University External Theory Examination (4 Paper *75)	300	
II	English	Internal (4 Papers * 25)	100	400
		University External Theory Examination (4 Paper *75)	300	
IIII	Major and Allied	Internal (16 Papers * 25)	400	`1600
		University External Theory Examination (16 Papers * 75)	1200	
IV	Practical	Internal (Only) (6 Semester * 200)	1200	1200
		University External Examination (Internal) (2 Practical * 100)	200	400
		External (2 Practical * 100)	200	
IV	Extension Activities: Village Placement Programme	University External Practical Examination Internal	100	200
		External	100	
			Total	4200

Semester - I

PAPER I

TAMIL – I

PART – I TAMIL

முதலாண்டு முதல் பருவம்:

அலகு – 1

(ஈ) பாரதியார்:

காணி நிலம் வேண்டும்

நல்லதோர் வீணை

(ஊை) சுரதா:

சிக்கனம்

அலகு – 2

புதுமைப்பித்தன் சிறுகதைகள்

1. கடவுளும் கந்தசாமிப் பிள்ளையும்
2. சாப விமோசனம்
3. பொன்னகரம்

அலகு – 3 (உரைநடை)

விளையாட்டுக்களின் தோற்றமும் வளர்ச்சியும்

விளையாட்டு வரையறை - விளையாட்டின் தோற்றம் - தமிழர் வாழ்வில் விளையாட்டு - விளையாட்டு வகை தொகை - விளையாட்டுக் கொள்கைகள்.

அலகு - 4 மொழிப் பயிற்சி

1. பொருந்திய சொல் தருதல்
2. மரபுத் தொடர்கள்
3. கலைச் சொற்கள

அலகு - 5 தமிழ் இலக்கிய வரலாறு

1. நாட்டுப்புற இலக்கிய வரலாறுஇ நாட்டுப்புறப் பாடல்கள், நாட்டுப்புறக் கதைகள்,
நாட்டுப்புறக் கதைப் பாடல்கள், பழமொழிகள், விடுகதைகள்

2. உரைநடை இலக்கிய வரலாறுஇ சிறுகதைகள், புதினங்கள் தோற்றமும் வளர்ச்சியும்

3. கவிதை இலக்கிய வரலாறு
மரபுக் கவிதைகள், புதுக் கவிதைகள் தோற்றமும் வளர்ச்சியும்.

4. நாடக இலக்கியத்தின் தோற்றமும் வளர்ச்சியும்

துணை நூற்பட்டியல்

1. பேரா.எம்மார் அடைக்கலசாமி,(2000) தமிழ் இலக்கிய வரலாறு ,ராசி பதிப்பகம்,சென்னை-73.
2. இமலையரசி, (2013), தமிழ் இலக்கியங்களில் விளையாட்டுக் கூறுகள் - பாவை பதிப்பகம்,மதுரை-1.
3. செ. பரமசிவம்,(2000),நற்றமிழ் இலக்கணம் ,பட்டுப் பதிப்பகம்,சென்னை.40.
4. சங்க இலக்கிய நூல்கள் - கழக வெளியீடு.

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PAPER II

ENGLISH - I

SEMESTER- I-

ENGLISH-I BASIC LANGUAGE SKILLS

LISTENING & SPEAKING:

UNIT-I

a) Greeting people & responding to greetings.
b) Introducing oneself & other people.
c) Asking for & giving personal details (name, occupation... etc)

UNIT-II

a) Using the telephone - exchanging information & taking messages
b) Describing a visual clipping

WRITING:

UNIT-III

a) Completing forms with personal details - bio-data & curriculum vitae.
b) Paragraph writing - converting note making to paragraph
c) Interpreting advertisements

UNIT-IV

a) Grammar in usage
b) Descriptive writing - describing a scene/ a person/ a situation
c) Translation - 50 words.

UNIT-V

a) Cabuliwallah - Rabindranath Tagore
b) The Last Leaf - O.Henry
c) Upper Division Love- Manohar Malgonkar.

Reference:

1. The last leaf & other stories by Anand Kumar Raju (Blackie books).

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Paper III

GENERAL KNOWLEDGE AND HISTORY OF PHYSICAL EDUCATION

GENERAL KNOWLEDGE

UNIT I ABBREVIATIONS &TERMINOLOGIES

I. Abbreviations (in sports) : AIU, AAFI, IAAF, IAF, AFC, AICS, AILTA, AIWHA, BAI, BCCI, FISU, IHF, IOA, IOC, ICC, FIBA, FIFA, FIVB, NCC, NSO, NSC
II. Sports Terminology : Archery, Billiards, Bowling, Equestrian, Fencing, Golf, Polo, Rugby, Skiing, Snooker, Yachting.

UNIT II AWARDS, TROPHIES AND SCHEMES

Honours and Awards. Outstanding National & International Personalities in various Sports & Games. Cups and Trophies - India and International . Functions and Schemes of Sports Authority of India , Sports Development Authority of Tamilnadu, Tamil Nadu Physical Education and Sports University.

HISTORY OF PHYSICAL EDUCATION

UNIT III PHYSICAL EDUCATION IN ANCIENT INDIA

History of Physical Education in Vedic period, Epic period, Buddhist period. Development of Indigenous activities - Yogic system of physical exercise.

UNIT IV PHYSICAL EDUCATION IN OTHER COUNTRIES and DEVELOPMENT OF PHYSICAL EDUCATION

Physical Education in Ancient Greece, Rome and European countries. Contributions to the growth of Physical Education by leaders and movements: Germany: Johann Bernhard Basedow, Johann Christoph Friedrich GutsMuths, Adolph Spiess, Role of Philanthropinum and Turnverein Movement. Sweden: Per Henrik Ling and Swedish medical gymnastics. Denmark: Franz Nachtegall , Niels Bukh.

UNIT V - PHYSICAL EDUCATION TEACHER TRAINING AND SPORTS PROMOTION

YMCA and its contribution: Contribution of H.C.Buck and Contribution of Mary Crowe Buck. Teacher Training Institutions in Physical Education. Indian Olympic Association, National Sports Federations and Associations. Youth Welfare Programmes: N.C.C., N.F.C., N.D.S., N.S.O., Scouting and Guiding, Youth hostels, Youth festivals, Camping Mountaineering. National Physical Fitness Programme

REFERENCES :

Competitions Success Review Year Book. (2014) New Delhi : Competition Review Pvt. Ltd.

General Knowledge Digest (2014), New Delhi: Wheelers Publishing.

Bucher, A.C(1984). Foundations of physical Education, St.Louis. The L.V.Mosby Co.,

Chelliah, S.N.(1989) Udarkalvi Enral Enna? Chennai: RajmohanPathippagam,.

Khan, E.A. (2000) History of Physical Education, Patma, Scientific Books Co., .

Knapp, C. & Hagman E.P. (1949)Teaching Methods-for Physical Education, New York: McGraw Hill Book Co. Inc.

Rajagopalan, K.A.(1969) Brief History of Physical Education in India. Delhi: Army Publishers

Thirunarayanan, C. & Hariharan S. (1969) Methods in Physical Education, Karaikudi.

Thomas, J.P. (1980) Physical Education Lesson: Chennai: Gnanodaya Press.

Thirunarayana. C (1967). Analytical History of Physical Education. Karaikudi.

PAPER IV

RULES OF GAMES AND SPORTS -PART I

(BASKETBALL, BADMINTON, KABADDI, SOFTBALL)

UNIT I - PREREQUISITES OF AN OFFICIAL

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II – HISTORY AND ORGANIZATIONAL SETUP

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III - PRINCIPLES AND MECHANISM OF OFFICIATING

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV - DIMENSIONS OF PLAY FIELD

Measurements of play fields of the above listed four games.

UNIT V - RULES AND THEIR INTERPRETATIONS

Rules of the following games and their in the above listed four games.

REFERENCES :

Anand, R.L. (1987) Play Field Manual Patiala : NISPublication.

Authors Guide (2014) FIBA Official Basket Rules, Munich, Germany.

Bonder, J.B. (1984) How to be a Successful Coach. New York, Prentice Hall Inc.

Buck .H.C (2000)Rules of Games and sports, New Delhi: YMCA Publishing House, Masse Hall,

Bunn, J.W. (1951)The Basketball Coaches' Guide to Success, Prentice Hall,

Bunn, J. W. (1951) The Art of officiating Sports, Prentice Hall, Englewood Cliff.

Chelliah, S.N. (1984), Vilayattu Vithi Muraihal, Chennai : Raj Mohan Pathipagam.

Semester - II

PAPER V - TAMIL – II

அலகு : 1
1. நந்திக் கலம்பகம்
2. தமிழ் விடு தூது

அலகு : 2
1. திருக்குற்றாலக் குறவஞ்சி (குறத்தி மலைவளம் கூறுதல்)
2. முக்கூடல் பள்ளு (நாட்டு வளம்)

அலகு : 3. தமிழரின் வீர விளையாட்டுக்கள்

ஏறு தழுவல், மற்போர், விற்போர், வேட்டை, சிலம்பம், களரி.

அலகு : 4 மொழிப் பயிற்சி
1.பிழை நீக்கம்
2.விளம்பர வாசகங்களை உருவாக்குதல்
3.நேர்காணல்.

அலகு : 5 தமிழ் இலக்கிய வரலாறு
அ. சிற்றிலக்கிய வரலாறு
ஆ. கிருத்துவ இலக்கிய வரலாறு
இ. இசுலாமிய இலக்கிய வரலாறு
ஈ. காப்பிய இலக்கிய வரலாறு

துணை நூற்பட்டியல்

1. பேரா.எம்மார் அடைக்கலசாமி,(2000) தமிழ் இலக்கிய வரலாறு ,ராசி பதிப்பகம்,சென்னை-73.
2. த.மலையரசி, (2013), தமிழ் இலக்கியங்களில் விளையாட்டுக் கூறுகள் - பாவை பதிப்பகம்,மதுரை-1.
3. சொ. பரமசிவம்,(2000),நற்றமிழ் இலக்கணம் ,பட்டுப் பதிப்பகம்,சென்னை.40.
4. சங்க இலக்கிய நூல்கள் - கழக வெளியீடு.

PAPER VI - ENGLISH- II

SEMESTER - II

ENGLISH - II DEVELOPING THE LANGUAGE SKILLS

LISTENING & SPEAKING

UNIT-I

a) Asking for & giving permission

b) Inviting a person - accepting / declining.

WRITING

UNIT-II

a) Grammar in usage

b) Translation - idioms & phrases

c) Filling up forms - Bank Chalans/ Pay in Slips / Demands Draft, Railway Reservation / Cancellation.

UNIT-III

a) Welcoming a foreign visitor & describing region & country

b) Letter writing

c) Descriptive writing - describing on event.

UNIT-IV

a) Ode to the best wind - P. B, Shelley

b) The Gift of India - Sarojini Naidu.

UNIT-V

a) The Man Who Could Work Miracles - H. G. Wells

b) The Verger - Somer Set Maugham.

Reference:

1) The Last Leaf & Other Stories by Anand Kumar Raju (Blackie Books)

2) The Silent Song - K.M.Tharakan (Macmillan)

PAPER VI

ANATOMY AND PHYSIOLOGY

UNIT I INTRODUCTION

Need and importance of anatomy and physiology for the students of physical education. Define Cell Tissue. Microscopic structure of the cell. Classification, Structure and functions of various types of tissues.

UNIT II MUSCULO SKELETAL SYSTEM

Skeletal systems: Names of the bones of upper and lower extremities - Classification of joints. Names of the major muscles and their actions.

UNIT III CARDIO RESPIRATORY SYSTEM

Blood: Functions of blood, Composition of blood, lymph and its functions. Cardiovascular system: Structure of the heart, Systematic, pulmonary, Coronary circulation. Definition of respiration,Structure and functions of the respiratory system, Mechanism for respiration, Lung volumes.

UNIT IV - NERVOUS SYSTEM

Structure and functions of Brain, Spinal cord reflex arc. Hormones and their roles.

UNIT V - DIGESTIVE SYSTEM

Structure and functions of alimentary canal - Accessory organs - liver, Pancreas, Gall bladder.

REFERENCES:

Chelliah, N. (1989)Dhekathai Therindu Kolvom, Chennai: Rajmohan Pathippagam.

Murugesh, N.(1990) Anatomy physiology and Health Education, Madurai: Sathiya Publishers,

Pearce, E.B. (1962) Anotomy and Physiology for Nurses, London: Faber and Faber Ltd.

Pearce, J. W. (1959) Anatomy for students and Teacher of Physical Education, ., London: Edward Arnold and Co.

Paper VIII

RULES OF GAMES AND SPORTS - PART II

(VOLLEYBALL, TABLE TENNIS, SWIMMING, THROWBALL AND KHO-KHO)

UNIT I - PREREQUISITES OF AN OFFICIAL

Qualification and Qualities of officials, Philosophy of Officiating in the above listed five games.

UNIT II – HISTORY AND ORGANIZATIONAL SETUP

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed five games.

UNIT III - PRINCIPLES AND MECHANISM OF OFFICIATING

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed f five games.

UNIT IV - DIMENSIONS OF PLAY FIELD

Measurements of play fields of the above listed five games.

UNIT V - RULES AND THEIR INTERPRETATIONS

Rules of the following games and their in the above listed five games.

REFERENCES:

Buck H.C. (2001)Rules of Games and sports, New Delhi: Y.M.C.A Publishing House

Then Lokesh(1995), Skills & Tactics-swimming, New Delhi: Sports Publication,.

Saggar S.K.(1994) Play better Volleyball, New Delhi: Kay Kay Printers.

Jain Deepak (2001) Teaching and Coaching Table Tennis, New Delhi: Khel Sathiya Kendra.

Semester - III

PAPER IX - TAMIL –III

இரண்டாம் ஆண்டு

மூன்றாம் பருவம்

அலகு : 1.

1.திருவாசகம் - மாணிக்க வாசகர்
(திருப்பாவை முதல் 5 செய்யுள்கள்)
2. நாலாயிரத் திவ்ய பிரபந்தம் - ஆண்டாள்
வாரணம் ஆயிரம் தொடங்கி 5 செய்யுள்கள்

அலகு : 2

கம்பராமாயணம்
(சுந்தர காண்டம் - ஊர் தேடு படலம் முதல் 74 செய்யுள்கள்)

அலகு : 3 சமுதாய நோக்கில் தமிழர் விளையாட்டுக்கள்-1
வாழ்க்கைக்கு பயன்படும் விளையாட்டு- விளையாட்டு நெறிமுறைகள்- விளையாடுவதற்கு ஏற்ற வசதிகள்- விளையாட்டு பொது- விளையாட்டில் ஆண்பெண் பாகுபாடு- விளையாட்டும் பெண்களும்.

அலகு : 4 மொழிப் பயிற்சி

1. வேலை வாய்ப்பு வேண்டி விண்ணப்பம் எழுதுதல்
2. கடிதம் எழுதுதல்
3. நேர்க்காணல்

அலகு : 5. தமிழ் இலக்கிய வரலாறு

அ. பல்லவர் கால பக்தி இலக்கிய வரலாறு
ஆ. பிற்காலச் சோழர் காலஇலக்கிய வரலாறு

துணை நூற்பட்டியல்

1. பேரா.எம்மார் அடைக்கலசாமி,(2000) தமிழ் இலக்கிய வரலாறு ,ராசி பதிப்பகம்,சென்னை-73.
2. த.மலையரசி, (2013), தமிழ் இலக்கியங்களில் விளையாட்டுக் கூறுகள் - பாவை பதிப்பகம்,மதுரை-1.
3. சொ. பரமசிவம்,(2000),நற்றமிழ் இலக்கணம் ,பட்டுப் பதிப்பகம்,சென்னை.40.
4. சங்க இலக்கிய நூல்கள் - கழக வெளியீடு

SEMESTER -III-

ENGLISH - III PROGRESSIVE LANGUAGE SKILLS

LISTENING & SPEAKING

UNIT -I

a) Discussing interests & leisure activities.
b) Checking in & out of a hotel.
c) Complaint & apology

WRITING:

UNIT-II

a) Comprehension.
b) Developing hints.

UNIT-III

a) Descriptive Writing - Comparing & Contrasting.
b) Translation - Sentences - English to Tamil

UNIT-IV

a) Where The Cross Is Made - O Eugene O'Neil
b) Pip & The Convict - Guy R. Williams

UNIT-V

a) The Dream Of The Message - A.P.J.Abdul kalam
b) Women of the Public Sphere - Dona.S.Sanzone.

REFERENCE:

1. A.K.Rama Bushanam "Human values through English Prose" - (Blackie)
2. Short Plays of Yesterday & Today - V.Sachidanandam.

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PAPER XI

HEALTH AND SAFETY EDUCATION

UNIT I INTRODUCTION

Health - Meaning, Definition and concepts - Factors influencing health - Health determinants, Heredity and environment. Health problems of India - Population and health - Environment pollution. Personal hygiene.

UNIT II SCHOOL HEALTH

Problems - Growth Stress of school planning Health instruction, Health appraisal follow up, Health service and supervision. Role of Physical Education Teacher in School Health Programmes.

UNIT III INFECTIONS

Causes of diseases - Mode of infection, Spread of infection - Public health measure to combat infection - Public health administration - Sanitation - Water supply. Immunity - Prophylactic immunisation - Programmes – AIDS Communicable diseases, Malaria, Typhoid, Cholera, Dysentry, Leprosy, Tuberculosis, STD, Polio, Tetanus Drug abuse - Alcohol, Smoking Family welfare - Sex education

UNIT IV SAFETY AT HOME

Environment and structure, Electrical connections, Bathrooms and Lavatory, Storing articles,. Kitchen and Fire place, Storing medicines, Principles of movements in daily living.

UNIT V SAFETY AT SCHOOL AND PHYSICAL EDUCATION

Safety at school structure and environment: Area, Surface, Building, Furniture and fixtures. School procedures and policies precautionary and emergency equipment. Collection of information: address of parents, hospitals and doctors, police, fire station, ambulance service. Safety in physical education and Sports : During Training and Competition, Dress and Safety equipments. Principles of safety: in organising Physical Education Classes, Demonstration and Competitions.

REFERENCES :

Mangal, S.K. & Chandra, P.C. (1979) Health and Physical Education Ludhiana. R.D. Tandon Broth,.

Neiniah, (1997) School Health Education, New Delhi: Harper & Bros.:

Park, J.E. (2001)Text Book of Preventive and Social Medicine.: Chennai

PAPER XII

RULES OF GAMES AND SPORTS - PART III

(TRACK AND FIELD AND CROSS COUNTRY)

UNIT I METHODS OF MARKING NON STANDARD TRACK

Method of marking Non Standard Track: 200m, 400m track, Calculation of Stagger, Diagonal Excess, Compensated Arc Start, Relay Exchange Zones.

UNIT II METHODS OF MARKING STANDARD TRACK

Method of marking Standard Track: 400m track, Calculation of Stagger, Diagonal Excess, Compensated Arc Start, Relay Exchange Zones, Marking for Hurdles event.

UNIT III METHODS OF MARKING FIELD EVENTS

Method of marking Shot-put Circle and Sector, Hammer Throw Circle and Sector, Discus Throw Circle and Sector, Long Jump, Triple Jump, High Jump and Pole Vault.

UNIT IV GENERAL COMPETITION RULES AND THEIR INTERPRETATIONS,

Track event: Start, Race, Finish, Timing, Seeding and Draws, Tie Breaking, Hurdle Races, Relay races. Field Events: Vertical Jumps Horizontal Jumps Throwing Events General Competition Rules of Cross country races: Course, Distances, Start, drinking / sponging and refreshment stations, race.

UNIT V OFFICIALS IN TRACK AND FIELD & CROSS COUNTRY

Authorities and Duties of Officials in Track and Field Meet and Cross country races: International Officials, Competition Officials Additional Officials.

REFERENCES:

Authors Guide (2014) IAAF Competition Rules 2014-2015, Monaco Cedex: IAAF Publishing .

Viswanath, M.J.(2002) Track and Field Marking & Athletics Officiating Manual, Chennai: Silver Star Publication.

Wright Gary, A (1990) Step by Step guide-Track & Field, New Jeysey: Associates Mahan.

Semester - IV

PAPER XIII - TAMIL - IV

இரண்டாம் ஆண்டு

நான்காம் பருவம்

அலகு : 1

திருக்குறள் அறத்துப்பால் : வாழ்க்கைத் துணைநலம், மக்கள் பேறு
பொருட்பால் : கல்வி, கேள்வி
காமத்துப்பால் : குறிப்பு அறிதல், புணர்ச்சி மகிழ்தல்

அலகு : 2

பத்துப்பாட்டு
நெடுநல்வாடை

அலகு : 3

சமுதாய நோக்கில் தமிழர் விளையாட்டுக்கள்-2
கூட்டுணர்வுவிளையாட்டுகள்- -சார்பு விளையாட்டுகள் - சமயம் சார்ந்த விளையாட்டுகள்.விளையாட்டில் நம்பிக்கையும் பழக்கவழக்கங்களும் - இயற்கையோடு இயைதல்- விளையாடில் அற உணர்வு- அறிவியலும் விளையாட்டும்- விளையாட்டும் வரலாற்று நிகழ்வும் -விளையாடில் குற்றமும் தண்டனையும்.

அலகு : 4

மொழிப் பயிற்சி

1. ஆங்கிலத்தில் இருந்து தமிழுக்கு மொழி பெயர்த்தல்
2. தமிழில் இருந்து ஆங்கிலத்துக்கு மொழி பெயர்த்தல்

அலகு : 5

தமிழ் இலக்கிய வரலாறு

1. சங்க இலக்கிய வரலாறு
2. அற இலக்கிய வரலாறு

துணை நூற்பட்டியல்

1. பேரா.எம்மார் அடைக்கலசாமி, தமிழ் இலக்கிய வரலாறு ,ராசி பதிப்பகம்,சென்னை-73.
2. முனைவர்.த.மலையரசி, (2013), தமிழ் இலக்கியங்களில் விளையாட்டுக் கூறுகள் - பாவை பதிப்பகம்,மதுரை-1.
3. முனைவர். சொ. பரமசிவம்,(2000),நற்றமிழ் இலக்கணம் ,பட்டுப் பதிப்பகம்,சென்னை.40.
4. சங்க இலக்கிய நூல்கள் - கழக வெளியீடு.

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SEMESTER -IV-

ENGLISH -IV-CAREER LISTENING AND SPEAKING

Unit - I

a) Group discussion - predicting and describing future possibilities.

1. Globalization
2. Consumerism
3. Current event.

b) Interview - focus on personality development and body language.

Writing

Unit - II

a) Report Writing
b) Note Making

Unit-III -a) How to write an e-mail
b) Descriptive writing - writing with a purpose

Unit - IV

a) How soon hath time - John Milton
b) Leave this chanting - Robindranath Tagore

Unit - V

a) Dharma in Tirukural - C.Subramanian.
b) Love all serve all - Derek Williams.

Reference:

1. A.K.Rama Bhushanam "Human values through English prose" - (Blackie)

2. Shankuntala Bharvani "The best words" Nissin Ezekial

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PAPER XV

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 to be adopted for good class management.

UNIT II LESSON PLAN:

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

UNIT III TOURNAMENTS:

– Meaning-Types. Method of drawing fixtures for knock out/elimination - league/Round Robin. Combination Tournament : Knock out – cum – 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:

Cosmin. H.Rosalind, C .& Jackson, C. (1960) Methods in Physical Education, London: W.B. Saunders Co.

Dheer, S., & Radhika Kamal (1991) Organization and Administration of Physical Education, New Delhi :Friends Publication.

Greyson Daughtrey. (1969). Methods in Physical Education and Health for Secondary Schools. London: W. B. Saunders Company.

Michael W. Metzler. (2000). Instructional Models for Physical Education. London: Allyn and Bacon.

Sachdeva, M.S (1983) Modern Approach to School Organization and Administration, Ludhina : Parkash Brothers Educational Publisher.

Sharad Chandra Mishra. (2009). Methods of Physical Education. New Delhi: Sports Publication.

Thirunarayanan, C. & Hariharan, S (1969) Methods in Physical Education Karaikudi: South India press,

Voltmer, Edward (1979) The Organization and Administration of Physical Education, New Jersey.: Prentice Hall, Inc.

PAPER XVI

RULES OF GAMES SPORTS - PART - IV

(Tennis, Tennikoit, Ball Badminton, Football and Gymnastics)

UNIT I - PREREQUISITES OF AN OFFICIAL

Qualification and Qualities of officials, Philosophy of Officiating in the above listed five games.

UNIT II – HISTORY AND ORGANIZATIONAL SETUP

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed five games.

UNIT III - PRINCIPLES AND MECHANISM OF OFFICIATING

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed five games.

UNIT IV - DIMENSIONS OF PLAY FIELD

Measurements of play fields of the above listed five games.

UNIT V - RULES AND THEIR INTERPRETATIONS

Rules of the following games and their in the above listed five games.

REFERENCES :

Anand, R.L. (1987)Play Field Manual Patiala: NIS Publication.

Bonder, J.B. (1984)How to be a Successful Coach. New York: Prentice Hall .

Bunn, J. W. (1951) The Art of Officiating Sports, Prentice Hall: Englewood Cliff.

Chelliah, S.N. (1984), Vilayattu Vithi Muraihal, Chennai: Raj Mohan Pathipagam.

Buck .H.C (2000)Rules of Games and sports, New Delhi: YMCA Publishing House, Masse Hall.

Semester - V

PAPER XVII

SCIENCE OF YOGA

UNIT I INTRODUCTION TO YOGA

Meaning, Definition, Aim, Concept, Scope of Yoga. Schools of Yoga Hastangayoga: Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana and Samadhi.

UNIT II YOGA AND PHYSICAL EDUCATION

Meaning and Definition of Physical Education – Relationship between Yoga and Physical Education. Comparison of Yoga Practices and Physical Exercises.

UNIT III ASANA

Asana: Meaning, Definition, Types of asanas. Benefits of Asana: Physiological, Psychological and Therapeutical values.

UNIT IV PRANAYAMA AND MEDITATION

Pranayama meaning., Definition, Aim, Concept of Pranayama - Types of pranayama - Physiological, psychological and Therapeutical values. Meaning, Definition, Aim, Concept of Meditation

UNIT V BANDHAS, SHATKRIYAS AND MUDRAS

Bandhas and Mudras - Meaning. Definition, values. Shat kriyas Neti (Jala, Sutra) Dhauti (Varmana, Vastra) Bhasti, Nauli, Trataka, Kapalabhati. Surya Namaskar.

REFERENCES :

Gharote M.L. (1982) Guidelines forYogic Practice; Lonawala: Medha Publications.

Iyengar B.K.S(1985) The Art of Yoga; Indus: Harpic Collins P.Ltd.

Thirumalai Kumar. S and Indira S, (2011) Yoga in Your Life: Chennai: The Parkar Publication.

PAPER XVIII

CARE AND PREVENTION OF SPORTS TRAUMA

UNIT I CORRECTIVE PHYSICAL EDUCATION

Definition and objectives of Corrective Physical Education . Posture and body mechanics . Standards of standing posture . Values of good posture. Drawbacks and causes of bad posture . Postural tests-Examination of the spine.

UNIT II POSTURE

Normal curve of the spine and its utility. Kyphosis, Lordosis, Deviations in posture: Kypholordosis, Flat back, Scoliosis, Round shoulders, Knock knee, Bow leg, Flat foot. Causes for these deviations and treatment including exercises.

UNIT III MOVEMENTS

Passive, Active, Assisted, Resisted exercise for Rehabilitation.

UNIT IV MASSAGE

Brief history of massage - Massage as an aid for relaxation - Points to be considered in giving massage - Physiological, Chemical, Psychological effects of massage - Indication/contra indication of massage - Classification of the manipulations used in massage and their specific uses on the human body - Stroking manipulation: Effleurage - Pressure manipulation : Petrissage Kneading (finger Kneading, circular) Ironing Skin Rolling - Percussion manipulation : Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.

UNIT V SPORTS INJURIES CARE AND TREATMENT AND SUPPORTs

Principles pertaining to the prevention of Sports injuries - Care and treatment of Exposed and unexposed injuries in sports - Principles of apply cold and heat, Infra red rays-Ultrasonic. Therapy-Short wave diotherapy. Principles and techniques of Strapping and Bandages.

Note : Each student shall submit Physiotherapy record.

REFERENCE:

Dohenty .J. Meno.wetb, Moder D (2000)Track & Field, EngleWood Cliffs,Prentice Hal Inc.

Lace, M.V.(1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd. .

Mc Ooyand Young(1954) Test and Measurement, New York: Appleton century.

Naro, C.L.(1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.

Rathbome, J.I. (1965)Corrective Physical Education, London: W.B. Saunders &Co.

Staffordand Kelly,(1968) Preventive and Corrective Physica1 Education, New York. The Ronald Press Co.

PAPER XIX

KINESIOLOGY AND BIOMECHANICS

UNIT I INTRODUCTION OF KINESIOLOGY

Introduction: History and Development. Role of Kinesiology in physical education.

UNIT II MUSCLES AND JOINTS

Joints, Classification of Joints, Construction of synovial joints of the body movement. Origin, Insertion and action of muscles: Pectoralis major, Biceps, Triceps (Anterior and Posterior), Trapezius, Sartorius Rectus Femoris, Quadriceps, Hamstring. Types of muscles contraction: isotonic, isometric, Isokinetic.

UNIT III BASICS OF BIOMECHANICS

Biomechanics in Sports - Mechanical principles, laws of motion, types of Motion, Factors influencing motion, air, gravity and water friction, simple machines - Levers - Types of levers and examples in from the human body . Equilibrium: Meaning, Definition and types.

UNIT IV MOTION

Mechanics of movements: force production - application - follow pre-requisite of efficient motion, psychomotor - Mental and emotional. Preliminary motion considerations - Whole motion - Body segment motion.

UNIT V - BIOMECHANICAL ANALYSIS IN SPORTS

Application of Biomechanics to skill learning

1. Track and Field : Sprint, Shot-put and High Jump.
2. Games:
    a. Basketball
    b. Cricket
    c. Badminton
    d. Kabaddi
    e. Hockey

REFERENCES:

Broor, (2000)Efficiency of Human Movements, London: Saunders & Co.,

Kelly, D. L. (1999)Kinesiology and Fundamentals of Motion Description, Prentice Hall.

McClusg, A. (1989) Human Kinetics and Analysis of Body Movements, London:William Heinmann,

Sunderarajan, G. S. (1979)Bio-mechanics of Sports and Games, Chennai: Roshan Publication.

Neil D.E. (1992)Kinesiology and Anatomy and Motion, London: Mosby and Co.

PAPER XX

EDUCATIONAL PSYCHOLOGY AND SPORTS JOURNALISM

UNIT I INTRODUCTION OF PSYCHOLOGY AND CONCEPT OF MIND

Meaning and Definition of Psychology Importance of psychology to physical education. The concept of mind - Cognition. Affection and conation, conscious and unconscious aspects of mind.

UNIT II DEVELOPMENT OF SELF AND MOTIVATION

Brief account of the development of self; Influence of heredity and environment, Individual differences. Motivation - Unlearned (Innate) and learned (acquired) motives, Incentive, Stimuli; Motivation for learning and Performance.

UNIT III LEARNING

Learning- Meaning-Types of learning- Theories of learning (trial and error, conditioned response, learning by insight, learning by imitation), Learning curve Transfer of training - Conditions of transfer.

UNIT IV ETHICS OF JOURNALISM AND SPORTS BULLETINS

Ethics of journalism, Sports ethics and sportsmanship, Canons of journalism, News, Information and ideas, Journalism and sports education, Structure of Sports bulletin, Compiling a bulletin, Types of bulletin, Hourly bulletins and special bulletin and External bulletins.

UNIT V REPORTING AND MASS MEDIAS IN JOURNALISM

Brief review of Olympic Games, Asian Games, Common Wealth Games and Indian traditional games, Sports as an integral part of physical education, Sports organization and sports journalism, General news reporting and sports reporting. Sports reviews, Commentary and Running commentary in Radio and T.V.

EDUCATIONAL PSYCHOLOGY (References):

Boaz, G.D.(1957) General Psychology, Chennai: Boaz institute of psychology Services,

Gates. A. (1957)Educational Psychology, New York: Macmillan Company.

Skinner, C.E (1964) Educational Psychology, New Delhi: Prentice Hall of India PLtd.,

Williams J.F(1964) .The Principles of Physical Education, Philadelphia: W.B. Saunder Co.

SPORTS JOURNALISM (References):

Ahiya, B.N. (1988) Theory and Practice of Journalism: Set to Indian Context Ed.3., New Delhi: Surjeet Publications.

Ahiya, B.N. and Choabra. S.S.A (1990). Concise course in Reporting Etc. New Delhi: Surjeet Publications.

Bbaft, S.C. (1993)broadcast Journalism Basic Principles, New Delhi, Har Anand Publications.

Kamali, M.V.(1983) The Journalist handbook, New Delhi: Vikas Publishing House Pvt. Ltd..

Parathasarathy, R.(1991) Journalism in India From the Earliest Times to the Chennai: Sterling Publication Pvt. Ltd

Varma A.K. (1993)Advanced Journalism, New Delhi: Har Anand Publications,

Semester - VI

PAPER XXI

EXERCISE PHYSIOLOGY AND NUTRITION

UNIT I MUSCULAR CONTRACTION AND EXERCISE:

Properties and composition of voluntary muscles. Minute structure of voluntary muscle. Sliding Filament Theory of Muscular Contraction- Conditions affecting muscular contraction.

UNIT II EFFECT OF EXERCISE ON HUMAN BODY SYSTEM:

Effect of exercise on: Muscular system, Circulatory system – Respiratory system.

UNIT III EFFECT OF EXERCISE ON HUMAN BODY SYSTEM:

Effect of exercise on: Nervous system- Digestive system - Endocrine system.

UNIT IV BASIC FOOD GROUP:

Carbohydrates, Fats and Protein as a source of fuels. vitamins - Fat soluble and Water soluble- Minerals. Balanced diet. Importance of water in an athletic diet.

UNIT V SPORTS NUTRITION:

Diet for sports competition- supplement to the daily diet. Vitamins, Minerals, Fluids. Electrolyte replacement, Carbohydrate loading, Protein loading, Calcium and iron supplement. Pre-event meal. Time for pre-event meal, Alternate eating pattern, Foods to avoid. Exercise and weight control, Crash dieting, Weight Control.

REFERENCE:

Amrit Kumar (1995) Introduction to Exercise Physiology, Chennai: Poompugar Pathipagam.

Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc.,

David, L Costill. (2004). Physiology of Sports and Exercise. New Jersey: Human Kinetics.

Fox, E.L.,& Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.

Gayton A.C (1984). Functions of the Human Body. London :W.B. Saunders & Co.

Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.

Karpovich & Sinnings(1955) Physiology of Muscular activity. London: W.B. Saunders Cp.,

Morehouse and Miller (1974) Physiology of Exercise. St.Louis : C.V. Mosby Co.

Reily T (1981) Sports Fitness and Sports Injuries , London :Faber and Faber.

Sandhya Tiwaji. (1999). Exercise Physiology. New Delhi :Sports Publishers.

Scott, N. Nisonson B. & Nicholos, J (1985) Principles of sports Medicine, London: William & Walkin,.

Vincent, T. Murche. (2007). Elementary Physiology. New Delhi ;Sports Publication.

William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams Company.

Williams, S. & Rod, W. (2001) Nutrition and Diet, Therapy 2nd Edition, London :W.B. Saunder College Publishing.

PAPER XXII

TEST, MEASUREMENT AND EVALUATION

UNIT I INTRODUCTION TO TEST, MEASUREMENT AND EVALUATION

Meaning and Definition of test, measurement and Evaluation. Need and importance of test and measurement in physical education.

UNIT II CRITERIA AND ADMINISTRATION OF TEST :

Criteria of test, Scientific authenticity (reliability, objectivity - validity - availability of norms). Administrative feasibility and educational application. Administration of test: advance preparation - Duties during testing - Duties after testing.

UNIT III FITNESS TEST

Physical fitness test: AAHPERD Health-Related Fitness Battery (revised in 1984) - Roger's physical fitness Index. Cardio vascular test : Harvard step test, 12 minutes run test, Multi-stage fitness test (Beep test). Motor Fitness: Indiana. Motor Fitness Test (For elementary and high school boys, girls, and College Men), JCR test. SDAT World Beaters Battery Test (For VI, VII & VIII Standard School Boys and Girls)

UNIT IV SPORTS SKILL TEST:

Badminton - Miller wall volley test – French short service test. Basketball - Johnson Basket ball test – Leilich Basketball test. Cricket : Sutcliff Cricket test. Hockey - Friedal field Hockey test.

UNIT V Sports Skill Test:

Sports Skill Test: Football - Johnson soccer test – McDonald soccer test. Tennis - Dyer Tennis test. Volleyball - Brady volley ball test – Russell Lange Volleyball test.

REFERENCES:

Barrow, H.M.. and McGee, R.,A (1964.)Practical Approach to Measurement in Physical Education, Philadelphia : Lea and Febiger.

Bovard, J.F., Cozens, F., W. & Hagman, P.E.(1949)Test and Measurements in Physical Education, Philadelphia: W.B. Sunders Company.

Campbell, W.R. & Tucker, N.M. (1967)An Introduction in Physical Education, London : G.Bell and Sons Ltd.

Getchell B. Physical Fitness (1979): A Way of Life, 2nd ed. New York: John Wiley and Sons, Inc.

Cureton, T.K. (1947)Physical Fitness Appraisal and Guidance, St.Louis : The Mosby Company.

Hunsicker, P.A. & Montoye, H.J. (1953) Applied Test and Measurements in Physical Education, New York: Prentice Hall Inc

Luc Leger (1983), Testing Physical Fitness, Eurofit Experimental Battery Provisional Handbook, : UK : Strasbourg

Meyers, C.R. & Belsh, E.T. (1962) Measurement in physical Education, New York: The Ronald press Company.

Wilgoose, C.E (1967) Evaluation in Health Education and physical Education, New York :McGraw Hill Book Company, Inc.

PAPER XXIII

SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

UNIT I SPORTS TRAINING

Sports Training: Definition, Aims, Characteristics, Principles of sports training.

Physical Fitness: components of physical fitness - importance of physical fitness – Training Load.

UNIT II STRENGTH AND SPEED AND ENDURANCE

Definition of strength -types of strength-importance of strength - factors determining strength – training method for strength improvement - loading procedure for strength training. Definition of speed - forms of speed - factors determining various speed performance - training - methods of increasing speed.

UNIT III ENDURANCE

Definition of endurance - types of endurance - importance of endurance- factors determining endurance training methods for improving endurance.

UNIT IV FLEXIBILITY AND COORDINATIVE ABILITIES

Definition of flexibility - types of flexibility - factors determining flexibility - methods improving flexibility. Coordinative abilities – types – Characteristics - training methods for improving coordinative abilities.

UNIT V VARIOUS METHOD OF TRAINING

Circuit Training Fartlek Training - Internal method - Weight training – Resistance training, Plyometric ,Core training - Functional training, Swiss ball training, Medicine Ball Training.

REFERENCES:

Jenson, G. and Fisher, A.G(1972) Scientific Basis of Athletic Conditioning, 2nd ed., Philadelphia: Lea and Fibiger.

Jones, B.J.(1982) Guide to Effective Coaching Principles and Practices. Allyn and Bacon, Inc.

Singh, H. (1984) Sports Training, General Theory and Physical Fitness NIS, Patiala.

Thomas, J.P (1964) Let us Coach Soccer, New Delhi:YMCA Publishing House.

Thomas, J.P (1971) Scientific Weight Training for Games and Sports, Chennai: Gnanodaya Press.

PAPER XXIV

RULES OF GAMES AND SPORTS - PART V

(HOCKEY, HANDBALL, CRICKET, NETBALL)

UNIT I - PREREQUISITES OF AN OFFICIAL

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II – HISTORY AND ORGANIZATIONAL SETUP

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III - PRINCIPLES AND MECHANISM OF OFFICIATING

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV - DIMENSIONS OF PLAY FIELD

Measurements of play fields of the above listed four games.

UNIT V - RULES AND THEIR INTERPRETATIONS

Rules of the following games and their in the above listed four games.

REFERENCES :

Ashok Kumar, (2004)Hand Ball, New Delhi: DPH Publishers.

Ashwin Shaw(2001) Cricket manual, New Delhi: Luther worth Publishers.

Claime Michal, Taverna (2009) Field Hockey – Techniques, Tactics, London:

Elizabet Ander (2009) Field Hockey – Steps to Success, London: Human Kinetics.

Human Kinetics.

Jain (2005) Play and learn Hand ball, Bangalore :KSK Publishers.

Tan Poin (2009) coaching youth cricket, London: Human Kinetics.

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