APPENDIX - BR MADURAI KAMARAJ UNIVERSITY

(University with Potential for Excellence)

B.Sc. Physical Education (Semester) Revised Syllabus

(With effect from the Academic year 2018-2019 onwards)

SCHEME OF EXAMINATION AND REGULATIONS

1. Introduction

We live in an era where people have realized the importance of sports and fitness. This field is expanding exponentially each passing day. Physical activity must be learned; hence there is a need for thinking on the part of the intellectual mechanism, with a resulting acquisition of knowledge. Physical activities are essential for the development of a student's scientific insight, intelligence and superior type of reflective thinking. Playing sports at the college or school level need no longer be just a hobby. Today we can shape the students future in the field by sticking around with physical fitness and pursuing their career in Physical Education.

B.Sc., Physical Education is an undergraduate Physical Education programme. The programme defines that encourages psychomotor learning in a play or movement exploration setting. There are some components which are to be covered during time such as physical fitness components like: speed, endurance, agility, flexibility, co-ordinative abilities and body composition etc.

This programme teaches and provides the students to know-how of that how scientific methods are used to examine physical activity and exercise. The students are introduced that how important physical activity and exercise are for a healthy life. The main subjects studied are Foundations, Organisation & Administration in Physical Education, Anatomy & Exercise Physiology, Test & Measurements Concepts in Physical Education, Yoga Education, Statistics & Computer Applications in Physical Education, etc. Besides the students are more exposed to practical learning on yoga, gymnastics, athletics and various games & sports.

2. Eligibility for Admission:

Candidates must have passed the Higher Secondary Examinations, Government of Tamilnadu or any other examination accepted by the Syndicate as its equivalent.

2.1 DURATION OF THE COURSE

The students shall undergo the prescribed course of study for a period of three academic years (Six semesters).

2.2 MEDIUM OF INSTRUCTION

English

3. Objectives of the Programme:

- 1. To develop the physical, mental, social and spiritual qualities of the students through physical education and sports.
- 2. To learn the organization and administration of intramurals and extramural in various sports and games.
- 3. To acquire the knowledge of the anatomy and sports physiology of the human body.
- 4. To study the sports science subjects and its application for the enhancement of sports performance.
- 5. To learn the teaching methods by means of internship training in nearby schools, colleges, fitness centres, etc.,
- 6. To develop desirable health habits and socially integrated sports persons in the nation.
- 7. To understand the rules & regulations and officiating mechanism of various sports.

4. Outcomes of the Programme:

- 1. The students would be eligible for higher studies in physical education and other P.G. programmes.
- 2. Paved the way for getting jobs in Uniform Services.
- 3. Eligible to appear UG level any competitive exams.
- 4. Make them to be a self employed.
- 5. A candidate with passion for sports career can also work as coach, team manager/sports manager, fitness instructor, athletic trainer, sports journalist, photographer.
- 6. Sports persons on retiring from active play can also look forward to satisfying jobs in assignments such as umpires and referees.
- 7. Also in a country like ours where country spas and yoga centers are at a rise, one can also use his/her expertise for a job in such places.
- 8. People today are looking for professionals in the field of Physical Education and Sport because they have best knowledge regarding rehabilitative and therapeutic modalities like Cryotherapy, Thermotherapy, Electromagnetic Therapy etc.
- 9. Trained Physical Education personnel get priority in defence and police services with special recruitment drives.

The programme consists of various subjects. The following are the different categories:

- 1. Tamil
- 2. English
- 3. Core Papers
- 4. Allied Paper I
- 5. Allied Paper II
- 6. Non Major Elective
- 7. Environmental Studies
- 8. Value Education
- 9. Extension Activities

Non Major Elective:

5. Core Subject Papers

Sem	S.No.	CORE	CORE SUBJECT PAPERS
I	1	CS1	Organization administration and Methods in Physical Education
1	2	CS2	Foundations of Physical Education & Sports
II	3	CS3	Test, Measurement and Evaluation in Physical Education
111	4	CS4	Practical – I Gymnastics
***	5	CS5	Theories of Major Games-I and
III		CCC	Track &Field-I
	6	CS6	Anatomy and Physiology
IV	7	CS7	Statistics in Physical Education
1 4	8	CS8	Practical –IV Track and Field – I
	9	CS9	Sports Training Methods
V	10	CS10	Health Education and First Aid
·	11	CS11	Theories of Track and Field – II
	12	CS12	Teaching Practices
VI	13	CS13	Theories of Major Game – III
V I	14	CS14	Practical – VI Major Game – II

6. Subject Elective Papers.

Sem	S.No.	Elective	Subject Elective Papers
V	1	ES1	Fundamentals of Kinesiology and Biomechanics
VI	2	ES2	Theories of Track and Field – III
	3	ES3	Practical – VII Track and Field – II

Sem	S.No.	Allied	ALLIED SUBJECT TITLE
I	1	AS1	Theories of Yoga and Gymnastics
II	2	AS2	Practical – II Yoga
III	3	AS3	Practical-III Major Games Specialization- I
IV	4	AS4	Theories of Major Game – II

Sem	S.No.	Skill Based	SKILL BASED SUBJECT TITLE
III	1	SBS1	Methods in Physical Education
IV	2	SBS2	Computer Education
V	3	SBS3	Sports Physiotherapy
	4	SBS4	Fitness Management
VI	5	SBS5	Sports Psychology and Sociology
	6	SBS6	Exercise Physiology

7. Non Major elective Papers

Sem	S.No.	Non Major Elective	NON MAJOR ELECTIVE TITLE
I	1	NME1	Yoga Education
II	2	NME2	Methods of Yogic Practices

8. Unitization

Each subject contains 5 units. Not only core subjects, but also all the subjects.

9. PATTERN OF SEMESTER EXAMINATION:

Internal - 25 Marks
External - 75 Marks
Total - 100 Marks

10. Scheme for Internal Assessment:

Tests - 10 Marks (Average of 2 tests)

Assignment - 5 Marks
Peer Team Teaching - 5 Marks
Seminar - 5 Marks
Total - 25 Marks

11. External Examination:

There shall be external examinations at the end of each semester, odd semesters in the month of November and even semesters in the month of April.

A Candidate who does not pass the examination may be permitted to appear in the failed subjects in the subsequent examinations. A candidate should get registered for the first semester examination.

Students must have earned 75% of attendance in each course for appearing for the examinations. Students who have earned more than 70% and less than 75% of attendance have to apply for condonation in the prescribed form with prescribed fee. Students who have earned more than 60% and less than 70% of attendance have to apply for condonation in the prescribed form with prescribed fee along with a medical certificate. Students who have below 60% of attendance are not eligible to appear for the examination. They shall re-do the semester(s) after the completion of the programme.

12. QUESTION PAPER PATTERN

	Part A	
Each question carries equal marks		
Ten objective type questions		$10 \times 1 = 10 \text{ marks}$
Two questions from each unit		
_	Part B	
Five questions (Either Or type)		$5 \times 7 = 35 \text{ marks}$
One question from each unit		
_	Part C	
Three questions out of five questio	ns	$3 \times 10 = 30 \text{ marks}$
One question from each unit		

13. SCHEME OF EVALUATION

The performance of a student in each course is evaluated in terms of percentage of marks with a provision for conversion to grade points.

Mark statement contains $CCPA = \frac{\sum (Marks \ X \ Credits)}{\sum (Credits)}$ where the summations cover all the papers appeared up to the current semester.

14. PASSING MINIMUM

The passing minimum is 40% (External minimum is 27 out of 75; No minimum for internal, but External + Internal should be at least 40)

14.1. Classification

- 1. Those candidates who secure 75% and above marks shall be declared as passed in First Class with distinction
- 2. Those candidates who secure 60% and above marks shall be declared as passed in First Class
- 3. Those candidates who secure 50% and above but less than 60% marks shall be declared as passed in Second Class
- 4. Those candidates who secure less than 50% shall be declared as passed in Third Class

15. Model questions

Answer all the questions

Time: 3 hrs

B.Sc – Physical education Yoga Education

Section -A

Maximum marks: 75

 $(10 \times 1 = 10)$

Choose the Correct Answ	er				
1. Who is called father of year	oga?				
a) Therumular	b) Patanjali	c) Budhar	d) valla	lar	
2. The third anga of Raja Y	oga				
a) Niyama b) Pi	ranayamas	c) As	sana	d) Dhai	rana
3. The sanskrit term Yuj me	eans				
a) Tojoin b) T	o help c) To	bind d) Mo	eans threa	ıd.	
4. Pathanjali eight limbs of	yoga is called.				
a) Astanga yoga	b) Bahiranga	yoga c) Aı	ntaranga y	yoga	d) Bhakthiyoga
5. Which is called cooling p	oranayamas				
a) Bhastrika b) K	apalabhati	c) Nd	isuthi	d) Sita	li
6 asana is called qu	een of asanas.				
a) Mayurarana	b) Sira	sana c) Dh	anurasan	d) Sira	sapadmasana

7. Effect of ----- practice will leads to have a good respiratory system. b) Kriyas a) Asana c) Pranayamas d) Neti 8. Trataka is use full in clearing elements of the b) Stomach c) Nose a) Eyes d) Heart 9. Yoga is the best practices of reducing----b) Spring a) Stress c) Open wound d) Fracture 10. ---- is improving abdominal strength b) Padmasanam a) Sirasanas c) Vajrasana d) Patcimothasana

Section - B

Answer all the questions.

 $(7 \times 5 = 35)$

11) a) Illustrate aims and objects of yoga.

Or

- b) Explain nature and scope of yoga.
- 12) a) Explain Karma yoga.

Or

- b) Explain Bhakthi yoga.
- 13) a) Discuss about Maha bhandha.

Oı

- b) Explain Mandra meditaion.
- 14) a) Define Pranayama and explain Nadi suthi.

 O_1

- b) Discuss about health related fitness
- 15) a) Illustrate the development of personality through yoga.

Oı

b) Discuss about yoga for physically challenged.

Section - C

Answer any three question

 $(3 \times 10 = 30)$

- 16) Explain the history of yoga and yoga education in the modern world.
- 17) List out Astanga yoga and explain any two anga.
- 18) Explain the general benefits of Pranayama.
- 19) List out Shat Kriyas and explain any of tham.
- 20) Explain role of yoga in improving sports performances.

16. TEACHING METHODOLOGY

Each subject is designed with lectures/assignments/peer team teaching/seminar etc. to meet effective teaching and learning.

17. TEXT BOOKS

List of text books will be given at the end of the syllabus of the each subject.

18. REFERENCE BOOKS

List of reference books are followed by the list of text books.

19. RETOTALING AND REVALUATION PROVISION

Candidates may apply for revaluation of the paper which was already valued, within ten days from the date of publication of the result in the university website along with required forms and fees.

20. TRANSITORY PROVISION

The candidates of previous syllabus scheme may be permitted to write exams in their own schemes up to the examinations of April 2020 as a transitory provision.

21. Subject and paper related website.

List of website address are followed by the list of refverence books.

u	COURS	COURS	Instr. Hours	lit	n rs	Ma	rks	
Sem	E	COURSE TITLE		Credit	Exam Hours	Int .	Ext	TOTAL
	T1	Tamil	6	3	3	25	75	100
	E1	English	6	3	3	25	75	100
I	CS1	Organization administration and Methods in Physical Education	5	5	3	25	75	100
1	CS2	Foundations of Physical Education & Sports	5	4	3	25	75	100
	AS1	Theories of Yoga and Gymnastics	6	5	3	25	75	100
	NME1	Yoga Education	2	2	3	25	75	100
		TOTAL	30	22				
	T2	Tamil	6	3	3	25	75	100
	E2	English	6	3	3	25	75	100
II	CS3	Test, Measurement and Evaluation in Physical Education	6	5	3	25	75	100
	CS4	Practical – I Gymnastics	4	5	3	40	60	100
	AS2	Practical – II Yoga	6	5	3	40	60	100
	NME2	Methods of Yogic Practices	2	2	3	25	75	100

30

23

TOTAL

	Т3	Tamil	6	3	3	25	75	100
	E3	English	6	3	3	25	75	100
TTT	CS5	Theories of Major Games-I and Track &Field-I	5	5	3	25	75	100
III	CS6	Anatomy and Physiology	5	4	3	25	75	100
	AS3	Practical-III Major Games Specialization- I	6	5	3	40	60	100
	SBS1	Methods in Physical Education	2	2		25	75	100
		TOTAL	30	22				
	Т3	Tamil	6	3	3	25	75	100
	E3	English	6	3	3	25	75	100

	Т3	Tamil	6	3	3	25	75	100
	E3	English	6	3	3	25	75	100
137	CS7	Statistics in Physical Education	5	4	3	25	75	100
IV	CS8	Practical –IV Track and Field – I	5	4	3	40	60	100
	AS4	Theories of Major Game – II	6	5	3	25	75	100
	SBS2	Computer Education	2	2		25	75	100
	EA	Extension Activity		1				
		TOTAL	30	22				

n	COURSE		Instru Hours	dit	m rs	Marks		TOTAL Y
Sem		COURSE TITLE		Credit	Exam Hours	Int .	Ext.	TOTAL
	CS9	Sports Training Methods	5	4	3	25	75	100
	CS10	Health Education and First Aid	5	4	3	25	75	100
	CS11	Theories of Track and Field – II	5	4	3	25	75	100
V	CS12	Teaching Practices	5	4	3	25	75	100
	ES1	Fundamentals of Kinesiology and Biomechanics	6	5	3	25	75	100
	SBS3	Sports Physiotherapy	2	2		25	75	100
	EVS	Environmental Studies	2	2		25	75	100
		TOTAL	30	25				

	CS13	Theories of Major Game – III	5	4	3	25	75	100
	CS14	Practical – VI Major Game – II	5	4	3	40	60	100
	ES2	Theories of Track and Field – III	6	5	3	25	75	100
X/T	ES3	Practical – VII Track and Field – II	6	5	3	40	60	100
VI	SBS4	Fitness Management	2	2		25	75	100
	SBS5	Sports Psychology and Sociology	2	2		25	75	100
	SBS6	Exercise Physiology	2	2		25	75	100
	VE	Value Education	2	2				
		TOTAL	30	26				

T	Tamil	E	English
CS	Core Subject	AS	Allied Subject
SBS	Skill Based Subject	NME	Non Major Elective
ES	Elective subject	VE	Value Education
EVS	Environmental Studies		

Semester – I <u>CS1</u>

ORGANIZATION, ADMINISTRATION AND METHODS IN PHYSICAL EDUCATION

Objectives

To enable the students to

- 1. Understand the concept of organization, administration and methods in physical education
- 2. Learn about organization scheme of physical education.
- 3. Learn about facilities and understands of play field.
- 4. Acquire knowledge on physical education programme and organisations of games and sports.

Unit – I

Meaning and Importance of Organization and administration – Scheme of Physical Education in: Schools, Colleges, Universities, Districts.

Unit – II

Facilities - Track, Play Grounds, Gymnasium, Swimming Pole - Layout of play fields (Basketball, Kabaddi, Hockey, Volleyball, Cricket) Care and Maintenance of play fields.

Unit – III

Method in Physical Education – Meaning - Factors influencing Method – Presentation Technique – Teaching Aids – Principles of Class Management.

Unit - IV

Teaching of activities: Marching, Calisthenics, light apparatus (Wands, hooks, Poles), Lezium, folk dance – Minor Games – Lead up activities.

Unit – IV

Organizing Tournaments and sports Meets (closed and open)- Fixtures: Knock out, League, Combination – Intramurals - Extra murals.

Reference:

Text Books:

- 1. Kamlesh M.L. Scientifie "Art of teaching physical Education" New Delhi Metropolitan 1994.
- 2. Thiru. Narayanan C and & Harihara Sharma "Methods in Physical Education" Karaikudi CJ and S.H. 1989.
- 3. Joseph. P.M. "Organization of Physical Education".

Reference Books:

- 1. Broyles, F. J. & Rober, H. D. (1979). Administration of sports, Athletic programme: A Managerial Approach. New York: Prentice hall Inc.
- 2. Bucher, C. A. (1983). Administration of Physical Education and Athletic programme. St. Lolis: The C.V. Hosby Co.
- 3. Kozman, H.C. Cassidly, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
- 4. Pandy, L.K. (1977). Methods in Physical Education. Delhe: Metropolitan Book Depo.

Website:

- 1. www.wmcarey.edu
- 2. www.indiastudycenter.com

Semester – I <u>CS2</u>

FOUNDATIONS OF PHYSICAL EDUCATION AND SPORTS

Objectives

To enable the students to

- 1. Understand the basic concepts of physical Education.
- 2. Be familiar with the scientific principles from various allied subjects in the field of physical education and sports.
- 3. Obtain knowledge of national physical education programme.
- 4. Be aware of contribution of Olympic movements towards international understanding.
- 5. Know the youth welfare and sports development programme of India and Tamil Nadu.

UNIT: I

Meaning and Definition of Education and Physical Education – Need, Nature and Scope of Physical Education – Physical Training and Physical Culture

UNIT: II

Aim and Objectives of Physical education – Development of Physical, Cognitive, Neuro-muscular, Affective, Social, Emotional, Spiritual and Recreational – Theories of Learning – Laws of Learning

UNIT: III

Scientific basis of Physical Education – Contribution of Allied Sciences – Anatomy, Physiology, Biomechanics, Kinesiology, Sports Medicine, Psychology, Sociology and Computer Science

UNIT: IV

History of Physical Education in Sparta and Athens – Olympic Games: Ancient, Modern – Origin – Organisation and conduct of the game – Olympic Flag, Torch, Oath, emblem and Motto

UNIT: V

Recent developments in India: SAI, NSNIS, SNIPES, LNIPE, Sports Academics – Awards and Scholarships: Arjuna Award, Dhronochariya Award, Rajiv Gandhi Khela Ratna Award – International and National Competitions: Asian Games, SAF, SGF, RDS, and BDS

Reference

Text Books:

- 1. Bucher Charles A., Foundationas of Physical Education, St. Louis the C.V. Mosby Company, 1983.
- 2. Kamalesh M.L., Physical Education: Facts and Foundation, New Delhi, P.B. Publications, 1988.
- 3. Thirunarayanan, C. and Hariharan, S., Analytical History of Physical Education, Karaikudi, C.T. & S.H., Publications, 1990.
- 4. Sharma, O.P., History of Physical Education, New Delhi, Khel Shitya Kendra, 1998.

Reference Books:

- 1. Wakharkar D.G., Manual of Physical Education in India, Pearl Publications Pvt. Ltd., Bombay, 1967.
- 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, AmarvatiSuyogPrakasan.
- 4. Jackson Sharman/Modern Principles of Physical Education : A.A. Barnes & Co., New York.

Website:

- 1. www.wku.edu
- 2. www.kanpuruniversity.org

Semester – I AS1

THEORIES OF YOGA AND GYMNASTICS

Objectives

To enable the students to

- 1. To enable the students to understand the concept of yoga.
- 2. To acquire the procedure of doing asana.
- 3. To enable the students makes a person develop a positive attitude towards life.
- 4. To know about the concepts ans basics of Gymnastics.
- 5. Acquiring the basic skills on the various gymnastic events.

UNIT: I

History of Yoga – Aims and Objectives of Yoga – Ashtanga Yoga: Patanjalai Eight Limbs of Yoga – Principles of Practising Asana and Pranayama.

<u>Yogic Techniques : Methods & Benefits</u> **Asanas :** *Relaxative Asanas -* Shanthiasana / Savasana, Makarasana. *Meditative Asanas -* Padmasana, Vajrasasna, Sukhasana

UNIT: II

<u>Yogic Techniques : Methods & Benefits</u> **Asanas :** *Cultural Asanas* – Bhujangasana, Salabhasana, Dhanurasana, Pascimottanasana, Vakrasana, Ardha Matsyendrasana, Yogamudra, Viparita Karani, Sarvangasana, Halasana, Mayurasana, Sirshasana, Chakrasana, Parvatasana, Bakasana & Suryanamaskar

UNIT: III

<u>Yogic Techniques : Methods & Benefits:</u> **Pranayama :** Naddi Suddhi, Nadi Shodhana, Kaphalabhathi, Ujjiayi, Sitali, Sitkari.

Meaning of Kriya – Types of Kriyas: Kaphalabhathi, Trataka, Neti, Dhauthi, Nauli, Basti.

Trataka: Practicing Method – Benefits.

Neti: Jala Neti, Sutra Neti – Methods of Practicing Neti and its benefits.

Dhauthi: Vamana Dhauthi, Vastra Dhauthi – Methods of Practicing Dhauthi and its benefits.

UNIT: IV

History of Gymnastics – Meaning of Gymnastics

Types of Gymnastics: Basic, Auxiliary and Sportive – Importance of Gymnastics

UNIT: IV

Safety Measures in Gymnastics

Measurements of Apparatus and Basic Skills on: Parallel Bars, Horizontal Bar, Roman Rings, Vaulting Horse, Floor, Spring Board

Text Books Reference:

- 1. SWAMI KUVALAYANANDA, Asanas, Kaivalyadhama, Lonavala, Pune.
- 2. B.K.S. IYANKAR, Light on Yoga Harper Collins Publications, Delhi.
- 3. Dr. P. MARIAYYAH, Asanas, Sports Publishers, Raja Street, Coimbatore-1
- 4. Dr.P.MARIAYYAH, Suriyanamaskar Jaya Publishing House, Perunthurai, Erode.
- 5. Dr. K. CHANDRASEKARAN, Sound Health Through Yoga, Prem Kalyan Publications, Sedapatti, Madurai, 1999.

Reference Books:

- 1. Modak Pintu, Gymnastics: A Scientific Approach, Pilani, Runthala Publishers, 1996.
- 2. CoopnPhyllis and Milan Trnka, Teaching Gymnastic Skills to Men and Women, Surject Publications, Delhi, 1982
- 3. Coopn Phyllis and Milan Trnka, Teaching Gymnastic Skills to men and Women, Delhi, Surject Publications, 1982.
- 4. Ayleoyd Peter, skills and Tactics of Gymnastics, Hong Kong: Marshall Cavendish, Ltd., 1982.

Website:

- 1. www.bdu.ac.in
- 2. http://kuk.ac.in
- 3. www.yogabasics.com
- 4. www.mea.gov.in/
- 5. www.ecoindia.com

YOGA EDUCATION

Objectives:

- 1. To enable the students to have good health
- 2. To practice mental hygiene
- 3. To possess emotional stability
- 4. To integrate moral value
- 5. To attain higher level of consciousness.
- 6. Understand the concept of yoga

Unit – I

History of Yoga – Meaning of Yoga – Nature and scope of Yoga – Aims and Objectives of Yoga - Yoga Education in the Modern Context – Misconceptions about Yoga

Unit - II

Different Schools of Yoga : Hatha Yoga, Raja Yoga, Gnana Yoga, Bhakti Yoga, Karma Yoga, Ashtange Yoga — Patanjali's eight limbs of yoga.(Yama, Niyama, Asana, Pranayama, Pratiyahara, Dharana, Dhyana and Samadhi

Unit - III

Principles of Yoga practices : Asanas, Pranayama, Kriyas, Bandhas, Mudras and Meditation.

Unit – IV

Yoga and Health – Health related fitness and Yoga – Yoga and Aging – Yoga for Physically Challenged people.

Unit – V

Yoga and Sports – role of yoga in improving sports performance – yoga and development of social qualities – personality, co-operation, tolerance and social adjustments

Text Books:

- 1. Textbook of Yoga George Feuerstein, Rider and Company, London.
- 2. Yogic Therapy Swami Kuvalayananda and Dr. S. L. Vinekar, Govt. of India, Ministry of Health, New Delhi.
- 3. ASANAS by Dr. P. Mariayyah, Sports Publications, Coimbatore.
- 4. Sound Health through Yoga by Dr. K. Chandrasekaran, Prem Kalyan Publications, Sedapatti, Madurai, 1999.
- 5. Tirumoolar Thirumanthiram Translation and Commentary in English by Dr. Natarajan, Ramkrishna Math, Mylapore, Madras 600 004.
- 6. Yogeshwar, "Text Book of Yoga", Madras yoga Centre.

Reference Books:

- 1. Patanjala Yoga Sutras Translation and Commetary by Dr. P. V. Karambelkar Kaivalyadhama SMYM Samiti, Lonavala.
- 2. Kumaresan P, yogasanam, Tirunelveli : Abinaya Publications, 2002

Website

- 1. www.kuk.ac.in
- 2. www.ugcac.in

Semester – II <u>CS3</u>

TEST, MEASUREMENTS AND EVALUATION IN PHYSICAL EDUCATION Objectives

To enable the students to

- 1. To classify the students.
- 2. To select appropriate learning situation.
- 3. To motivate the students.
- 4. To select the particular team.

Unit - I

Meaning of Test, Measurement and Evaluation – Brief history of Test, Measurement and Evaluation, - Need and importance of Measurement and Evaluation in Physical Education.

Unit - II

Classification of test – Standardised and teacher made test – Objective and subjective Tests – Construction of Knowledge's test and skill test – Administration of test – Duties during testing – Duties after Testing.

Unit - III

Criteria for Test Selection – Validity – Reliability – Objectivity – Norms - Administrations Economic Feasibility – Educational Applications – Follow-up.

Unit - IV

Definition – Health Related fitness – Skill Related Physical fitness – JCR Test – Barrow motor ability Test – Harvard step cooper 12 Minute Run/ Walk Test.

Unit - V

Basket ball – Johnson Basketball ability Test, Hockey - Friedel Field Hockey Test Soccer – Mc Donald Soccer Test, Volleyball – Russel Lange Volley Ball Test, Badminton – French Short Service Test. Tennis – Broer Miller Tennis test.

Text Book Reference:

- 1. A.K.Gupta. *Tests & Measurements in physical Education*. New Delhi. Sports publication
- 2. Horold, M.Borrow. A Practical applied to measurement in Physical Education.
- 3. Barry L.Johnson, Jack K.Nelson. *Measurements for Evaluation in physical education*. Surject Publications.

Reference Books:

- 1. Safrit Margarat J. "Measurement in Physical Education and Exercise Science". St. Louis, Times Mirror Mosby College publishing, 1986.
- 2. Bosco, James S. "Measurement and Evaluation in physical Education and Sports", New Jersy, Prentice Hall Inc., 1983.
- 3. Clarke H. "Application of measurement in Health and Physical Education, Pretice Hall Inc., 1967.
- 4. Mathews K. Donald, "Measurement in Physical Education" London W.S. Saunders Company, 1973.

Website:

- 1. http://mycbseguide.com
- 2. http://edurev.in

Semester – II <u>CS4</u>

PRACTICAL – I GYMNASTICS

Objectives

To enable the students to

- 1. To enable the students makes a person develop a positive attitude towards life
- 2. Learn the various skills in gymnastics event.
- 3. Obtain the knowledge of rules and regulations and learn methods of gymnastics.

GYMNASTICS:

Testing the Elementary Skills on:

ш	Floor
	Parallel Bars
	Horizontal Bar
	Roman Rings
	Vaulting Horse
	Spring Board

- 1. Modak Pintu, Gymnastics: A Scientific Approach, Pilani, Runthala Publishers, 1996.
- 2. CoopnPhyllis and Milan Trnka, Teaching Gymnastic Skills to Men and Women, Surject Publications, Delhi, 1982

Reference Books:

- 1. Ayleoyd Peter, skills and Tactics of Gymnastics, Hong Kong: Marshall Cavendish, Ltd., 1982.
- 2. Elango.M, Kandasamy. M ,Sivagnanam.P . Basic Gymnastics: Krishna Publications, 2007

Website:

- 1. www.gymnastics.org
- 2. www.myspectrumsports.com

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills : 35
Playing ability / Performance : 20
Officiating Technique : 10
Record note : 10

TOTAL : 75

Semester – II

PRACTICAL - II YOGA

Objectives

To enable the students to

- 1. Acquire practical knowledge on asanas.
- 2. Obtain the experience in Bandhas, Kriyas and Pranayama.
- 3. Acquire the procedure of doing asana.
- 4. To enable the students to know the procedure of pranayama.
- 5. To know the procedure of Kriyas.
- 6. To know the procedure of Meditation.

YOGA: Testing the Listed Asanas, Pranayamas, Mudras, Bandhas and Kriya in the THEORY Paper.

Text Books:

- 1. SWAMI KUVALAYANANDA, Asanas, Kaivalyadhama, Lonavala, Pune.
- 2. B.K.S. IYANKAR, Light on Yoga Harper Collins Publications, Delhi.
- 3. Dr. P. MARIAYYAH, Asanas, Sports Publishers, Raja Street, Coimbatore-1
- 4. Dr.P.MARIAYYAH, Suriyanamaskar Jaya Publishing House, Perunthurai, Erode.

Reference Books:

- 1. Dr. K. CHANDRASEKARAN, Sound Health Through Yoga, Prem Kalyan Publications, Sedapatti, Madurai, 1999.
- 2. Modak Pintu, Gymnastics: A Scientific Approach, Pilani, Runthala Publishers, 1996.
- 3. CoopnPhyllis and Milan Trnka, Teaching Gymnastic Skills to Men and Women, Surject Publications, Delhi, 1982
- 4. Yogeshwar, "Text Book of Yoga", Madras yoga Centre.
- 5. Kumaresan P, yogasanam, Tirunelveli : Abinaya Publications, 2002

Website:

- 1. www.bdu.ac.in
- 2. www.kuk.ac.in

Scheme of Assessment:

Asanas Demonstrat	ion – Five Asanas	:	15
Pranayama	- Three Pranayama	:	15
Mudra	- Two	:	10
Bandha	- One	:	05
Kriya	- One	:	10
Teaching Practice		:	10
Record note		:	10

TOTAL : 75

Semester – II <u>Non-Major Elective – II</u>

METHODS OF YOGIC PRACTICES

Objectives

- 1. To enable the students to understand the concept of yoga.
- 2. To enable the students makes a person develop a positive attitude towards life.
- 3. To acquire the procedure of doing asana.
- 4. To enable the students to know the procedure of pranayama.
- **5.** To know the procedure of Kriyas and meditation.

UNIT I

Meaning of Yogic Practices: Asana, Pranayama, Kriya, Bandha, Mudra, Dhayana. Scope and Limitations of Asanas – Safety Measures and Precautions - Classification of Asanas – Meditative Asanas – Relaxative Asanas – Cultural Asanas

UNIT II

Pranayama – definition - Safety Measures and Precautions –Breathing Ratio in Pranayama Practice -

UNIT III

Define Bandha and Mudra - Different types of Bandhas: Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bhandha.

Different types of Mudra: Brahmma Mudra, Ashwini Mudra, Shanmugi Mudra.

UNIT IV

Define – Kriyas – Types of Kriyas: Kaphalabhathi, Trataka, Neti, Dhauthi, Nauli, Basti. Kaphalabhathi: Practicing Method – Benefits - Trataka: Practicing Method – Benefits

UNIT V

Neti: Jala Neti, Sutra Neti - Methods of Practiving Neti and its benefits - Dhauthi: Vamana Dhauthi, Dhanta Dhauthi, Vastra Dhauthi - Methods of Practicing Dhauthi and its benefits.

Nauli: Practiving Method – Benefits - Basti: Practicing Method – Befenits

Definition & Concept of Meditation – Types of Meditation : Breathing Meditation, Object Meditation

Text Books:

- 1. Pranayama Swami Kuvalayananada. Kaivalyadhama, Lonavla.
- 2. ASANAS by Dr. P. Mariayyah, Sports Publications, Coimbatore.
- 3. Sound Health through Yoga by Dr. K. Chandrasekaran, Prem Kalyan Publications, Sedapatti, Madurai, 1999.

Reference Books:

- 1. Yogic Therapy Swami Kuvalayananda and Dr. S. L. Vinekar
- 2. Asanas Swami Kuvalayananda. Kaivalyadhama, Lonavla

Website:

- 1. www.bdu.ac.in
- 2. www.kuk.ac.in
- 3. www.esamskriti.com
- 4. www.healthandyoga.com

Semester - III <u>CS5</u>

THEORIES OF MAJOR GAMES – I and TRACK & FIELD – I (Major Games: Football, Kabaddi & Volleyball Track & Field: Sprint and Middle Distance Race)

Objectives

To enable the students to

- 1. Know the history of major games working federations and fundamental skills.
- 2. Understand the techniques in major games.
- 3. Acquire the knowledge about various techniques track and field.
- 4. learn the procedures and techniques in events
- 5. Practical knowledge on track and field measurements

UNIT: I

Origin, History and Development of the Game – International, National and State Level Organizations

UNIT : II Fundamental Skills – Lead-Up Games, Various System of play – Selection of Players

UNIT: III

Training: Warm-Up Technical Training – Tactical Training – Coaching Programme

UNIT: IV

Layout of Playfield – Rules and Their Interpretations – Methods of Officiating Duties of Officials – Important Tournaments and Cups

UNIT: V

Athletics: Sprint and Middle Distance Race

References:

Text Books:

- 1. Conling David, Atheletics, London, Robert Hale, 1980.
- 2. Prabhakar Eric, The way to Athletic Gold, Madras East West Press Pvt. Ltd, 1995.
- 3. Dr. P. Mariayyah, Football, Sports Publications, Raja Street, Coimbatore.
- 4. Dr. P. Mariayyah, Track and Field, Sports Publications, Raja Street, Coimbatore.

Reference Book:

- 1. Thompson William, Teaching Soccer, Delhi, Surjeet Publications, 1996.
- 2. Carting Ganagon, Play Better Soccer in All Colour, W.B. Saubders Company, 1972.
- 3. Dhanaraj V. Hubert, Volleyball–A Modren Approach, Patiala, Sainsoris, 1991.

Website:

- 1. www.bdu.ac.in
- 2. www.kuk.ac.in
- 3. www.iaaf.org
- 4. https://healthfully.com

Semester – III <u>CS6</u>

ANATOMY AND PHYSIOLOGY

Objectives

To enable the students to

- 1. Understand the basic concepts of anatomy and physiology.
- 2. Learn the origin of muscles.
- 3. Know about the structure of human body.
- 4. To provide knowledge on various parts of the human body and their movements
- 5. Learn about the Physiological movements of human body.

UNIT: I

Meaning of Anatomy and Physiology – Need and Scope of Anatomy and Physiology in Physical Education – Cell – Structure and Functions – Tisuues – Types and Function

Muscular System – Types of Muscles: Skeletal Muscle, Cardiac Muscle, and Smooth Muscle.

UNIT: II

Skeleton: Meaning and Functions – Bones: Classification and Functions - General Features of Various Bones: Vertebral Column, Pelvic Bone, Radius and Ulna, Sacbula, Femer and Bones of Skull – Joints: Definition and Classification of Joints

UNIT: III

Nervous System: Neuron – Central Nervous System (CNS): Brain and Spinal Cord – Peripheral Nervous System (PNS): Cranial Nerves and Spinal Nerves – Digestive System: Structure & Functions – Digestive Process – Liver, Pancreas – Functions

UNIT: IV

Respiratory System – Respiration – Respiratory Track – Alveoli – Lungs: Structure & Functions – Gas Exchange – Vital Capacity

Circulatory System – Heart: Structure & Functions – Cardiac Cycle, Cardiac Output, Stroke Volume

UNIT: IV

Endocrine Glands – Functions of Endocrine Glands: Pituitary, Thyroid, Para-Thyroid, Thymus, Pancreas, Adrenal, & Sex – their role, in growth, development and regulations of body functions

References:

Text Books:

- 1. Guyton A.C., Functions of the Human Body, London, W.B. Saunders Company, 1969
- 2. Dr.V. Selvam "Anatomy and Physiology" Bodinayakanur.
- 3. Dr. N.M. MUTHAYYA "Physiology" J.J. Publications, Madurai.

Reference Books:

- 1. SEELEY et. all Anatomy and Physiology Mc Graw Hill.
- 2. Srivastava et. all, Text Book of Practical Physiology, Calcutta Scientific Book Agency, 1976
- 3. Kapovich and Sinnser, "Physiology of Muscular Activity", London W.B. Saunders company 1965.
- 4. Anderson T.Mc. CLurg, "Human Kinetics and Analysing Body Measurments, London. William Heinmann Medical Books Ltd., 1961.

Website:

- 1. www2.highlands.edu
- 2. www.hccfl.edu
- 3. https://opentextbc.ca
- 4. https://Rmoskowitz.tripod.com
- 5. www.iteachbio.com

Semester – III AS3

PRACTICAL – III

MAJOR GAMES SPECIALISATION: I

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL)

Objectives

To enable the students to

- 1. Know the major games working federations and fundamental skills.
- 2. Understand the techniques in major games.
- 3. Acquire the knowledge about various techniques in major games.
- 4. Learn the procedures and techniques in games.
- 5. Practical knowledge on major games measurements

Testing On

- Fundamental Skills
- Finer Skills

- Playing ability / Performance
- Officiating Technique

Text Book Reference:

- 1. Dr.Anil Sharma O.P.Sharma Rules of games sports publication 4264/3
- 2. An sari Road New Delhi -2.
- 3. Dr.P.Mariayyah Sports & Games Sports Publication Raja Street, Coimbature

Reference Books:

- 4. Rao C.V. Kabaddi Patiala NIS Publication 1971.
- 5. Dr.P.Mariayyah in "Volley ball"

Website:

- 1. www.ducksters.com
- 2. www.fifa.com
- **3.** www.thefa.com
- 4. www.fivb.org
- 5. www.livestrong.com
- 6. www.hockeyindia.org
- 7. https://sportsaspire.com
- 8. www.breakthroughbasketball.com
- 9. www.fiva.basketball/
- 10. www.indiankabaddi.org/
- 11. www.prokabaddi.com

Scheme of Assessment:

TOTAL	:	75
Record note	:	10
Teaching Practice	:	10
Officiating Technique	:	10
Playing ability / Performance	:	20
Fundamental Skills & Defensive and OffensiveSkills	:	25

Semester – III SBS1

METHODS IN PHYSICAL EDUCATION

Objectives

To enable the students to

- 1. Learn the factors influencing methods in physical education.
- 2. Learn the lesson plan and understand the methods of teaching aids.
- 3. Study the method of teaching physical activity.
- 4. Draw the fixtures of league and knock-out tournaments.

Unit -I:

- a) Meaning Factors influencing Methods Presentation techniques.
- b) Class Management Principles of Class Management.
- c) Teaching aids.

Unit – II

1. Explain various physical activities in the field of physical education – Calisthenics, Marching, Minor games, Indigenous activities, Rhythmic activities, Gymnastics, Defensive arts and swimming.

Unit – III

- a) Meaning of Tournaments.
- b) Merits and demerits of Knock out and League tournaments.
- c) Methods of deciding winner in the League tournament and Tie breaking in league tournaments.

Unit - IV

- a) Intramural Competition Objectives Methods of Organising and conducting Units for competition Intramurals Committee.
- b) External competition Benefits Drawbacks methods of Organizing and conducting.

Unit - V

- a) Sports meet Standard and Non Standard Methods of organizing and conducting sports meet.
- b) Play day methods of organisation and conduct.

Text Books References:

- 1. Sampath, K., Pannirselvam, A. & Santhanam, S. (1981). Introduction to educational technology. New Delhi: Sterling Publishers Pvt. Ltd.
- 2. Walia, J.S. (1999). Principles and methods of education. Jullandhar: Paul Publishers.
- 3. Bhardwaj, A. (2003). New media of educational planning. New Delhi: Sarup of Sons.
- 4. Bhatia, & Bhatia, (1959). The principles and methods of teaching. New Delhi: Doaba House.
- 5. Kochar, S.K. (1982). Methods and techniques of teaching. New Delhi: Sterling Publishers Pvt. Ltd.

References Books:

- 1. Colin A. Hardy, Mick Mawer, (1999). Learning and Teaching in Physical Education, Falmer Press, Great Britain.
- 2. James Michael Lee (1963). *Principles and Methods of Secondary Education*, McGraw-Hill.
- 3. Susan Capel (2004). *Learning to Teach Physical Education in the Secondary School:* A Companion to School Experience, RoutledgeFalmer.

Website:

- 1. www.bdu.ac.in
- 2. www.kuk.ac.in

Semester - IV <u>CS7</u>

STATISTICS IN PHYSICAL EDUCATION

Objectives

To enable the students to

- 1. Understand basic concept of statistics.
- 2. Learn the central tendency.
- 3. Study about the deviation.
- 4. Learn about the correlation.

Unit – I:

Meaning and Definition of statistics

Types of statistics

Data- Quantitative and qualitative data- grouped.

Unit – II:

Mean, Median and mode – definitions.

Computation of mean, median and mode from the un – grouped data Discrete data.

Specific characteristics and uses of measures of central tendency.

Unit – III:

Range – Quartile deviation – Mean deviation – Standard deviation – Definitions.

Computation of Quartile deviation – Mean deviation and Standard deviation from the un – grouped data.

Definition and computation of Co – efficient of variation from the un – grouped data.

Specific Characteristics and uses of Measures of Variability.

Unit – IV:

Computation combined mean from un – grouped data.

Normal curve and its properties – Homogeneous and Heterogeneous group.

Unit – V:

Meaning and Definition of Correlation and its types.

Computation of Product Moment Correlation from the un – grouped data.

Diagrammatic representation – Bar diagram, Pie diagram, Histogram.

Text Books:

- 1. Best, John W and James V.Kahn. (1992). *Research in Education*. New Delhi: Prentice Hall of India.
- 2. Berg, Kris E and Richard W. Latin. (1994). *Essentials of Modern Research Methods in Health, Physical Education, and Recreation*. New Jersey. Prentice Hall
- 3. Clarke, David H and H.Harrison Clarke. (1984). Research Process in Physical Education, Recreation, and Health. New Jersy: Prentice Hall, 1984

Reference Books:

- 1. Rothstein, Anne L. Research design and Statistics for Physical Education. New Jersey: Prentice Hall
- 2. Gupta, Sp., Advanced Practical Statistics, New Delhi : S. Chand & Co., 1982.
- 3. Wilks, S.S., Elementary Statical Analysis, Deford& I, IBH publishing Co., Calcutta, 1984.

Website:

- 1. www.andhrauniversity.edu.in
- 2. www.amu.ac.in
- 3. www.yourarticlelibrary.com
- 4. www.birzeit.edu

Semester - IV CS8

PRACTICAL - IV TRACK & FIELD-I

Objectives

To enable the students to

- 1. Be familiar with the procedure of track event marking and the method of officiating
- 2. Understand the techniques in jump, and throw events
- 3. Acquire the knowledge about various techniques track and field.
- 4. learn the procedures and techniques in events
- 5. Practical knowledge on track and field measurements

TESTING ON

Track & field events:

- **❖** DISCUS THROW
- ❖ SHOT PUT
- **❖** HAMMER THROW
- **❖** JAVELIN THROW
- LONG JUMP
- ❖ HIGH JUMP
- **❖** LONG DISTANCE RUN

Text Books:

- 1. Dr. P.Mariayyah Track & Fields Sports Publication Raja street coimbatore.
- 2. Dr. Anil Sharma, O.P.Sharma Rules of games, Sports Publications 4264/3 Ansari Road New delhi-2.
- 3. Gambetta, V., 1981, Track and Field Coaching Manual, Leisure Press Champaign, Illidis. Thirunarayan, C., and Hariharan, S., 1970, Track and Field the South Indian Press, Karaikudi.

Reference Books:

- 1. A.A.F.I., 1994, Competitive Rules Hand Book, Ashok Printers, Kanpur.
- 2. Conling David, Athletics London Robert Hale 1980.
- 3. Ken Bosen Track & Field Fundamental Techniques NIS Publications, Patiala.
- 4. Goel, R.C., 1992. Encyclopaedia of Sports and Games, Trange paper, Delhi.

Website:

- 1. www.prsu.ac.in
- 2. http://syllabi.oru.edu

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	25
Playing ability / Performance	:	20
Officiating Technique	:	10
Teaching Practice	:	10
Record note	:	10

TOTAL : 75

Semester - IV AS4

THEORIES OF MAJOR GAMES - II

Objectives

To enable the students to

- 1. Know the history of major games working federations and fundamental skills.
- 2. Understand the techniques in major games.
- 3. Acquire the knowledge about various techniques in major games.
- 4. learn the procedures and techniques in games.
- 5. Practical knowledge on major games measurements

(Major Games: Ball Badminton, Badminton, Basketball, Cricket, Hockey, Kho-Kho)

UNIT - I

Origin, History and Development of the Game – International, National and State Level Organisations.

UNIT - II

Fundamental Skills – Lead-up games, Various system of play – Selection of players.

UNIT - III

Training: Warm-up and cool down - Technical training - Tactical training - Coaching programme.

UNIT - IV

Layout of Playfield with all measurements, facilities & equipment and its specifications.

UNIT - V

Rules and its interpretations System of Officiating Duties of Officials

Text Books:

- 1. Ballon B. Ralph (1982). *Teaching Badminton*. Delhi, Surjeet Publication.
- 2. Dr.P.Mariayyah. Sports & Games, Sports Publication Raja Street, Coimbatore.
- 3. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 4. Dr. P. Mariayyah, Kabaddi, Sports Publications, Raja Street, Coimbatore.

Reference Book:

- 1. Wein Horst (1979). *The Science of Hockey*. London, Pelham Books.
- 2. Coleman Brain et al. (1976), Ep Publishing Ltd.
- 3. Tyson Frank (1985). The Cricket Coaching Manual. Calcutta, Rupa & Co.
- 4. Dr.Anil Sharma O.P.Sharma. Rules of games, sports publication, An sari Road New Delhi.

Website:

- 1. http://ocw.metu.edu.tr
- 2. http://mit.edu
- 5. www.umcarey.edu
- 6. www.indiastudycenter.com

Semester – IV SBS2

COMPUTER EDUCATION

Objectives

To enable the students to

- 1. Understand the Definition and Meaning of Computer.
- 2. Acquire knowledge about M.S Word.
- 3. Have knowledge about M.S Excel.
- 4. Be Familiar with advanced features of video editing.
- 5. Have knowledge on Advantages of working in Windows.

Unit-I:

Definition and Meaning of Computer – Need and Importance of Computer Applications in Physical Education – Generations of Computer – CPU (Central Processing Unit) – Sources of Memory – Read only Memory (ROM) – Random Access Memory (RAM)

Unit-II:

Input and Output devices – Floppy disk – Hard disk – Define Hardware & Software – Need of programming languages and packages – Advantages of working in Windows – Desktop – Start Menu – Control panel

Unit-III:

Find – Run – Starting an application – Moving a window – changing the size – Task bars – Control panel – Clock – Mouse – Shut Down – Microsoft Applications – MS Word – Advantages of MS Word.

Unit-IV:

Working with Document – Page Setup – Formatting Paragraphs – Creating Bulleted and numbered lists – Fonts – Editing (Cut, Copy & Paste) – Grammar & Spelling Checkers – Find and Replace – Tables – Printing

Unit-V:

Using Computers in Various Areas in Physical Education – Research – Biomechanics, Exercise Physiology, Motor Learning & Sports Psychology – Internet – Introduction to Internet – Service provided through Internet – Search Engines – E-Mail (Sending and Receiving mail)- Web pages.

References:

Text Books:

- 1. Jaiswal A (2003), Fundamental of Computers & Information Technology Delhi Dreamtech Publisher.
- 2. Steve Sagman Addison (2001), Ms office 2000 for Windows, Delhi Wesley publication.

Reference Books:

- 3. Taxali. R.K. (2003), PC Software for windows, Made Simple Delhi Tata Mcgraw Hill publishing company limited.
- 4. Perry J. Paul (1998), World wide Web secrete, Delhi: Condex computer publishing.

Website:

- 1. http://ocw.metu.edu.tr
- 2. http://mit.edu
- 3. www.umcarey.edu
- 4. www.indiastudycenter.com
- 5. www.ericdigests.org

Semester V <u>CS9</u>

SPORTS TRAINING METHODS

Objectives

To enable the students to

- 1. Understand the concept of strength and endurance.
- 2. Acquire the knowledge of motor components. .
- 3. Learn the fundamentals of sports training.
- 4. Practical knowledge on sports training methods.
- 5. Get the knowledge of training plans and periodization.

Unit - I

Meaning and Definition – Aim, Tasks and characteristics of sports training – Principles of sports training- importance of warm - up and cool – down.

Unit - II

Important features of Training Load- Intensity Density and volume – Type of Training Load – Training and Adaptation – Over Load – Causes, Symptoms and Remedies.

Unit - III

Means and methods of developing: Strength – Endurance –Speed – Flexibility.

Unit - IV

Basic Types of Training: Weight training – Circuit training – Plyometric training – Fartlek training – Interval training – Continuous training.

Unit - V

Training Plan, Types of Cycles, Periodisation- Definitions of Techniques and Tactics.

Text Books:

- 1. Singh Hardhayal, (1984) Sports training General theory and methods, NIS Patiala.
- 2. Williams, J. (1977) *II Athletic Training and Physical fitness*. Allyn and Bacon Inc., Sydney.

Reference Books:

- 1. Singh H, (1984). Science of sports Training.
- 2. Dick Frank. Sports Training Principles.
- 3. Mateweyew L.P. Fundamental Sports Training.

Website:

- 1. www.moe.gov.sg
- 2. www.mdurohtak.ac.in
- 3. www.teachpe.com
- 4. www.pdhpe.net

Semester V <u>CS10</u>

Health Education and First Aid

Objectives

To enable the students to

- 1. Understand the concept of health education and first aid.
- 2. Acquire the knowledge of health education.
- 3. Learn the fundamentals of health education and first aid.
- 4. Practical knowledge on health education and first aid.
- 5. Get the knowledge of health education and first aid.

UNIT-I

Meaning - Definition of Health Education – Aim, Scope of Health Education- Role of International Organization (WHO, UNICEF), National, State level Health Oraganization of a Health education person – College health programmes – Opportunities of student participation.

UNIT-II

Physical Health – Physical Fitness – Health related fitness – Performance related fitness – Components of Health related fitness and performance related fitness. Mental health: Meaning of mental health – Fundamental factors for mental health – Hygiene – Personal – Family – Food poisoning and their prevention – Food Adulteration – School Health Programme.

UNIT-III

Pollution – Water – Air – Land – Noise – Communicable Diseases – Malaria – Cholera – Typhoid – Dysentery – Chickenpox – Tuberculosis.

UNIT-IV

Definition of safety Education – Factors affecting Safety Education – Need and importance of safety Education – Safety in play fields, Swimming pool, Gymnasium.

<u>UN</u>IT-V

First aid – Definition – Aim and Objectives of first Aid – Scope of First Aid – Bandages – Types of Bandages – Wound – Types of wound Fractures – Types of Fractures – Shock – Burns – Poison – Snake bite – Dog bite.

Text Books:

- 1. Ramachandran. L, and T. J. Dharmalingam, 2010, Health Education a New Approach, Viukas Publications, New Delhi.
- 2. Blank F.C. 2002, "Foods and Nutrition", Sixth Agrobics India Publications, Jodhpur.

Reference Books:

- 3. Melinda J. Flegal, 2010 "Sports First Aid! A Coach's Guide to the care and prevention of Athletic Injuries" 4th ED., USA.
- 4. Lyan R. Marotz, 2008 "Health, Safety and Nutrition for the young child" Seventh Edition, USA.
- 5. John Severs, 2012 "Safety and Risk in Primary School Physical Education" London

Website:

- 1. www.betterhealth.vic.gov.au.
- 2. www.troopfifty.org. Semester V

CS11

THEORIES OF TRACK AND FIELD - II

OBJECTIVES

- 1. Be familiar with the procedure of track event marking and the method of officiating
- 2. Understand the techniques in jump, and throw events
- 3. Acquire the knowledge about various techniques hurdles and race walking
- 4. learn the procedures and techniques in events
- 5. Practical knowledge on track and field measurements

Unit - I

History of Events Relay (Visual, Non – Visual)

4X100 Mts Relay

4X400 Mts Relay

Unit – II Combined Events-Decathlon, Pentathlon, Heptathlon

Unit - III Cross Country, walking Events, Steeple Chase, Marathon.

Unit - IV Triple Jump

History of the events

Specific Conditioning exercise

System of Officiating

Unit - V History of the events

Pole vault

System of Officiating

Text Books:

- 1. Dr. P. Mariayyah, *Track and Field*, Coimbatore, Teachers publication.
- 2. Dr. Anil Sharma, O.P. Sharma, *Rules of sports*, sports publication, Ansari Road, New Delhi.
- 3. Conling David, (1980). Athletics, London Robert Hale.
- 4. Ken O. Bosen, Track & Field Fundamental Techniques, MS Publication Patiala.

Reference Books:

- 1. Doherty, J., Manneth, Mudern Track and Field Engle wood Cliffs; N.J. Prientice Hall Inc.
- 2. Dyoon, Geoffray, G.H. The Mechanics of Athelitics London: University of London Press Ltd., 1962.
- 3. Ken O Bosen Track and Field Fundamental Techniques, MS Publicationm Patiala.
- 4. Handbook, AAFI, New Delhi.
- 5. Prabakhar Eric., The way to Atheletic Gold Delhi, Affiliated Eastt West Press Privated Ltd., 1995.
- 6. Rogres, L. Joseph., USA Track & Field Coaching

Website:

- 1. www.trackisports.com
- 2. www.iaaf.org

Semester V <u>CS12</u>

TEACHING PRACTICES

OBJECTIVES

- 1. Be familiar with the teaching practices.
- 2. Understand the techniques in general lesson plan.
- 3. Acquire the knowledge about particular lesson plan.

The Students should go to School for internship Teaching Practice for 10 days to have a practical exposure on the Teaching Methods.

1. General Lesson Plan : 10 Nos.

2. Special Lesson Plan : 10 Nos.

Scheme of Assessment:

General Lesson Plan (One)
 Special Lesson Plan (One)
 Lesson Plan Observation Note
 TOTAL
 75

Semester – V ES1

FUNDAMENTALS OF KINESIOLOGY AND BIOMECHANICS

Objectives

To enable the students to

- 1. Understand the concepts of kinesiology
- 2. Learn the origin of the muscles
- 3. Obtain the concepts of bio-mechanics and motions
- 4. Know about the kinematics
- 5. Learn about the kinetics

UNIT-I INTRODUCTION OF KINESIOLOGY

Introduction — meaning — history - aim-objectives of kinesiology for physical education and sports . Fundamental concepts: centre of gravity — area and plans of motion — fundamental starting positions — terminology of fundamental movements — classification of muscles.

UNIT-II LOCATION AND ACTION OF MUSCLES

Location and action of muscles at various joints: upper extremity: pectoralis major – pectoralis minor – deltoid – biceps brachii – triceps – teres major – latissimus dorsi – trapezious. Lower extremity: rectus femoris – vastus group – Sartorius – biceps femoris – semi membranus – semi tendinosus – gluteus maximus – gasatrocnemius muscles – muscular analysis of fundamental movements: walking – running – throwing. Structure of motor action : cyclic – acyclic motor action – movement condition.

UNIT-III INTRODUCTION OF BIOMECHANICS

Bio mechanics: meaning – aim – objectives – importance. Types of motion : linear motion - angular motion.

UNIT-IV KINEMATICS

Linear kinematics: speed – velocity – acceleration – uniform acceleration motion – projectile motion. Angular kinematics: speed – angular velocity – angular acceleration - relationship between linear and angular motion.

UNIT-V KINETICS

Linear kinetics: mass – weight – force – pressure – work – power –energy – impuls – momentum – impact – friction – Newton's law of motion. Angular kinetics: moment of inercia – conversation of momentum – transfer of momentum – levers – equilibrium. Biomechanical principles: principles of initial force – principles of optimum path of acceleration – principles of conservation – momentum - principles of counter action.

Text Books:

- 1. Dhanajoy.S , 2000, "Mechanical Basics of Biomechanics", First edition, Sports Publication Chennai.
- 2. Anderson, T.M., 2003, "Biomechanics of Human Motion", First edition, Sports Publication Chennai.
- 3. Dhanajoy.S., 2005, "Pedagogic of Kinesiology", Sports Publication, Chennai.

Reference Books:

- 1. Bijlani.R.,and S.KManchanda, 2002, "The Human Machine", First edition, National Book Trust India, New Delhi.
- 2. Dhanajoy.S, 2000, "Mechanical Basics of Biomechanics", Sports Publication, New Delhi.

Website:

- 1. www.umcarey.edu
- 2. www.indiastudycenter.com
- 3. www.gymnastics.org
- 4. www.myspectrumsports.com

Semester V SPORTS PHYSIOTHERAPY SPORTS PHYSIOTHERAPY

Objectives

To enable the students to

- 1. Understand the meaning, nature and scope of sports physiotherapy.
- 2. Analyse the effects of sports physiotherapy in Therapeutic exercise and Rehabilitation.
- 3. Understand the properties posture.
- 4. Analyse the Therapeutic movements.
- 5. Understand the physiological effects of massage.

Unit – I:

- a) Meaning of Physiotherapy Guiding principles of Physiotherapy Importance of Physiotherapy.
- b) Meaning of Therapeutic exercise and Rehabilitation.

Unit – II:

- a) Posture Meaning and Definition Types of Posture Values of good posture Drawbacks and Causes of Poor posture concepts of posture.
- b) Posture deviations and the corrective exercise for Kyphosis, Lordosis, Scoliosis, Knock knee, Bowleg and Flat Foot.

Unit – III:

- a) Therapeutic movements passive, active and resistive movements.
- b) Physiological classification of movements voluntary and involuntary movements.

Unit - IV:

- a) Massage History of Massage Swedish massage system points to be considered in giving massage – Contra – indication of Massage – Physiological effects of massage.
- b) Classification of massage manipulation stroking, pressure, percussion, shaking and deep manipulations self massage manipulation techniques.

Unit – V:

- a) Hydrotherapy Cryotherapy Thermo therapy Hot pack, Whirlpool Bath Contrast bath.
- b) Electrotherapy Infra red rays and Ultra Sound waves.

- 1. Joan, N. Laan, "Physitharaphy in Medical Conditions"
- 2. Thorndike, "Atheletic Injuries"
- 3. Joan, "Physiotharaphy in Surgical conditions"
- 4. Henry, C. Kondal and Fiorence P. Kondal, Muscle and Funtions.
- 5. I.B. Clayton, "Text Book of Electroherephy" and Actiontheraphy
- **6.** Branda Savage, "Preliminary electricity for the Physiotharapist.

Reference Books:

- 1. Fox, John Edward; Day, Richard Jasper (2009). A Physiotherapist's Guide to Clinical Measurement. Churchill Livingstone, London.
- 2. Pryor, Jennifer A.; Prasad, Ammani S. (2009). *Physiotherapy for Respiratory and Cardiac Problems: Adults and Paediatrics (Physiotherapy Essentials)*. Churchill Livingstone, London.
- 3. Jonathan Kenyon, Karen Kenyon (2005). *The Physiotherapist's Pocket Book: Essential Facts at Your Fingertips*. Paperback.

Website:

- 1. www.ipv.ac.in
- 2. http://collegedunia.com

Semester VI CS13

THEORIES OF MAJOR GAMES - III

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL, NETBALL, HANDBALL)

Objectives

To enable the students to

- 1. Know the history of major games working federations and fundamental skills.
- 2. Understand the techniques in major games.
- 3. Acquire the knowledge about various techniques in major games.
- 4. Learn the procedures and techniques in games.
- 5. Practical knowledge on major games measurements

Unit- I

History of games – National and State level organizations.

Unit – II

Fundamental Skill – lead up Games – Various System of Play.

Unit - III

Training: Warm up – Technical Training coaching Program.

Unit - IV

Layout of Play field with all measurements, facilities and equipment and its specifications.

Unit - V

Rules and their Interpretation. - Methods of Officiating - Duties of Officials.

References:

Text Books:

- 1. Dr.P.Mariayyah. Sports & Games, Sports Publication Raja Street, Coimbatore.
- 2. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 3. Dr. P. Mariayyah, Kabaddi, Sports Publications, Raja Street, Coimbatore.

Reference books:

1. Dr.Anil Sharma O.P.Sharma. *Rules of games*, sports publication, An sari Road New Delhi.

Website:

- 1. http://ocw.metu.edu.tr
- 2. http://mit.edu

Semester - VI <u>CS14</u>

PRACTICAL - VI

MAJOR GAMES SPECIALISATION - II

(BASKETBALL, FOOTBALL, HOCKEY, KABADDI, VOLLEYBALL)

Objectives

To enable the students to

- 1. Know the history of major games working federations and fundamental skills.
- 2. Understand the techniques in major games.
- 3. Acquire the knowledge about various techniques in major games.
- 4. learn the procedures and techniques in games.

Practical knowledge on major games measurements

Testing On

- Fundamental Skills
- Finer Skills
- Playing ability / Performance
- Officiating Technique

- 1. Dr.P.Mariayyah, Sports & Games, Coimbatore. Teachers Publication.
- 2. Dr.P.Mariayyah. Volley ball. Coimbatore. Teachers Publication.

Reference Books:

- 1. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 2. Dr. Anil Sharma O.P. Sharma. Rules of games. New Delhi. Sports publication.

Website:

- 1. http://ocw.metu.edu.tr
- 2. http://mit.edu

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills : 25
Playing ability / Performance : 20
Officiating Technique : 10
Teaching Practice : 10
Record note : 10

TOTAL : 75

Semester VI

ES2

THEORIES OF TRACK AND FIELD - III

OBJECTIVES

- 1. Be familiar with the procedure of track event marking and the method of officiating
- 2. Understand the techniques in jump, and throw events
- 3. Acquire the knowledge about various techniques hurdles and race walking
- 4. learn the procedures and techniques in events
- 5. Practical knowledge on track and field measurements

Unit - I

History of Events

Relay (Visual, Non – Visual)

4X100 Mts Relay

4X400 Mts Relay

- Unit II Combined Events-Decathlon, Pentathlon, Heptathlon
- Unit III Cross Country, walking Events, Steeple Chase, Marathon.
- **Unit IV** Triple Jump

History of the events

Specific Conditioning exercise

System of Officiating

Unit - V History of the events

Pole vault

System of Officiating

- 1. Dr. P. Mariayyah, *Track and Field*, Coimbatore, Teachers publication.
- 2. Dr. Anil Sharma, O.P. Sharma, *Rules of sports*, sports publication, Ansari Road, New Delhi.
- 3. Conling David, (1980). Athletics, London Robert Hale.
- 4. Ken O. Bosen, Track & Field Fundamental Techniques, MS Publication Patiala.
- 5. Doherty, J., Manneth, Mudern Track and Field Engle wood Cliffs; N.J. Prientice Hall Inc.

Reference Books:

- 1. Dyoon, Geoffray, G.H. The Mechanics of Athelitics London: University of London Press Ltd., 1962.
- 2. Ken O Bosen Track and Field Fundamental Techniques, MS Publicationm Patiala.
- 3. Handbook, AAFI, New Delhi.
- 4. Prabakhar Eric., The way to Atheletic Gold Delhi, Affiliated Eastt West Press Privated Ltd., 1995.
- 5. Rogres, L. Joseph., USA Track & Field Coaching Manual USA: Herman Kinetics.

Website:

- 1. www.prsu.ac.in
- 2. http://syllabi.oru.edu

Semester VI <u>ES3</u>

PRACTICAL - VII

TRACK AND FIELD - III

(Relay, Combined Events, Triple Jump Pole Vault)

OBJECTIVES

- 1. Be familiar with the procedure of track event marking and the method of officiating
- 2. Understand the techniques in jump, and relay (Triple Jump Pole Vault)
- 3. Acquire the knowledge about various techniques combined events.
- 4. learn the procedures and techniques in events
- 5. Practical knowledge on track and field measurements
 - Relay (4X100, 4X400) Events
 - Explain the various stages in relay Events
 - Combined Events
 - (Pentathlon, Decathlon, Heptathlon)
 - Jump (Triple Jump)
 - Explain the various styles in Jump Event.
 - Pole Vault.

- 1. Dr. P.Mariayyah. *Track and Field*, Sports Publications, Coimbatore.
- 2. , V., 1981, Track and Field Coaching Manual, Leisure Press Champaign, Illidis. Thirunarayan, C., and Hariharan, S., 1970, Track and Field the South Indian Press, Karaikudi.

Reference Books:

- 1. Conling, David (1980). Athletics, Condon Robert Hale
- 2. Prabhakar Eric. (1995). *The way to Athletic Gold.* Madras, East West press PVT Ltd.
- 3. Goel, R.C., 1992. Encyclopaedia of Sports and Games, Trange paper, Delhi.
- 4. A.A.F.I., 1994, Competitive Rules Hand Book, Ashok Printers, Kanpur.

Website:

- 1. www.prsu.ac.in.
- 2. http://syllabi.oru.edu.
- 3. www.trackisports.com.
- 4. www.iaaf.org.

Scheme of Assessment:

Fundamental Skills & Defensive and OffensiveSkills	:	25
Playing ability / Performance	:	20
Officiating Technique	:	10
Teaching Practice	:	10
Record note	:	10

TOTAL : 75

Semester VI SBS4

FITNESS MANAGEMENT

Objectives

To enable the students to

- 1. To enable the students makes a person develop a positive attitude towards life
- 2. This is very important from the health perspective.
- 3. Learn the various skills in fitness management.
- 4. Acquire knowledge on fitness management.

Unit - I: Introduction

- a) Meaning and Definitions of Physical Fitness, Need and Importance of fitness, Benefits of Physical Fitness
- b) Types and Components of Physical Fitness Health related and skill related
- c) Misconception about fitness, National solution for fitness problem

Unit – II : Development of Physical Fitness

- a) Principles of Physical Fitness
- b) Value of Physical Fitness
- c) Factors affecting physical fitness(Age Sex Climate Diet Exercise & Training)

Unit – III : Exercise Programmes

Callisthenic's – Jogging – Swimming – Skipping – Aerobic dance – Weight training – Participation in games and sports - Cycling

Unit – IV: Benefits of Physical Fitness

- a) Positive effects of exercise on health
- b) Ways to lower cholesterol level
- c) Disadvantages of overweight
- d) Ways to safely lose weight

Unit-V: Nutrition

- a) Meaning of Food and Nutrition
- b) Brief description of different nutrients and their role Carbohydrate, Fat, Protein, vitamins and Minerals.
- c) Balanced Diet
- d) Nutritional diseases
- e) Obesity Causes and their effects

Text Books:

- 1. James and Leona Hart, (2000). Fitness and Wellness, Goodwill Publishing House, New Delhi
- 2. Rube'n Acosta Herna'ndez (2002). Managing Sports Organisation, Human Kinetics.
- 3. Deepak Join. W., (1999). Administration in Physical Education, Sports Publication, Delhi.

Reference Books:

- 1. Jerrold S. Greenberg et al., Physical Fitness and Wellness (3rd Ed,), USA: Human
- 2. Kinetics, 2004.
- 3. Joseph P. Winnick and Francis X. Short, Physical Fitness Training Guide, USA: Human Kinetics, 1999.
- 4. Edmund R. Burke, Home Fitness: Handbook, USA: Human Kinetics, 1996. Lynne Brick, Fitness Aerobics, USA: Human Kinetics, 1996.
- 5. Martha White, Water Exercise, USA: Human Kinetics, 1996.

Website:

- 1. www.umcarey.edu
- 2. www.indiastudycenter.com

Semester VI SBS5

SPORTS PSYCHOLOGY AND SOCIOLOGY

Objectives

To enable the students to

- 1. Understand the basic concepts of sports psychology and sociology.
- 2. Learn principles of sports psychology and sociology.
- 3. Know about the sports psychology and sociology.
- 4. Learn about the personality..

Unit-I

Meaning and definition of Psychology and sports Psychology – Development of sports Psychology in India – Need and importance of sports Psychology in the field Physical Education and sports.

Unit - II

Definition Motor Learning – Physical and Motor considerations- Body Build, Height and Weight, strength, Muscular, endurance, Flexibility, Balance Co-Ordination, Reaction time, Movement time and Reflex time Cognitive – Affeative – Psychomotor?

Unit - III

Definition of Perception – Theory of Perception Gestult Theory, Palror Theory and witkins's Theory emotional effects tension, anxiety and stress – its role in Physical Education and sports.

Unit - IV

Personality traits of sports person – Composition of personality – Aggression – Theories of Aggression – Psycho – regulative procedures — Autogenic training, yoga and Music's.

Unit - V

Meaning, Nature and scope of sociology in physical Education and sports – Social factors in sports – Leadership in sports spectators and fans group cohesion Social Integration

Text Books:

- 1. Alderman A.B. Psychological Behaviour in sports W.B. Saundar company, Saundar 1974.
- 2. Puni A.T. Sports psychology chanduga NIS.
- 3. Alderman Psychology Behavior
- 4. Cratty B.J. Psychology and Physical activity.
- 5. Singer R.N. Coaching, Athletics and psychology.

Reference Books:

- 1. Alderman. A.B "Psychology Behavior in Sports", W.B Saunders Company, Saunder 1974.
- 2. Cratty B.J "Psychology and Physical Activity", London Prentice Hall Inc., 1961.
- 3. Cratty, B.J Psychology in Contemporary Sports," Prentice Hall Inc. Englewood Cliff. 1973.
- 4. Cratty B.J Social Dimension of Physical Activity "New Jerchy, Printice Hall inc.
- 5. cratty B.J Social Psychology in Athletics," New Jersy, prentice, Hall Inc., 1981.

Website:

- 1. www.prsu.ac.in
- 2. http://targetstudy.com
- 3. www.teachpe.com
- 4. www.sociology.iresearchnet.com
- 5. http://www.researchgate.net

Semester VI SBS6

EXERCISE PHYSIOLOGY

Objectives

To enable the students to

- 1. Understand the meaning, nature and scope of exercise physiology.
- 2. Analyse the effects of exercise physiology on various systems of the body.
- 3. Understand the properties structure and functions of voluntary muscles.
- 4. Analyse the physiological concepts of physical fitness.
- 5. Understand the physiological factors affecting motor abilities.

Unit - I

Meaning and scope of Physiology of exercise - Structure and function of skeletal Muscles - Types of Muscle fibers - Red and White - Types of Muscular Contraction - Isotonic Isometric and Isokinetic - Effect of exercise on Muscular system - Hypertrophy, Hypo trophy.

Unit - II

Mechanism of respiration – respiratory muscles – Lung volumes and Capacities - Heart rate – Stroke Volume – Cardiac cycle – Cardiac Output during rest and Exercise – Blood pressure – Systolic, Diastolic – Effect of exercise on Respiratory system and Circulatory system.

Unit - III

Nervous System – Types of Nervous System – Central Nervous System (CNS) and Peripheral Nervous System (PNS) – Structure of Neuron - Effect of exercise on Nervous system.

Unit - IV

Metabolism – Anabolism and catabolism - sources of energy – Aerobic and Anaerobic Metabolism, Fat metabolism and protein metabolism and endocrine system.

Unit- V

Exercise and temperature regulation in Hot and Cold climate – Exercise and Altitude – Sex differences on exercise – aging and exercise – Physical Conditioning.

References:

Text Books:

- 1. More house LE and Milter A.T. Physiology of exercise St Louis, The CV Mosby Company 1976.
- 2. Jonson W.R. Science and Medicine of exercise and sports London Harper & Bros 1974.
- 3. Guyton AC Text book of Medical Physiology W.B. Soundars Company Philadelphia.
- 4. Bourne GH the Structure and function of Muscle London Academic Press.
- 5. Karporich P.V. and Sinning W.B. Physiology of muscular activity.

Reference Books:

- 1. D.E. Vries H.A. Physiology for physical Education and Athletics. Strape press, London. 1976.
- 2. Devrises H.A Physiology of exercise for physical Education and Athletics London, Staples Press 1976.

Website:

- 1. www.unm.edu
- 2. Web.cortland.edu
- 3. https://googleweblight.com
- 4. www.Wikieducator.org.