

DEPARTMENT OF PHYSICAL EDUCATION

SYLLABUS FOR TWO-YEAR B. P. ED. COURSE CHOICE BASED CREDIT SYSTEM

(From academic session 2018 onwards)



**RAJIV GANDHI UNIVERSITY,
RONO HILLS, DOIMUKH**

Preamble: Bachelor of Physical Education (B. P. Ed.) two years (Four Semesters Choice Based Credit System) programme is a professional programme meant for preparing teachers of physical education in classes VI to X and for conducting physical education and sports activities in classes XI and XII.

B. P. Ed. programme shall be designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprises of compulsory and optional theory as well as practical courses and compulsory school internship.

GOAL OF THE B.P.ED & SPORTS SCIENCES PROGRAMME

To prepare professionally fit teachers of Physical Education & Sports Sciences and academic subjects, who are capable of responding to the changing needs of the Modern Indian Society with the challenges and opportunities available therein.

GENERAL OBJECTIVES OF THE B.P.ED PROGRAMME

1. To prepare teachers of Physical Education with broader educational perspective.
2. To develop Personal, Professional and Social competencies required in teaching profession.
3. To develop potential for planning and organizing Physical Education programmes and activities.
4. To empower learners to inspire their students to actively participate in Physical and Yogic Exercises, Games and Sports.
5. To enable teachers to develop personality, character, will power, democratic values and positives attitude towards life among their students through Physical Education.
6. To make teachers capable of imparting basic knowledge about health, hygiene, nutrition and physical fitness.
7. To develop skills and competencies to organize school and community games and sports.
8. To cultivate the spirit of sportsmanship, mental and physical alertness, scientific temper and optimism.
9. To promote mental health, power of self-decision and self-control, correct judgment and action, emotional stability, respect for other and acceptance of the authority and rules.
10. To promote appreciation and interest for indigenous games, sports and yogic practices among learner.
11. To create awareness about health and hygiene in the community.

Eligibility

Intake, Eligibility and Admission Procedure as per the NCTE norms and standards

B. P .Ed. Duration of the Course:

The B. P. Ed programme shall be of a duration of two academic years, that of four semesters. However, the students shall be permitted to complete the programme requirements within a maximum of three years from the date of admission to the programme.

B. P. Ed. The CBCS System:

The Programme shall run on Choice Based Credit System (CBCS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

B. P. Ed Course:

The term course usually referred to, as ‘papers’ is a component of a programme. All courses need not carry the same weight. The course defines learning objectives and learning outcomes. The course is designed to comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. and a combination of some of these.

B. P. Ed. Courses of Programme:

The B. P. Ed. Programme consists of a number of courses, the term ‘Course’ applied to indicate a logical part of subject matter of the programme and is invariably equivalent to the subject matter of a “paper” in the conventional sense. The following are the various categories of courses for the B.P.Ed. Programme.

- Theory:
 - Core Course:
 - Elective Course:
- Practicum:
- Teaching Practices:

B. P. Ed. Semesters:

One academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. A minimum of 36 working hours in a week (five or six days a week).

B.P. Ed. Working days:

There shall be at least 200 working days per year exclusive of admission and examination processes etc.

B. P. Ed. Examinations:

i. Semester examinations for first semester in the month of November /December: for second semester in the month of May / June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in November/December or May / June.

ii. candidate should get enrolled/registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

B. P. Ed. Scheme of Evaluation:

1. Internal Assessment : 30 Marks
2. External Assessment : 70 Marks and 50 and 20 marks for Theory and Practical respectively for papers having practicum.
3. Duration of Exam : 3 Hours
4. Pass marks : 40% in Internal and External separately

- Out of 30 marks of Internal assessment **20** marks will be awarded on the basis of three Sessional Tests by taking the average of two best Sessional Test and **10** marks will be awarded on the basis of the Sessional Work performed.
- For external assessment (written exam) there will be question paper of **70** marks having **5** question of equal value with internal choice.

NB: All other items of related to award of minimum passing marks, degree, semester grade points and all others items leading to award of 2 (Two) Year Bachelor of Physical Education Degree will be governed by NCTE, Regulations, 2014-15 R. B.P. Ed. 1 -20 .

Details of the Syllabus inclusive of Course papers, total credits, nos. of teaching hours, total marks inclusive both of Internal Assessment and external Assessment for each semester are shown separately:

Semester – I

Part A: Theory						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
CC – 101	History, Principles and Foundation of Physical Education	64 hrs	4	30	70	100
CC – 102	Anatomy and Physiology - I	64 hrs	4	30	70	100
CC – 103	Elementary Statistics & Computer Application in Physical Education	64 hrs	4	30	70 (Th-60+Pr-10)	100
Elective Course (Anyone)						
EC – 101	Olympic Movement	64 hrs	4	30	70	100
EC – 102	Officiating and Coaching					
Part-B Practical Course						
PC – 101	Track & Field –I (Track Events)	64 hrs	4	30	70	100
PC – 102	Badminton and Volleyball	64 hrs	4	30	70	100
PC – 103	Football	64 hrs	4	30	70	100

Semester-II

Part A: Theory						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
CC-201	Sports Psychology and Sociology	64 hrs	4	30	70	100
CC- 202	Anatomy and Physiology – II	64 hrs	4	30	70	100
CC- 203	Management and Administration in Physical Education and Sports	64 hrs	4	30	70	100
Elective Course (Anyone)						
EC-201	Nutrition & Weight Management	64 hrs	4	30	70	100
EC-202	Educational Technology and Methods of Teaching Physical Education					
Part-B Practical Course						
PC-201	Track & Field –II (Field Events)	64 hrs	4	30	70	100
PC-202	Yoga	64 hrs	4	30	70	100
PC-203	Kho Kho & Kabaddi	64 hrs	4	30	70	100
Part-C Teaching Practices						
TP-201	Mass Demonstration & Teaching Practices (05 Lessons in Classroom teaching and 05 Lessons in Outdoor activities)	64 hrs	4	30	70	100

Semester-III

Part A: Theory						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
CC - 301	Sports Training	64 hrs	4	30	70	100
CC - 302	Communication Skills	64 hrs	4	30	70	100
CC - 303	Sports Medicine, Physiotherapy & Rehabilitation (Theory – 50 + Practical - 20)	64 hrs	4	30	70	100
Elective Course (Anyone)						
EC - 301	Yoga Education	64 hrs	4	30	70	100
EC - 302	Curriculum Design					
Part-B Practical Course						
PC-301	Basketball & Handball	64 hrs	4	30	70	100
PC-302	Taekwondo & Table Tennis	64 hrs	4	30	70	100
PC-303	Boxing	64 hrs	4	30	70	100
Part-C Teaching Practices						
TP-301	Teaching Practices : 30 Lessons (Teaching Lesson Plans for various Games & Sport) 20 External and 10 Internal.	64 hrs	4	30	70	100

NB: Under the NCTE Regulation, 2014 Appendix-7, 4.1(c) it is mandatory for the students to undertake **20** Lessons in the designated School and **10** lessons in the Department

Semester-IV

Part A: Theory						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
CC-401	Measurement & Evaluation in Physical Education and Sports	64 hrs	4	30	70	100
CC- 402	Kinesiology and Biomechanics	64 hrs	4	30	70	100
CC- 403	Health Education and Environmental Studies	64 hrs	4	30	70	100
Elective Course (Anyone)						
EC-401	Adapted Physical Education	64 hrs	4	30	70	100
EC-402	First Aid & Safety Education (Theory – 50 + Practical - 20)					
Part-B Practical Course						
PC-401	Weight Training/ lifting & Hockey	64 hrs	4	30	70	100
PC-402	Archery	64 hrs	4	30	70	100
PC- 403	Cricket	64 hrs	4	30	70	100
Part-C Teaching Practices						
TP-402	Games Specialization: (Football, Yoga, Boxing, Track & Field & Cricket (5 Lessons)	64 hrs	4	30	70	100

Semester – I

CC-101 HISTORY PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION

OBJECTIVES:

1. To acquaint the learner with History of Physical Education
2. To acquaint the learner with the goals of education and Physical Education.
3. To understand the contribution of Philosophers of Education and Physical Education.
4. To understand the contribution of various people towards Physical Education.
5. To understand the modern development and social aspects of Physical Education

Unit -1: Introduction and foundation of Physical Education

1. Meaning, Definition and Scope of Physical Education
2. Aims and Objective of Physical Education
3. Importance of Physical Education in present era.
4. Philosophical foundation: Pragmatism, Naturalism, Realism, Humanism and Existentialism
5. Physical Education as an Art and Science.

Unit - 2 –Development of Physical Education in India

1. Indus Valley Civilization Period, Vedic Period, Epic Period, Early Hindu Period
Medieval Period, Muslim period, British period
2. Physical Education in India (After 1947)
3. Contribution of Akhadas, Vyayamshalas and Y.M.C.A.
4. Contribution of LNIPE, NSNIS and SAI in promoting Physical Education and Sports and its functions.

Unit – 3 Development of Physical Education in the World

1. Physical education in Rome, Germany, Sweden, Denmark and USSR
2. Contribution of Johan Basedow, Guts Muths, Frederick Ludwig John, Adolph Speiss, Per Henrik Ling, Franz Nachtegall
3. Physical Education in Greece, Sparta and Athens
4. The Origin and Development of Ancient and Modern Olympic games.

Unit- 4- Commission, Awards and Sports Policies

1. Commissions – Dr. Kunzru Commission, Kothari Commission, Kaul Kapoor Committee
2. Rajkumari Amrit Kaur Coaching Scheme
3. India (G.D.Sondhi) Padamshree (P.M. Joseph)
4. Awards and Trophies of sports at various level
5. The Indian Olympic Association and other Sport Association and Federations.
6. Right to Education(RTE), National Policy on Education (Physical Education)

Sessional Work: (Any One)

1. Analysis of history of physical education from ancient period till 1947.
2. Seminar presentation on policies and commissions related to Physical Education in India.
3. Study of various schemes and Awards in Physical Education and sports in India

References:

- Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.
- Mohan, V. M. (1969). Principles of Physical Education. Delhi: Metropolitan Book Dep.
- Nixon, E. E. & Cozen, F.W. (1969). An Introduction to Physical Education, Philadelphia: W.B. Saunders Co.
- Sharman, J. R. (1964). Introduction to Physical Education. New York: A.S. Barnes & Co.
- William, J. F. (1964). The Principles of Physical Education. Philadelphia: W.B. Saunders Co

Semester - I
CC-102 ANATOMY AND PHYSIOLOGY - I

OBJECTIVES:

1. To enable the learner to understand the basic structure and function of human body.
2. To acquire the knowledge regarding effect of exercise on the body as a whole.
3. To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
4. To acquaint the learner with school health program.

UNIT-I

1. Meaning and concept of anatomy
2. Need and importance of the knowledge of anatomy in the field of Physical Education & Sports.
3. Regional Anatomy, Systemic Anatomy, Gross and Microscopic Anatomy, Normal Anatomical Position and its importance.
4. Essential properties of living organism.
5. Classification, structure and functions of cells and tissues:
6. Definitions of Cell, Tissue, Organs and Organ System
7. Microscopic structure, composition and function of Cell

UNIT-II

1. Skeletal System - Gross and Microscopic
2. Structure, Composition, Properties and functions of skeletal muscles.
3. Structure and Function of Bones.
4. Muscles: Meaning, Classification and nomenclature of Muscles, Structure and function of different Types of Muscles
5. Joints: meaning and Classification of Joints, name of the movement around joints
6. Nervous System
 - a. Central Nervous System (ANS)
 - b. Peripheral Nervous System (PNS)
 - c. Structure and function of Neuron.

UNIT III

1. Respiratory System
 - a. The lungs and their structure
 - b. Exchange of gases in the lungs,
 - c. Mechanism of respiration (internal and external respiration)
2. Circulatory System
 - a. Structure and Properties of the Heart Muscle
 - b. Circulation of Blood, Blood Pressure, Cardiac Cycle & Cardiac Output.
3. Excretory system:
 - a. Meaning and classification
 - b. Structure and Functions of skin
 - c. Structure and functions of kidney
 - d. Structure and functions of liver.

UNIT IV

1. Digestive System:
 - a) Organs of Digestion (structure and function in brief)
 - b) Steps of Digestion

- c) Digestive Glands – structure and functions
- d) Secretion and functions of Digestive Juices
- e) Absorption and Metabolism (Anabolism, Catabolism) of Food
- 2. Endocrine System:
 - a. Classification Endocrine System.
 - b. Secretion and function of various classifications.

Sessional Work: (Any One)

1. Chart paper presentation on various systems of the body
2. Prepare a model on various system of the body.
3. PowerPoint presentation on various system of the body.

References:

- Astrand, P.O. and Rodahl Karre, Text Book of Work Physiology, Tokyo: McGraw Hill Kogakusha Ltd.
- Bourne, Geoffery H. The Structure and Function of Muscles: London: Academic Press (1973).
- Caprovich, P.V. and Sining. Wayne E. Physiology of Musclar Activity (Philadelphia: W.B. Saunders, 1976), 7th Edition.
- Chaurasia B.D. Human Anatomy Regional and Applied (CBS Publisher and Distributer, 1979).
- Gupta, A. P. (2010). Anatomy and Physiology. Agra: Sumit Prakashan.
- Gupta, M. and Gupta, M. C. (1980). Body and Anatomical Science. Delhi: Swaran Printing Press.
- Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
- Guybon, Arthur C. Text Book of Medical Physiology. (Philadelphia: W.B. Saunder Company, 1976).
- James C. Clouch, Fundamental Human Anatomy (Lea & Febiger, Philadelphia, 1971).
- Karpovich, P. V. (n.d.). Philosophy of Muscular Activity. London: W.B. Saunders Co.
- Lamb, G. S. (1982). Essentials of Exercise Physiology. Delhi: Surjeet Publication.
- Mathew, D.K. and Fox E.L., Physiology Basis of Physical Education and Athletics (Philadelphia: W.B. Saunder Company, 1976).
- Moorthy, A. M. (2014). Anatomy Physiology and Health Education. Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). Physiology of Exercise. St. Louis: The C.V. Mosby Co.
- Pearce, E. C. (1962). Anatomy and Physiology for Nurses. London: Faber & Faber Ltd.
- Morehouse, I.E., Miller, A.T. Physiology of Exercise. (St. Louis: The C.V. Mosby Company, 1976) 7th Edition.
- Pears Evelyn C. Anatomy and Physiology of Nurses (London: Faber & Faber Ltd. 1929).
- Perrot J.W. Anatomy for Students and Physical Education (London: Adward Arnold and Co. 1967).
- Sharma, R. D. (1979). Health and Physical Education, Gupta Prakashan.
- Singh, S. (1979). Anatomy of Physiology and Health education. Ropar: Jeet Publications.
- St. John's Ambulance, First-Aid By Red- Cross Society of India.
- Waruida, Roger and Williams, Peter L. Gray's Anatomy (London: Longmans Group Ltd. 1973).

Semester – I

CC - 103 ELEMENTARY STATISTICS & COMPUTER APPLICATION IN PHYSICAL EDUCATION

OBJECTIVES :

1. To understand the concept of Statistics and Assessment Procedure in Physical Education.
2. To understand different tests in Physical Education.
3. To acquire the knowledge of various tests regarding Physical fitness, motor and health related fitness.
4. To understand the application of simple statistical procedures for evaluation.

Unit-I Introduction

1. Statistics: Meaning, Definition, Nature and Importance in physical education and sports
2. Class Intervals: Raw Score, Continuous and Discrete Series, Construction of Tables
3. Graphical Presentation of Data: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram
4. Data and Types of Data
5. Sample and Sampling Techniques

Unit-II Statistical Models in Physical Education and Sports

1. Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data
2. Measures of Variability: Meaning, importance, computing from group and ungroup data
3. Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data

Unit-III Introduction to Computer

1. Meaning, need and importance of information and communication technology (ICT).
2. Application of Computers in Physical Education
3. Components of computer, input and output device
4. Application software used in Physical Education and sports

Unit- IV Introduction to MS Word, MS Excel & MS Power Point

1. Creating, saving and opening a document
2. Formatting, Editing and Drawing table
3. page setup, paragraph alignment, spelling and grammar check printing option, inserting page number, graph, footnote
4. Creating, saving and opening spreadsheet in MS Excel
5. Format and editing, adjusting columns width and row height
6. Understanding and creation of charts in MS Excel
7. Basic statistical calculation and creating formulas in MS Excel
8. Creating, saving and opening a MS Power Point file
9. format and editing features slide show , design , inserting slide number, picture ,graph ,table in MS PPT
10. Preparation of Power point presentations

Sessional Work: (Any One)

1. Analysis of various scores and graphical presentation of scores through various techniques.
2. Seminar presentation on various statistical models in research.
3. Model preparation of the parts of the computer and power point presentation.

References:

- Best, J.W. (1963). Research in Education. U.S.A.: Prentice Hall.
- Bompa, T. O. & Haff, G. G. (2009). Periodization: Theory and Methodology of Training, 5th ed. Champaign, IL: Human Kinetics.
- Brown, L. E., & Ferrigno, V. A. (2005). Training for speed, agility and, 2nd ed. Champaign, IL: Human Kinetics.
- Brown, L.E. & Miller, J., (2005). How the Training Work. In: Training Speed, Agility, and Quickness. Brown, L.E. & Ferrigno, V.A & Ferrigno, V.A., eds. Champaign, IL: Human Kinetics.
- Carl, E. K., & Daniel, D. A. (1969). Modern Principles of Athletes Training. St. Louis: St. Louis's Mosby Company.
- Clark, H. H., & Clark, D. H. (1975). Research Process in Physical Education. Englewood cliffs, New Jersey: Prentice Hall, Inc.
- Garrett, H.E. (1981). Statistics in Psychology and Education. New York: VakilsFeffer and Simon Ltd.
- Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). Introduction to Research: A guide for the Health Science Professional. Landon: J.B. Lippincott Company.
- Thomas, J.R., & Nelson J.K. (2005). Research Methods in Physical Activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). Research Method in Physical Activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Uppal, A. K. (1990). Physical Fitness: How to Develop. New Delhi: Friends Publication.
- Verma, J. P. (2000). A Text Book on Sports Statistics. Gwalior: Venus Publications.

Semester – I
Theory Courses
EC-101 OLYMPIC MOVEMENT (ELECTIVE)

OBJECTIVE:

1. To know the history of Olympic
2. To understand the growth and development of Olympic
3. To understand the Olympic movement and its significance in the modern world

Unit – I Origin of Olympic Movement

1. Philosophy of Olympic movement
2. The early history of the Olympic movement
3. The significant stages in the development of the modern Olympic movement
4. Educational and cultural values of Olympic movement

Unit – II Modern Olympic Games

1. Significance of Olympic Ideals, Olympic Rings, Olympic Flag
2. Olympic Protocol for member countries
3. Olympic Code of Ethics
4. Olympism in action
5. Sports for All

Unit – III Different Olympic Games

1. Para Olympic Games
2. Summer Olympics
3. Winter Olympics
4. Youth Olympic Games

Unit – IV Committees of Olympic Games

1. International Olympic Committee - Structure and Functions
2. National Olympic committees and their role in Olympic movement
3. Olympic commission and their functions
4. Olympic medal winners of India

Sessional Work: (Any One)

1. Analysis in detail of Olympic ideals, motto and symbols (in paper)
2. Discussion and analysis of various Olympic Games and venues.
3. Analysis of the IOC in terms of structure and functions. Preparation of list of Olympic medal winners of India.

Reference:

- Osborne, M. P. (2004). *Magic Tree House Fact Tracker: Ancient Greece and the Olympics: a nonfiction companion to magic tree house: hour of the Olympics*. New York: Young Readers.
- Burbank, J. M., Andranovich, G. D. & Heying, Impact of Mega-Events on Local Politics: Lynne Rienner

Semester – I
Theory Courses
EC-102 OFFICIATING AND COACHING (Elective)

OBJECTIVES:

1. To understand the basic concept and principles of officiating and coaching of different games and sports.
2. To understand the rules, regulations and officiating of different games and sports
3. To acquaint the students with the duties and responsibilities of an officials and coaches.
4. To acquaint the students with dimensions and actual markings of different play fields, courts and arenas
5. To understand the basic concept and principles of officiating and coaching of

Unit- I: Introduction of Officiating and coaching

1. Concept of officiating and coaching
2. Importance and principles of officiating and coaching
3. Relation of official and coach with management, players and spectators
4. Measures of improving the standards of officiating and coaching

Unit- II: Coach as a Mentor

1. Duties of coach in general, pre, during and post game.
2. Philosophy of coaching
3. Responsibilities of a coach on and off the field
4. Psychology of competition and coaching

Unit- III: Duties of Official

1. Duties of official in general, pre, during and post game.
2. Philosophy of officiating
3. Mechanics of officiating – position, singles and movement etc.
4. Ethics of officiating

Unit- IV: Qualities and Qualifications of Coach and Official

1. Qualities and qualification of coach and official
2. General rules of games and sports
3. Eligibility rules of intercollegiate and inter-university tournaments, preparation of TA, DA bills
4. Integrity and values of sports

Sessional Work: (Any One)

1. Discussion and presentation in the class regarding the principles of officiating and coaching and its requirement and preparation/planning.
2. Discussion on preparation of a team for competitions/tournaments as a coach or an official of an institute.

Reference Books:

- Bunn, J. W. (1968). The Art of Officiating Sports. Englewood cliffs N.J. Prentice Hall.
- Bunn, J. W. (1972). Scientific Principles of Coaching. Englewood cliffs N. J. Prentice Hall.
- Dyson, G. H. (1963). The Mechanics of Athletics. London: University of London Press Ltd.
- Lawther, J.D. (1965). Psychology of Coaching. New York: Pre. Hall.
- Singer, R. N. (1972). Coaching, Athletic & Psychology. New York: M.C. Graw Hill

Semester – II
Theory Courses
CC-201 SPORTS PSYCHOLOGY AND SOCIOLOGY

OBJECTIVE:

1. To develop an understanding of the nature, scope & methods of psychology and sociology in physical education & sports.
2. To acquire knowledge of the stages of growth & development with special emphasis on childhood & adolescence stage & physical education activities for the same.
5. To develop an understanding of the role of sociology in understanding physical education and sports from sociological point of view.
6. To develop an understanding of the concept of personality, factors affecting personality development and the role of teacher in promoting mental health of students.
7. To understand group structure and group dynamics as relevant to classroom situations.

Unit -I: Introduction

1. Meaning, Importance, scope of Educational and Sports Psychology
2. General characteristics of Various Stages of growth and development
3. Types and nature of individual differences; Factors responsible - Heredity and environment
4. Methods of psychological study: Introspection method, Observation method, Experimental method
5. Psycho-sociological aspects of Human behavior in relation to physical education and sports

Unit-II: Sports Psychology

1. Meaning & Definition of Learning, Nature of learning, theories of learning, Laws of learning,
2. Plateau in Learning; & transfer of training
3. Meaning and definition of personality, characteristics of personality
4. Dimension of personality, Personality and Sports performance
5. Meaning and definition of motivation, Nature of motivation, Factors influencing motivation; techniques of motivation and its impact on sports performance.
6. Mental Preparation Strategies: Attention focus, Self- talk, Relaxation, Imagery.
7. Meaning and nature of Aggression, types of Aggression, Aggression and Sports
8. Meaning and nature of anxiety, Kinds of anxiety, anxiety and Sports
9. Meaning and nature of stress; Types of stress, Arousal and their effects on sports performance

Unit-III: Sports Sociology and Physical Education.

1. Meaning and definition of Sports Sociology,
2. Customs, Tradition, Culture and Festivals
3. Socialization and stratification in Sports
4. Socialization through Physical Education.
5. Racial difference in Sports
6. Olympism in socialization process

Unit-IV: Culture : Meaning and Importance.

1. Features and importance of Sports culture
2. Effects of culture on people life style.
3. Politics and Sports
4. Violence in sports
5. Women in Sports
6. Sports economy

Sessional Work: (Any One)

1. Conduct at least 2 psychological tests and write a report on the findings.

2. Discuss and analyse the importance of sports in bringing the society in to a new world order.

References:

- Ball, D. W. & Loy, J. W. (1975). Sport and Social Order; Contribution to The Sociology Of Sport. London: Addison Wesley Publishing Co., Inc.
- Blair, J. & Simpson, R. (1962). Educational Psychology, New York: McMillan Co.
- Cratty, B. J. (1968). Psychology and Physical Activity. Eaglewood Cliffs. Prentice Hall.
- Kamlesh, M.L. (1998). Psychology in Physical Education and Sport. New Delhi: Metropolitan Book Co.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). Sport and Social System. London: Addison Wesley Publishing Company Inc.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). Sports Culture and Society. Philadelphia: Lea & Febiger.
- Mathur, S.S., (1962). Educational Psychology. Agra. Vinod Pustak Mandir.
- Skinner, C. E., (1984.). Education Psychology. New Delhi: Prentice Hall of India.
- William, F. O. & Meyer, F. N. (1979). A Handbook of Sociology. New Delhi: Eurasia Publishing House Pvt Ltd.

Semester – II
CC-102 ANATOMY AND PHYSIOLOGY - II

OBJECTIVES:

5. To enable the learner to understand the basic structure and function of human body.
6. To acquire the knowledge regarding effect of exercise on the body as a whole.
7. To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
8. To acquaint the learner with school health program.

UNIT-I

1. Introduction
2. Meaning and Definition of physiology, Exercise Physiology and Sports Physiology
3. Importance of Physiology in the field of Physical Education and Sports.
4. Role of oxygen- Physical Training, Oxygen Debt, Second Wind, Vital Capacity.
5. Pulmonary Volume: Inspiratory Reserve Volume, Expiratory Reserve Volume, Minute Respiratory Volume, Residual Volume

UNIT-II

1. Reproductive System: Introduction to Physiology of human reproduction.
2. Transmissions of hereditary characteristics
3. Excretory system and thermo regulation.
4. Blood Circulation: Pulmonary Circulation, Systemic Circulation, Coronary Circulation, Portal Circulation and Micro Circulation.
5. Sensory System: General Sensations – Cutaneous and Kinesthetic
6. Visual and Auditory senses.

UNIT-III

1. Meaning of Nerves, Neuron, Axon and Dendrites.
2. Physiology of skeletal muscles:
 - i. Microscopic Structure and functions of skeletal muscles
 - ii. Composition and Properties
 - iii. Contractile unit of skeletal muscles (Sarcomeres)
3. Nerve control of muscular activity:
 - i. Neuromuscular junction
 - ii. Transmission of nerve impulse across it.

UNIT-IV

1. Physiological concept of Health and Fitness.
2. Effect of exercise on – Circulatory, Respiratory and Muscular Systems.
3. Physiological concept of physical fitness, warming up, conditioning and fatigue.
4. Fuel for muscular activity:
 - a. Aerobic Activity
 - b. Anaerobic Activity
5. Basic concept of balanced diet:
 - a. Meaning and definition
 - b. Diet before Competition
 - c. During Competition, and
 - d. After Competition.

Sessional Work: (Any One)

4. Chart paper presentation on various systems of the body
5. Project work on effects of exercise on muscular, respiratory and cardio vascular system of the body.
6. Analysis and explanation on the concept of balanced diet and nutritional chart.

References

- Pearce, E.C. Anatomy and Physiology for nurses (Faber Ltd. : London 1962)
- Guyton, A.C. Function of the Human Body (W.B. Saunders Co., London)
- Srivastava, and et.al. Text book of Practical Physiology_(Scientific Book Agency; Calcutta)
- Maxhouse and Miller Physiology of Exercise_ (The C.V. Mosby Company, St. Louis)
- Karpovich and Sinuer Physiology of Muscular Activity (W.B. Saunders Company, London)
- Mathew, D.K. and Fox, E.L. Physiological basis of Physical Education and Athletics_(W.B. Saunders Co., Philadelphia, 1976)
- Mcardle, Katch &Katch, Exercise Physiology (Forth Edition) Williams & Wilkins -1996
- Richard W. Bowers & The late Edward L Fox, Sports Physiology, (Thirdded) W.m.C. Brown Publishers, 1992.
- David H. Clarke, Exercise Physiology, 1975 by Prentice Hall inc.
- C.C. Chatterjee, Human Physiology (Vol.I & II), by Sreemati Maya Chattejree & Ashok Chatterjee-1980
- Valcrie C. Scanlon, Essentials of Anatomy and Physiology.
- Scott K. Powers, Edward T. Howley, Exercise Physiology.
- Jack. H Willmar, Physiology of Sport and Exercise.
- Sandhya Tiwari 2009, Exercise Physiology
- David.B. Costill, 2011, Physiology of Sport and Exercise.

Semester – II
Theory Courses

CC-203 MANAGEMENT AND ADMINISTRATION IN PHYSICAL EDUCATION & SPORTS

OBJECTIVES:

1. To understand the importance of management of Physical Education at different level
2. To gain knowledge regarding the organization of various Physical Education programmes
3. To acquire knowledge regarding development of infrastructure and maintenance of facilities needed for Physical Education and Sports
4. To gain knowledge of various schemes and plans of State/Central Government.

Unit -I

5. Meaning and concept of Sports Management.
6. The purpose and scope of Sports Management.
7. Elements/Phases of Management (Planning; Organizing; staffing; Directing and Coordination; Supervision and Control/Evaluation; Re-adjustments and Improvement/Follow-up)
8. Principles of Management.
9. Essential skills of Sports Management.

Unit-II

1. Meaning and Definition of leadership
2. Elements of leadership, Qualities of a good leader
3. Forms of Leadership: Autocratic, Laissez-faire, Democratic, Benevolent Dictator
4. Tournament - Types of Tournament and its organization structure: Knock-out, League or Round Robin, Combination and challenge Tournament.
5. Draw of fixtures and seeding

Unit-III

1. Office management: Need for Office, Location and Set-up, Office Function.
2. Equipments and Materials: Need, Importance, Purchase, Care and Maintenance.
3. Records and Registers: Type of Record and Registers, Maintenance of attendance register/ stock register/cash register etc
4. Time-Table Management: Meaning, need & Importance of Time-Table
5. Factor affecting Time-Table, Principles for construction of Time-Table.

Unit-IV

1. Financial management: Preparation of the Financial Proposal for Physical Education & Sports in Schools/Colleges/ Universities
2. Budget–meaning, definition, Principles of budgeting, Importance, Steps of Budget making, Criteria of good budget,
3. Account Keeping, Petty Cash Fund/Imprest
4. Intramurals & Extramural Tournament

Sessional Work: (Any One)

1. Visit and preparation of detailed report on financial management and budget preparation of any sports institute.
2. Prepare a Plan for conduct of Inter College Sports Tournament consisting colleges affiliated to RG, Doimukh

References:

- Ashton, D. (1968). Administration of Physical Education for Women. New York: The Ronald Press Cl.
- Bucher, C.A. Administration of Physical Education and Athletic Programme. 7th Edition, St. Louis: The C.V. Mosby Co.
- Daughtrey, G. & Woods, J.B. (1976). Physical Education and Intramural Programmes, Organisation and Administration. Philadelphia U.S.A. : W.B. Saunders Cp.
- Earl, F. Z. & Gary, W. B. (1963). Management Competency Development in Sports and Physical Education. Philadelphia: W. Lea and Febiger

Semester – II
Theory Courses

EC-201 EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION (ELECTIVE)

OBJECTIVES:

1. To understand the conceptual framework of educational technology.
2. Make use of instructional media in physical education
3. To familiarize the learner about the teaching learning process
4. To acquaint the learner with the principles of teaching physical activity.
5. To acquaint the students with planning, objectives of different types of lessons.
6. To bring awareness of innovation in teaching process

Unit – I Concept of Educational Technology

1. Nature and Scope of Educational Technology
2. Objectives of Education Technology
3. Forms of Education Technology
4. Use of Education Technology
5. Types of Education- Formal, Informal and Non- Formal Education

Unit – II Teaching Techniques

1. Teaching Techniques – Lecture method, Command method, Demonstration method, Imitation method, project method etc.
2. Teaching Procedure – Whole method, whole – part – whole method, part – whole method, Stage-Whole Method.
3. Presentation Technique – Personal and technical preparation
4. Command- Meaning, Types and its uses in different situations.

Unit – Teaching Aids

1. Teaching Aids – Meaning, Importance and criteria for selecting teaching aids.
2. Teaching aids – Audio aids, Visual aids, Audio – visual aids, Verbal, Chalk board, Charts, Model, Slide & LCD projector, Motion pictures, computers, Laptops etc.
3. Team Teaching – Meaning, Principles and advantage of team teaching.
4. Difference between Teaching Methods and Teaching Aid.

Unit – IV Lesson Planning and Teaching Innovations

1. Meeting sources and identification of teaching skills
1. Macro Teaching, Micro Teaching – Meaning, Types and steps of micro teaching.
2. Simulation Teaching - Meaning, Types and steps of simulation teaching and Simulated Social Skill Teaching (SSST)
3. Meaning, importance of Lesson Plan (General and specific lesson plan), Steps of Lesson Plan and Evaluation

Sessional Work: (Anyone)

1. Preparation of Instructional based on PI or PSI
2. Writing of instructional objectives in behavioral form
3. Teaching through computer
4. Preparation of Lesson Plan

Reference:

- Bhardwaj, A. (2003). New Media of Educational Planning. New Delhi: Sarup Sons.
- Bhatia,& Bhatia,(1959). The Principles and Methods of Teaching. New Delhi: Doaba House.
- Kochar, S.K. (1982). Methods and Techniques of Teaching. New Delhi: Sterling Publishers Pvt. Ltd.
- Sampath, K.,Pannirselvam, A. & Santhanam, S. (1981). Introduction to Educational Technology. New Delhi: Sterling Publishers Pvt. Ltd.
- Walia, J.S. (1999). Principles and Methods of Education. Jallandhar: Paul Publishers.

Semester - II
Theory Courses
EC-202 NUTRITION AND WEIGHT MANAGEMENT (ELECTIVE)

OBJECTIVES:

1. Through this paper the students will acquire knowledge about the nutrition and its components
2. The students will acquire knowledge regarding the relationship between nutrition and weight management
3. The students will also gain knowledge about the relationship between balanced diet and maintenance of a healthy life style

Unit – I Introduction to Nutrition

1. Meaning and Definition of Nutrition
2. Basic Nutrition guidelines
3. Role of nutrition in sports
4. Factors to be considered for developing nutrition plan

Unit – II Nutrients: Ingestion to energy metabolism

1. Carbohydrates, Protein, Fat – Meaning, classification and its function
2. Role of carbohydrates, Fat and protein during exercise
3. Vitamins, Minerals, Water – Meaning, classification and its function
4. Role of hydration during exercise, water balance, Nutrition – daily caloric requirement and expenditure.

Unit – III Nutrition and Weight Management

1. Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
2. Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss
3. Obesity – Definition, meaning and types of obesity,
4. Health Risks Associated with Obesity, Obesity - Causes and Solutions for Overcoming Obesity.

Unit – IV Steps in Planning Weight Management

1. Nutrition – Daily calorie intake and expenditure, Determination of desirable body weight
2. Balanced diet for Indian School Children, Maintaining a Healthy Lifestyle
3. Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

Sessional Work: (Any One)

1. Discuss and analyse on various components of nutrition and its role in maintenance of human body.
2. Plan a balanced diet with an exercise schedule for an individual with issues of obesity.

References:

- Butryn, M.L., Phelan, S., & Hill, J. O.(2007). Consistent Self-Monitoring of Weight: a Key Component of Successful Weight Loss Maintenance. *Obesity*(Silver Spring). 15(12), 3091-3096.
- De Maria, E. J. (2007). Bariatric Surgery for Morbid Obesity. *N. Engl J Med*,356(21), 2176-2183. Dixon, J.B., O'Brien, P.E., Play fair, J. (n.d.). Adjustable Gastric Banding and Conventional Therapy for type 2 Diabetes: A Randomized Controlled Trial. *JAMA*. 299(3), 316-323

Semester – III
Theory Courses
CC-301 SPORTS TRAINING

OBJECTIVES

1. To understand the basic concept and principles of training of different games and sports.
2. To understand the rules and regulations of different games and sports
3. To acquaint the students with the duties and responsibilities of an officials and coaches.
4. To understand the methods of conditioning exercises, planning and periodisation of training

Unit – I Introduction to Sports Training

10. Meaning and Definition of Sports Training
11. Aim and Objective of Sports Training
12. Principles of Sports Training
13. System of Sports Training – Basic Performance, Good Performance and High Performance Training

Unit – II Training Components

1. Strength – Mean and Methods of Strength Development
2. Speed – Mean and Methods of Speed Development
3. Endurance - Mean and Methods of Endurance Development
4. Coordination – Mean and Methods of coordination Development
5. Flexibility – Mean and Methods of Flexibility Development

Unit – III Training Process

1. Training Load- Definition and Types of Training Load
2. Principles of Intensity and Volume of stimulus
3. Technical Training – Meaning and Methods of Technique Training
4. Tactical Training – Meaning and Methods of Tactical Training

Unit – IV Training programming and planning

1. Periodization – Meaning and types of Periodization
2. Aim and Content of Periods – Preparatory, Competition, Transitional etc.
3. Planning – Training session
4. Talent Identification and Development

Sessional Work: (Any One)

1. Prepare a detailed Chart indicating the training methods of developments of strength, speed, endurance, flexibility etc.
2. Prepare a detailed chart discussing the different types of training methods.

Reference:

- Dick, W. F. (1980). Sports Training Principles. London: Lepus Books.
- Harre, D. (1982). Principles of Sports Training. Berlin: Sporulated.
- Jensen, R. C. & Fisher, A.G. (1979). Scientific Basis of Athletic Conditioning. Philadelphia: Lea and Fibiger, 2nd Edn.
- Matvyew, L.P. (1981). Fundamental of Sports Training. Moscow: Progress Publishers.
- Singh, H. (1984). Sports Training, General Theory and Methods Patiala: NSNIS.
- Uppal, A.K., (1999). Sports Training. New Delhi: Friends Publication.

Semester – III
Theory Courses
CC-302 COMMUNICATION SKILLS

OBJECTIVE:

1. Students will learn about effective communication using verbal and written techniques, including electronic media.
2. To enable the students to select and apply communication skills to resolve conflict and effectively respond to others.
3. To enable the students to demonstrate their communication skills in contexts such as formal presentations, informal interactions, movement settings, social situations and in advocating health and physical activity.

Unit-I : Introduction to communication

1. Meaning and significances of communication
2. Types of communication
3. Methods of communication
4. Barriers to effective communication
5. Developing effective communication skills

Unit-II : Written communication and Correspondence

1. Principles of effective communication
2. Composition of sentences
3. Mechanics of communication in writing
4. Letters of placing an order, Cancellation of order, Return of goods
5. Report writing on completion of sports events and Functions held in an institute / school
6. Minutes, Agenda, Welcome speech, and Vote of thanks
7. Application for job, Bio-data, CV and Resume

Unit-III : Non-verbal communication

1. Para language, body language and its significance
2. Carbon copying and effective use of body parts in communication
3. Area of influence and local culture
4. Indicators and pointers
5. Chairs, Tables and Office setup

Unit-IV: Special communicative skills

1. Motivational skills, Negotiation skills, Interpersonal skill and Interview technique
2. One to one meeting
3. Round Table Conference
4. Seminars, Conferences, Workshops
5. Group Discussion
6. Interpretation of graphic data
7. Master of Ceremony
8. Soft skills for academic presentations– Structuring the presentation - Choosing appropriate medium (Flip charts – Power Point presentations) – Clarity and brevity - Interaction and persuasion - Interview skills –Group Discussions

Sessional Work: (Any One)

1. Conduct of Mock Interview and assessment by Teacher
2. Power Point presentation of Bio-data by students
3. Drafting of Letters on various points
4. Importance of Non Verbal Communication in physical education profession.

Reference:

- Effective Communication for Arts and Humanities Students, Joan Van Emden and Lucinda Becker: Palgrave Macmillan
- Sharma R. C., Mohan Krishna, Business Correspondence and Report Writing (New Delhi : Tata McGraw -Hill Co. Ltd. 2002)

Semester – III
Theory Courses

CC-303 SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

OBJECTIVES:

1. This paper will help understand the need and importance of sports medicine, Physiotherapy and rehabilitation techniques and process
2. Will help the students to understand and facilitate the process of recovery from injury, illness or disease to normal condition as soon as possible.
3. Will enable the learners in acquiring proper and adequate rehabilitation program in helping athletes or sportsperson to reverse many disabling conditions or patients cope with deficits that cannot be reversed by medical care.

Unit-I: - Sports Medicine:

1. Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance.
2. Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches.
3. Need and Importance of the study of sports injuries in the field of Physical Education
4. Prevention of injuries in sports – Common sports injuries – Diagnosis –
5. First Aid - Treatment - Laceration – Blisters – Contusion - Strain – Sprain – Fracture – Dislocation and Cramps – Bandages – Types of Bandages – trapping and supports.

Unit-II: Physiotherapy

1. Definition – Guiding principles of physiotherapy, Importance of physiotherapy
2. History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.
3. Introduction and demonstration of treatments - Electrotherapy – infrared rays – Ultraviolet rays –short wave diathermy – ultrasonic rays.

Unit-III: Hydrotherapy:

1. Introduction and demonstration of treatments of Cryo therapy, Thermo-therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation; Massage:

Unit-IV: Therapeutic Exercise:

1. Definition and Scope – Principles of Therapeutic Exercise – Classification, Effects and uses of Therapeutic exercise – passive Movements (Relaxed, Forced and passive - stretching)
2. Active movements (concentric, Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Shoulder, Elbow – Wrist and Finger Joints – Hips, Knee, ankle and Foot joints – Trunk. Head and Neck exercises.

Sessional Work: (Any One)

1. Visit to a local physio-therapy centre and preparing a detailed report on types of injuries, equipments and other requirements for an ideal physio-therapy centre.
2. Preparing a list of injuries involved in at least 15 games and sports.

References:

- Christine, M. D., (1999). Physiology of Sports and Exercise.USA: Human Kinetics.
- Conley, M. (2000). Bioenergetics of Exercise Training. In T.R. Baechle, & R.W. Earle, (Eds.), Essentials of Strength Training and Conditioning (pp. 73-90). Champaign, IL: Human Kinetics.
- David, R. M. (2005).Drugs in Sports, (4th Ed). Routledge Taylor and Francis Group.
- Hunter, M. D. (1979). A Dictionary for Physical Educators. In H. M. Borrow & R. McGee, (Eds.), A Practical Approach to Measurement in Physical Education (pp. 573-74). Philadelphia: Lea & Febiger
- Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.
- Khanna, G.L., (1990). Exercise Physiology & Sports Medicine. Delhi: Lucky Enterprises.
- Mathew, D.K. & Fox, E.L, (1971). Physiological Basis of Physical Education and Athletics. Philadelphia: W.B. Saunders Co.

Theory Courses
EC-301 CURRICULUM DESIGN (Elective)

OBJECTIVES

1. To understand the concept of curriculum and its development and physical education
2. Understand the utility of curriculum
3. To understand the place of Physical Education in school curriculum.
4. To acquaint the learner with planning, presentation technique and class management of teaching various activities in Physical Education.
5. To acquaint the learner with different methods of teaching physical activities.
6. To acquaint the learner with the principles of teaching physical activity.
7. To acquaint the students with planning, objectives of different types of lessons.
8. To acquaint the learner with organizing and conducting various types of tournaments and athletic meet.

Unit-I Conceptual framework of curriculum in relation to physical education

1. Concept, nature and need of curriculum.
2. Principles of curriculum development in physical education.
3. Segments of curriculum
4. Bases of curriculum

Unit-II Curriculum development

5. Curriculum Theory
6. Types of curriculum
7. Development of curriculum :various steps

Unit- III Curriculum Transaction.

8. Process of curriculum transaction
9. Instructional objectives
10. Content analysis
11. Teaching strategies
12. Use of hardware and software

Unit - IV Evaluation of Curriculum

13. Concept of evaluation
14. Steps of curriculum evaluation
15. Utility of curriculum evaluation
16. Feedback and modification of curriculum
17. Action research

Sessional Work:

1. Analysis of Curriculum of B. P. Ed.
2. Selecting a problem and conducting a action research
3. Content analysis of any paper of B. P. Ed. And suggesting some measures to improve the paper.

References:

- Barrow, H. M. (1983). Man and Movement: Principles of Physical Education. Philadelphia:Lea and Febiger.
- Bucher, C. A. (1986). Foundation of Physical Education: St. Louis: The C. V. Mosby & Company.
- Cassidy, R. (1986). Curriculum Development in Physical Education. New York: Harper & Company
- Cowell, C.C. & Hazelton, H.W (1965). Curriculum Designs in Physical Education. Englewood Cliffs: N.J. prentice Hall Inc.
- Larson, L.A. (n.d.). Curriculum foundation in Physical Education. Englewood Cliffs: N.J. Prentice Hall Inc.

Semester - III
Theory Courses
EC-302 YOGA EDUCATION (ELECTIVE)

OBJECTIVES

1. This paper will help the students to learn the origin and history of yoga in India and the importance of yoga in daily life.
2. Will help in acquiring knowledge about Yoga education in prevention of disease and promotion of health
3. To train students in Yogic principles and practices.
4. To prepare and standardized Yoga teaching and training programme in the Arunachal context

Unit – I: Introduction

1. Meaning and Definition of Yoga
2. Aims and Objectives of Yoga
3. Yoga in Early Upanisads
4. The Yoga Sutra: General Consideration
5. Need and Importance of Yoga in Physical Education and Sports

Unit - II: Foundation of Yoga

1. The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
2. Yoga in the Bhagavadgita - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

Unit - III Asanas

1. Effect of Asanas and Pranayama on various system of the body
2. Classification of asanas with special reference to physical education and sports
3. Influences of relaxative, meditative posture on various system of the body
4. Types of Bandhas and mudras
5. Type of kriyas

Unit – IV Yoga Education

1. Yoga for various groups according to need and as a rehabilitative form
2. Difference between yogic practices and physical exercises
3. Yoga education centers in India and abroad
4. Competitions in Yogasanas

Sessional Work: (Any One)

1. One lecture on importance of Yoga Education on Various NCDS (Non Communicable Disease) i.e. Hypertension, diabetes etc.
2. Project work on benefits of yoga on stress management.

References:

- Brown, F. Y.(2000). How to Use Yoga ? Delhi: Sports Publication.
- Gharote, M. L. & Ganguly, H. (1988). Teaching Methods for Yogic Practices.
- Rajjan, S. M. (1985). Yoga Strengthening of Relaxation for Sports Man. New Delhi Publishers.
- Shankar, G.(1998). Holistic Approach of Yoga. New Delhi: Aditya Publishers.
- Shekar,K. C. (2003). Yoga for Health. Delhi: Khel Sahitya Kendra.

Semester – IV
Theory Courses

CC-401 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION & SPORTS

OBJECTIVE

1. To understand the concept of test, Measurement, Evaluation and Assessment Procedure in Physical Education.
2. To understand different tests in Physical Education.
3. To acquire the knowledge of various tests regarding Physical fitness, motor and health related fitness.
4. To understand various sports skill tests

Unit- I Introduction to Test & Measurement & Evaluation

2. Meaning of Test & Measurement & Evaluation in Physical Education
18. Need & Importance of Test, Measurement & Evaluation in Physical Education
19. Principles of test, measurement & evaluation
20. Formative and summative evaluation and principles of evaluation

Unit- II Criteria; Classification and Administration of test

1. Types and classification of test
2. Criteria of good tests
3. Administration of test, advance preparation – Duties during testing – Duties after testing.

Unit- III Physical Fitness Tests

1. AAHPER youth fitness test
2. Kraus Weber Fitness Test
3. Indiana Motor Fitness Test
4. JCR test
5. Harvard Step Test
6. Tuttle Pulse Ratio Test

Unit- IV Sports Skill and Social Efficiency Tests

1. Lockhart and McPherson badminton test
2. Johnson basketball test
3. McDonald soccer test
4. Brady volleyball test
5. Harbans Hockey test
6. Meaning of Social Efficiency.
7. Mc Cloy's Behaviour Rating Scale.
8. Cowell Social behaviour Trend Index.

Sessional Work: (Any One)

1. Conducting a test for assessment of strength and speed abilities of athletes and preparing a report.
2. Conducting a test for assessment of endurance and flexibility of an athlete and preparing a report

References:

- Bangsbo, J. (1994). Fitness Training in Football: A scientific approach. Bagsvaerd, Denmark
- Barron, H. M., & Mchee, R. (1997). A Practical Approach to Measurement in Physical Education. Philadelphia: Lea and Febiger.
- Barron, H.M. & Mchee, R. (1997). A Practical Approach to Measurement in Physical Education. Philadelphia: Lea and Febiger.
- Mathews, D.K., (1973). Measurement in Physical Education, Philadelphia: W.B. Sounders Company.
- Pheasant, S. (1996). Body Space: Anthropometry, Ergonomics and Design of Work. Taylor & Francis, New York.

Semester – IV
Theory Courses
CC-402 KINESIOLOGY AND BIOMECHANICS

OBJECTIVES:

1. To enable the learner to understand the basic structure and function of human body.
2. To acquire the knowledge regarding effect of exercise on the body as a whole.
3. To understand the importance of normal movements of the human body and kinesiological analysis.
4. To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
5. To enable the learner to understand the need and importance of health education and community health.
6. To acquaint the learner with school health programme.

Unit – I Introduction to Kinesiology and Sports Biomechanics

1. Meaning and Definition of Kinesiology and Sports Biomechanics
2. Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches.
3. Terminology of Fundamental Movements
4. Fundamental concepts of following terms – Axes and Planes, Centre of Gravity, Equilibrium, Line of Gravity

Unit – II Fundamental Concept of Anatomy and Physiology

1. Classification of Joints and Muscles
2. Types of Muscle Contractions
3. Posture – Meaning, Types and Importance of good posture.
4. Fundamental concepts of following terms- Angle of Pull, All or None Law, Reciprocal Innervations

Unit – III Mechanical Concepts

1. Force - Meaning, definition, types and its application to sports activities
2. Lever - Meaning, definition, types and its application to human body.
3. Newton's Laws of Motion – Meaning, definition and its application to sports activities.
4. Projectile – Factors influencing projectile trajectory.

Unit – IV Kinematics and Kinetics of Human Movement

1. Linear Kinematics – Distance and Displacement, speed and velocity, Acceleration
2. Angular kinematics – Angular Distance and Displacement, Angular Speed and velocity, Angular Acceleration.
3. Linear Kinetics – Inertia, Mass, Momentum, Friction.
4. Angular Kinetics – Moment of inertia , Couple, Stability.

Sessional Work: (Any One)

1. Preparation of a study material on various terminologies of fundamental movements to teach students.
2. Preparation of Charts to teach the mechanical concepts applicable in sports.

Reference:

- Bunn, J. W. (1972). Scientific Principles of Coaching. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Hay, J. G. & Reid, J. G.(1982).The Anatomical and Mechanical Basis of Human Motion. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Hay, J. G. & Reid, J. G.(1988).Anatomy, Mechanics and Human Motion. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Hay, J. G. (1970).The Biomechanics of Sports Techniques. Englewood Cliffs, N.J.: Prentice Hall, Inc.

Semester – IV
Theory Courses
CC-403 HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

OBJECTIVES:

1. To understand the components of health education.
2. To study various kind of communicable & infectious diseases
3. To create awareness about fitness & its importance in life.
4. To create awareness about the relationship between human being and the environment
5. To educate the students regarding the importance of sustainable development

Unit – I Health Education

1. Concept, Dimensions, Spectrum and Determinants of Health
2. Definition of Health, Health Education, Health Instruction, Health Supervision
3. Aim, objective and Principles of Health Education
4. Health Service and guidance instruction in personal hygiene

Unit – II Health Problems in India

1. Communicable and Non Communicable Diseases
2. Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population,
3. Personal and Environmental Hygiene for schools
4. Objective of school health service, Role of health education in schools
5. Health Services – Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

Unit – III Environmental Science

1. Definition, Scope, Need and Importance of environmental studies
2. Concept of environmental education, Historical background of environmental education
3. Celebration of various days in relation with environment.
4. Plastic recycling & probation of plastic bag / cover.
5. Role of school in environmental conservation and sustainable development.

Unit – IV Natural Resources and related environmental issues:

1. Water resources, food resources and Land resources
2. Definition, effects and control measures of:
3. Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution
4. Management of environment and Govt. policies, Role of pollution control board.

Sessional Work: (Anyone)

1. Taking a class on awareness and concept of health education, determinants health and personal hygiene.
2. Prepare a course material on impact of pollution and on various resources, human health and eco system.

References:

- Agrawal, K.C. (2001). Environmental Biology. Bikaner: Nidhi publishers Ltd.
- Frank, H. & Walter, H., (1976). Turners School Health Education. Saint Louis: The C.V. Mosby Company.
- Nemir, A. (n.d.). The School Health Education. New York: Harber and Brothers.
- Odum, E.P. (1971). Fundamental of Ecology. U.S.A.: W.B. Saunders Co.

Semester – IV
Theory Courses
EC-401 ADAPTED PHYSICAL EDUCATION (ELECTIVE)

OBJECTIVES:

1. To understand the meaning, need and importance of Adapted Physical Education
2. To enable the students to know the purpose, aims and objectives of Adapted Physical Education
3. To understand the Test, Measurement and Evaluation in Adapted Physical Education
4. To develop the Individual Education Program of Adapted Physical Education
5. To understand the role of games and sports in disability and physical activity implications through Adapted Physical Education
6. Understand wide range of disabilities and associated characteristics
7. Understand how specific individual characteristics can influence movement skill functioning

Unit - I : An Introduction to Adapted Physical Education

1. Meaning, Need and Importance of Adapted Physical Education and Sports
2. Purpose, Aims and Objectives of Adapted Physical Education and Sports
3. Program organization of Adapted Physical Education and Sports
4. Adapted Sports- Para Olympics
5. Test, Measurement and Evaluation in Adapted Physical Education

Unit - II: Development of Individual Education Program (IEP)

1. The student with a disability
2. Components and Development of IEP
3. Principles of Adapted Physical Education and Sports
4. Role of Physical Education teacher
5. Teaching style, method and approach in teaching Adapted Physical Education

Unit - III: Developmental Considerations of an Individual

1. Motor development
2. Perceptual Motor development
3. Early childhood and Adapted Physical Education

Unit - IV: Individual with unique need and activities

1. Behavioral and Special learning disability
2. Visual Impaired and Deafness
3. Health Impaired students and Physical Education
4. HRPF and its development for Individual with unique need
5. Role of games and sports in Adapted Physical Education

Sessional Work: (Anyone)

1. Analyse and Discuss in detail the causes of different types of disabilities (cognitive, affective & psychomotor)
2. Visiting any institution specialized in care of children with disabilities a preparing a suitable exercise programme for the students.

Reference:

- Beverly, N. (1986). Moving and Learning. Times Mirror/Mosby College Publishing.
- Cratty, B.J. Adapted Physical Education in the Mainstream. (4th Edition) Love Publishing Company.
- Houser, L.D. Integrated Physical Education- A Guide for the Elementary Classroom Teacher.
- Winnick, J. P. (2005). Adapted Physical Education and Sports. Human Kinetics (4th Edition).
- Pangrazi, R.P. and Dauer, V. P. Dynamics Physical Education for Elementary School Children. (11th Edition): Allyn and Bacon Publishing.

Semester – IV
Theory Courses
EC 402 FIRST AID AND SAFETY EDUCATION (ELECTIVE)

OBJECTIVES:

1. To enable the students to understand the meaning, need and importance of First Aid and Safety Education in daily life
2. Will help students in explaining the factors leading to sports injuries
3. Describe in detail the symptoms, causes and treatment of common sports injuries
4. Take safety measures to reduce the risk of sports injuries
5. Will help the students to equip themselves in the initial care of injuries in sporting situations and any kind of emergencies in daily life
6. Acquainting the students with some of the things that make the environment unsafe, as well as some consequences of unsafe environment and risk behaviours.

Unit - I : Meaning of First Aid and Safety Education

1. Definition of First Aid and Emergency care and Safety Education and accident prevention
2. Knowledge of first aid and Safety Education and accident prevention
3. Need and importance of Health and Safety in Daily Life
4. Effect of common injuries and their management

Unit - II: Factors Leading to Sports Injuries

1. Environmental factors-heat cramps, heat exhaustion, heatstroke-hypothermia due to cold, Frostbite, Wind chill - rain and very high relative humidity and control of movement-outdoors activities- air pollution, Air Quality Health Index respiratory and cardiovascular diseases
2. Facilities and equipment installation - inspection and regular maintenance-proper fitting of clothing and materials - impact-absorbing- Sports grounds- scientific design, regular maintenance, removal of unwanted foreign substances, regular watering and mowing of outdoor courts-curb on an athletics track
3. Protective devices to reduce the risk of injury
4. Level of skill, Level of fitness, Physical limitations, Nature of different sports, Level of contact, Mismatching of players
5. Physical limitations -height, weight, strength, Eyesight, high arch or flat feet and technique
6. Nature of different sports - Level of contact - Mismatching of players

Unit – III Common sports injuries

1. Bleeding-Abrasion-Contusion – injury to soft tissue (Musculoskeletal injuries)- Dislocation – injury to joint (Musculoskeletal injuries)
2. Heat cramps- Heat Stroke
3. Closed fracture
4. Direct trauma:
5. Avulsion fracture
6. Stress fracture : Open fracture, Stress Fracture, Pulled / Strained muscle – injury to muscle
7. Sprain – injury to ligaments
8. Heat and Cold Injuries – Environmental injuries
9. Heat injuries: Heatstroke, Heat exhaustion
10. Overuse injuries

Unit – IV Emergency care and treatment of injuries

1. General principles of first aid - **P R I C E**
2. Types of Emergency, knowledge and its care of - Respiratory emergencies (Asphyxiation)- CPR(cardio pulmonary resuscitations)- Poisoning- Bites (Insect-Snake-Human- Animal)
3. Sudden illness or injury- Heart attack, stroke- burns and radiation.
4. Entry of foreign particles in the body- Eyes, Ear and Nose

Sessional Work: (Any One)

1. Power point presentation explaining various types of sports injuries.
2. Preparing a chart paper educating school students on Safety Education.

Reference:

- Laoye, J.A. (1979). Principle and Practice of Health Education. Ibadan: Macmillan Publisher. ISBN: 03330-86260.
- Obiyemi O. O. and Oyerinde (2001). First Aid and Safety Education. Ilorin: Department of Human Kinetics and Health Education, University of Ilorin. ISBN: 978-2900-30-2.
- Oyerinde, O.O. (1994). All time Health Education for College Students and Individuals, 1st Ed. Ibadan – Fabonis Publishers.
- Hyde, T.E., & Gengenbach, M.S. (2007). Conservative Management of Sports Injuries. Sudbury, MA: Jones and Bartlett.
- Bird, S., Neil, B. & Newton, P. (Eds.). (1997). Sports Injuries: Causes, Diagnosis, Treatment and Prevention. Cheltenham, UK: Stanley Thornes.

Syllabus for Practical Course

SEMESTER -I

PC – 101 Track & Field –I (Track Events)

A. Sprints

1. Methods of starts.
2. Standing and Crouch start.
3. Starting strides and body position

B. Medium & distance running

1. Standing starts
2. First 50 M. run
3. Strides and body position in running
4. Pace judgment

C. Hurdles races (100 M., 110 M. and 400 M.)

1. Start
2. strides to the first hurdle
3. Strides between hurdles and finish)
4. hurdle clearance

D. Relay races

1. Visual and non-visual methods
2. Methods of holding the baton
3. Passing the baton
4. Arrangement of runners
5. Responsibilities of receiver and passer

References:

1. IAAF Competition Rules.
2. Track and Field Events Layout and Marking by George Emmanuel
3. Track and Field by Gerhardt Schmolinsky.

PC – 102 Badminton

1. Introduction and History of badminton at National and International Level.
2. Introduction of Equipment's and Measurement of the courts.
3. Fundamental Basic technique and skills :

Technique: **a.** Hand grips, **b.** Footwork

Skills:

Shots Category

- Clear Shots :
- Fore Hand and Back Hand Overhead Clear, Around the head clear, Underhand clear shot.
- FH and BH Drives
- FH and BH Smash
- Drop Shot
 - Net play(Net push, Net kill, Net lift (Net clear)
 - Offensive Attacks (Offensive Drive, Drop & Smash

b. Service and returning

- Short Service (low, drive, and high service)
- High Service

4. Mechanics of officiating.
5. International and National Championship and Records.

References

- Chin, M. K., Wong, S. K., So, C. H., Steininger, K., and Lo, T. L. (1995). Sport specific fitness testing of elite badminton players. *British Journal of Sports Medicine*, 29, 3, 153-157.
- Guang, Y., Lu, Zhi, & Jiang, J. (2008). Influence of 21 point system on development of men's singles technique and tactics of badminton. *Journal of Shanghai University of Sport*, 32, 2.

PC – 102 Volleyball

Unit-I

1. Origin and brief history of Volleyball.
2. Development of Volleyball in India and worldwide.
3. Establishment of national and international federations/associations of Volleyball.
4. Major tournaments of Volleyball.
5. Awards associated with Volleyball.

Unit-II

1. Measurements and marking of Volleyball court.
2. Specifications of Volleyball.
3. Preparation and maintenance of Volleyball court.
4. Officials, no. of officials and duties of officials in the game of Volleyball.
5. Technical equipments for officiating.

Unit-III

1. Development of Motor Components: Speed, Strength, Coordination, Endurance, Flexibility specific to Volleyball along with conditioning and worming up exercises
2. Fundamental Skills of Volleyball:
 - a. Receiving and Passing - Player's stance, Underarm pass, Overhead pass.
 - b. Service : Underarm serve, Side-arm serve, Overhead serve, Jump serve.
 - c. Set up : High set, Medium set, Short set, Wide set.
 - d. Block : Single block, Double block, Triple block.
 - e. Spike : Straight arm spike, Round arm spike, Smash with turn of body, Smash on short ball.
 - f. Defensive Skills : Dig, Sprawl, Extension roll.

Unit-IV

1. Major rules and regulations of Volleyball.
2. Important Signals in Volleyball.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Volleyball.
6. Lead-up Games: Bounce Volleyball, the setting game, two against two and three against three, King/queen of the court.

References:

1. American Volleyball Coaches Association (2005), "Volleyball : Skills and Drills", Human Kinetic, USA.
2. Dhanraj, H. V. "Volleyball for men & Women" New Delhi: Y.M.C.A. Publishing house

3. Nicllac, S. "Winning Volleyball", London: Stanely Paul & Co. Ltd.
4. Sagar, S. K. "Cosco skill Tactics -Volleyball ", Delhi: Sports publication
5. Scates, A.E. "Winning Volleyball", USA: W. C. Brown

PC – 103 Football

1. Introduction of Football International and National level. International and National organisation of Football. Introduction of Equipment and dimension of ground.

4. Law of Football

5. Fundamental Skills

I) Kicks-Inside kick, Instep kick, Outer instep kick, lofted kick

II) Trapping-trapping rolling the ball, trapping bouncing ball with sole

III) Dribbling-With instep, inside and outer instep of the foot.

IV) Heading-From standing, running and jumping.

V) Throw in

VI) Feinting-With the lower limb and upper part of the body.

VII) Tackling-Simple tackling, Slide tackling.

VIII) Goal Keeping-Collection of balls, Ball clearance-kicking, throwing and deflecting.

6. National and International Competition.

Reference

1. How to Play Soccer: A Beginner's Guide to Learning Soccer Rules and Regulations, Getting the Hang of Important Practice Drills, and Playing Soccer Like a ProMay 8, 2015 by Matthew Price
2. DK Readers L1: Let's Play SoccerMar 3, 2008by Patricia J. Murphy
3. The Ultimate Guide to Soccer Positions - Learn How to Succeed on any Soccer PositionDec 26, 2013 by MirsadHasic
4. www.fifa.com

SEMESTER-II

Part-B Practical Course

PC-201 Track & Field –II (Field Events)

Jumping Events

A. High Jump Western and Straddle Roll

1. Approach Run, 2. Take Off, 3. Cross Bar Clearance, 4. Landing

B. Long Jump (Shill Hang and Hitch-Rick Style

1. Approach Run, 2. Take Off

C. Triple Jump

1. Approach Run, 2. Take Off, 3. Landing of all the three Phase-Hop, Step and Jump

Throwing Events

A. Shot-throw and Put

1. Hand hold, 2. Placement of shot, 3. Initial stance, 4. Glide, 5. Delivery stance, 6. Delivery action and body position, 7. Reserve and body position

B. Throwing the Discus

1. Hand hold, 2. Stance, 3. Preliminary swing 4, Turn 5. Delivery stance,
6. Delivery action, 7. Reverse

C. Throwing the javelin

1. Grip, 2. Carrying the javelin, 3. Getting ready to throw, 4. Delivery Stance,
5. Delivery action, 6. Reverse

6. IAAF Competition Rules.
7. Track and Field Events Layout and Marking by George Emmanuel
8. Track and Field by Gerhardt Schmolinsky

PC-202 Yoga

1. Introduction of Yoga in International and National level.
2. International and National organisation of Yoga.
3. Introduction of Equipments in yoga.

4. Introduction of Asanas, Pranayama and Kriyas,
 - i) Surya Namaskara
 - ii) Pranayams
 - iii) Corrective Asanas
 - iv) Sitting
 - v) Standing
 - vi) Laying Prone Position,
 - vii) Laying Spine Position

Reference:

- ❖ Mark Singleton, Yoga Body: The Origins of Modern Posture Practice Publisher Oxford University Press, 2010. ISBN 0199745986, 9780199745982
- ❖ Sadhguru, Adiyogi: The Source of Yoga Publisher, HarperCollins Publishers India, 2017 ISBN 9352643933, 9789352643936
- ❖ Joseph S. Alter, Yoga in Modern India: The Body Between Science and Philosophy, Publisher Princeton University Press, 2004 ISBN 0691118744, 978069111874.

PC-203 Kho Kho

1. 1 Introduction of the game and historical development with specific reference to India
2. Important tournaments held at national and international level and distinguished personalities related to the game.

3. Fundamental skills:
 - 3.1. Offensive skills:
 - Sitting in the square
 - Giving Kho (simple, judgement, late, advance, proximal and cross step method kho)
 - Turning at the pole
 - Tapping
 - Covering (Biped and Quadruped method)

- Dive (sitting, running, pole and side dive)

3.2 Defensive skills:

- Entering the field of play
- Positioning on the post
- Running skills (single chain, double chain and three six-up)
- Ring (short medium and long ring)

4. Rules and their interpretations
5. Duties of Officials and their Signals

References:

- Gouric Kho-Kho Avalokan (New Delhi, Khel Sahitya Kendra) 2005.
- Kho-Kho, the game of chase and thrill, Bombay Maharashtra Kho-Kho Association.
- Yogesh Yadav, Kho-Kho, Maharashtra Kho-Kho Association, 1969.

PC-203 Kabaddi

1. Brief history of Kabaddi including important competitions and personalities.
 - 1.1 Demonstration of basic skills of Kabaddi
 - 1.2. To familiarise with the rules and officiating of Kabaddi.
 - 1.3. To familiarise with the basic teaching patterns.
 - 1.4. To familiarise with methods of construction, layout and making of Kabaddi ground
2. Origin and brief history of Kabaddi.
2. Development of Kabaddi in India and worldwide.
3. Establishment of national and international federations/associations of Kabaddi.
4. Major tournaments of Kabaddi.
5. Awards associated with Kabaddi.
2. Measurements and marking of Kabaddi court.
 2. 1. Preparation and maintenance of Kabaddi court.
 - 2.2. Officials, no. of officials and duties of officials in the game of Kabaddi.
 - 2.3. Technical equipments for officiating

3. Fundamental skills of Kabaddi:

3.1. Offensive Skills.

- (a) The chant. (b) Skills performed by the hands and legs

- 1. Toe touch, 2. Hand touch, 3. Side kick, 4. Curve kick, 5. Mule kick or back kick, 6.

Fly kick

3.2. Defensive skills

1. Ankle catch, 2. Double ankle catch, 3. Knee catch, 4. Double knee catch, 5. Double, 6. thigh catch, 7. Wrist catch, 8. Shoulder catch, 9. Washer man hold, 10. Chain Formation and movement.
2. Regular game practice: Game practice will be a part of lesson.
3. Positional and system of play
4. Lead-up games.

4. Major rules and regulations of Kabaddi.

4.1. Important Signals in Kabaddi.

4.2. Knowledge of score sheet.

4.3. Related sports terminologies.

4.4. Eminent sports personalities associated with Kabaddi.

References:

1. Mishra, S. C. "Teach Yourself Kabaddi", New Delhi: Sports Publication
2. Muniraju, S. "A Text Book on Kabaddi", LAP Lambert Academic Publishing
3. Rao, C.V. "Kabaddi", Patiala : N.I.S. Publication.
4. Rao, E.P. "Modern Coaching in Kabaddi", New Delhi:DVS Publishers

SEMESTER-III

PC-301 Basketball

1.1. A brief historical survey of basketball and an elementary knowledge of International and National developments, important competitions, achievements tables of India, Asia and World. Leading nations and outstanding personalities especially of India.

1.2. Rules of basketball game.

1.3. Warming up exercises and conditioning

1.4. Ball Handling

1.5. Catching the ball

1.6. Pass and their drills

1. Chest Pass, 2. Side Pass, 3. Over head pass, 4. Bounce pass, 5. Underhand pass 6. Back pass, 7. All passes with variations

1.7. Passes on the move and drill

1.8. Dribbling

1. Bouncing on the spot, 2. High-Low (Variations), 3. Zig-Zag dribbling

1.9. Shooting

1. Set shot (Variations), 2. Free throw (Variations), 3. Lay up shot (Variations), 4. Tip in shot

1.10. Footwork in moving

1. Stances, 2. Change of direction, 3. Change of pace

1.11. Drills

1. Pivoting, 2. Stationary, 3. Reverse, 4. Front

1.12. Individual defense

1.13. Stance

1.14. Footwork

1.15. Position of hands

1.16. Rebounding variations

1.17. Offensive and defensive rebounding

1. Team defense (variations), 2. Man to man defence, 3. Zone defence, 4. Combination of defence Team offences, 5. Fast break, 6. Simple offense play, 7. Regular game practices : Game practice will be a part of lesson

PC-301 Handball

1. History:

1.1. History and development of Handball at World level.

1.2. History and development of Handball at Asian level.

- 1.3. History and development of Handball in India. Federation and Association:
- 1.4. Organisational structure & functions of International Handball Federation (IHF).
- Organisational structure & functions of Handball Federation of India (HFI).
- 1.5. Competitions and Types of competitions- Olympics, World Championships.
- National Competitions- National Championships, All India Inter- University, S.G.F.I.

2. Officiating and layout of play field:

- 2.1. Rules and their interpretations.
- 2.2. Mechanics of officiating.
- 2.3. Duties of Referees before, during and after the match.
- 2.4. Referee hand's signal
- 2.5. Qualities and tools of the referee's Score sheet

3. Layout and marking of play areas

3.1. Techniques/ Skills:

- 3.2. Warming Up: - General and Specific Warming up
- 3.3. Basic Technique/ Skills- Catching, Passing, Shooting, Dribbling, Feints, Goal Keeper techniques.
- 3.4. Advanced Technique/ Skills- Fall Shot, Jump Fall Shot, Lob.
- 3.5. Functional training in attack and defense
- 3.6. Recreational and lead-up activities in Handball.

4. Officiating and layout of play field:

- 4.1. Mechanics of officiating.
- 4.2. Referee hand's signal
- 4.3. Position of Referee
- 4.4. Duties of Referees
- 4.5. Layout and Marking of Play areas.

5. Passing and receiving techniques:

- 5.1. Overhand Pass, 5.2. Push Pass, 5.3. Wrist Pass, 5.4. Bounce Pass, 5.5. Behind the back Pass, 5.6. Ball Reception Techniques, 5.7. Catching at Chest Level, 5.8. Catching below waist, 5.9. Catching at sides, 5.10. Catching at head height, 5.11. Catching in the air, 5.12.
- 5.2. Dribbling: 5.2.1. High Dribbling, 5.2.2. Low Dribbling,
- 5.3. Shooting: (Set Shot, Jump Shot Long, Jump Shot High, Wing Shot)
- 5.4. Positional Play in attack & defense,

Reference:

1. Clanton Reita and Dwight Mary Phyl, Team Handball Steps to, Success, Human Kinetics Publications, 1997.
2. Sykes and Pennycook, Olympic Handball Stanley , Publications, London, 1991.

PC-302(A) Table Tennis

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. Fundamental Skills.
 - 3.1 The grip-
 - 3.1.1 The Tennis grip (forehand grip and backhand grip)

- 3.1.2 Penholder grip.
- 3.2 Service-
 - 3.2.1 Forehand (Forward and backward spins).
 - 3.2.2 Back hand (Forward and backward spins).
 - 3.2.3 Side spin.
 - 3.2.4 High Toss.
- 3.3 Strokes (From both forehand and backhand).
 - 3.3.1 Push.
 - 3.3.2 Chop.
 - 3.3.3 Drive (with top spin).
 - 3.3.4 Half volley.
 - 3.3.5 Smash.
 - 3.3.6 Drop-shot.
 - 3.3.7 Balloon.
 - 3.3.8 Flick shot.
 - 3.3.9 Loop drive.
- 3.4 Stance and Ready position, and foot work.
- 4. Tactics – Defensive, attacking in singles doubles and mixed doubles.
- 5. Rules and their interpretations and duties of officials.

Reference:

1. Sklorz Martin, Sport Table Tennis. Yorkshire: E.P. Ltd. Cast Ardsley, Wakefield, 1973.
2. Varner, Margaret and Harrison J. Rufford. Brown Physical Education, Activities series, Table Tennis. IOWA: WM. C. Brown Company Dubuque.
3. Myers Harold. Table Tennis: London L Faber & Faber Ltd. 3, Queen Square, 1977.
4. Earna Victor, Your Book of Table Tennis. London: Faber and Faber Ltd. 3, Queen Square, 1971.

PC-302(B) Taekwondo

1. Historical Development of taekwondo at International Level.
2. Historical Development of taekwondo in National level.
3. International and National governing body and competition.
4. Fundamental Skills:
 - 4.1. Player Stances – walking, extending walking, L stance, cat stance.
 - 4.2. Fundamental Skills – Sitting stance punch, single punch, double punch, triple punch.
 - 4.3. Punching Skill from sparring position – front-fist punch, rear fist punch, double punch, and four combination punch.
 - 4.4. Foot Techniques (Balgisul) – standing kick (soseochagi), Front kick (AP chagi), Arc kick (BandalChagi), Side kick, (YeopChagi), Turning kick (DollyoChagi), Back kick (Twit Chagi), Reverse turning kick (BandaeDollyoChagi), Jump kick (TwimyoChagi).
 - 5. Poomsae (Forms) – Jang, Yi Jang, Sam Jang, Sa Jang, O Jang, Yook Jang, Chil Jang, Pal Jang (Fundamental Movement – eye control, concentration of spirit, speed control, strength control, flexibility, balance, variety in techniques)
 - 6. Sparring (Kyorugi) – One Step Sparring (hand techniques, foot techniques, self defense techniques, combination kicks), Free Sparring. o Board Breaking (Kyokpa) – eye control, balance, power control, speed, point of attack. o Rules and their interpretations and duties of officials.

PC-303 Boxing

1. Historical Development of Boxing at International Level.
2. Historical Development of Boxing in National level.
3. International and National governing body and competition.
4. Introduction of Rules and Regulation.
 - 4.1 Equipment, 4.2 Officiating, 4.3 Weight Category.
5. Fundamental Skill
 - 5.1 Stance (own Guard) 5.1.1 Orthodox, 5.1.2 South paw,
6. Punches
 - 6.1 Left Straight, 6.2 Right Straight, 6.3 Left Hook, 6.4 Right Hook, 6.5 Left Upper Cut
 - 6.6 Right Upper Cut, 6.7 Combination Punch
7. Defense Technique
 - 7.1 Duck, 7.2 Perry, 7.3 Slip, 7.4 Block, 7.5 Swing
8. Ring Tactics
9. Strategy and game planned
10. Lesson Plan of Any of above skill.

Reference

1. Doug Werner Boxer's Start-Up: A Beginner's Guide to Boxing Publisher Tracks Publishing, 1998 ISBN 188465486X, 9781884654862
2. Danna ScottBoxing: The Complete Guide to Training and Fitness Publisher Penguin 2000 ISBN 0399526013 9780399526015
3. Doug Werner, Alan Lachica Fighting Fit: Boxing Workouts, Techniques and Sparring Publisher Tracks Publishing, 2000 ISBN 1884654029, 9781884654022

Part-C Teaching Practices

TP-301 Teaching Practices: 30 Lessons

(Teaching Lesson Plans for various Games & Sport) **20 External and 10 Internal.**

These students are expected to develop further proficiency in the conduct of Physical Activities of formal nature. In view of this, the duration of the lesson to be conducted by these students shall be in the range of 30 to 45 minutes depending on the class they are going to handle-primary, middle and secondary.

Each student teacher is expected to take ten lessons during the course of the year. The lessons will be supervised by the faculty members who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

COURSE CONTENTS:

1. Drill
 - 1.1 Attention/Stand-at-ease/Left turn/Right Turn/About Turn/Mark Time
 - 1.2 March
 - 1.3 Quick March and Halt.
 - 1.4 Marching with About Turn
 - 1.5 Marching with Salute
2. Free hand exercise (Calisthenics)
 - 2.1 Two count

2.2	Four count	With verbal command, drum and music.
2.3	Eight count	

3. Light Apparatus

- 3.1 Exercise with apparatus with verbal command
- 3.2 Exercise with apparatus (with music and drum)
- 3.3 Exercise with apparatus (with music and formations)- **BHARTIYAM**

Note:

1. Students are to be allotted various schools in the vicinity to prepare Mass-Demonstration items. These groups will have march-past and mass demonstration competition after three weeks of training.
2. Each student takes ten lessons in the academic year.
3. Each student will be given sessional marks out of 50. The distribution of 50 marks is as follows:
 - 3.1 Internal Lessons : 50 marks
 - 3.2 Two lessons of squad drill, three lessons of calisthenics five lessons of light apparatus.

EXAMINATION:

During the course of the year, the lessons which are conducted by the student teachers will be graded by the faculty members each carrying 10 (ten) marks. So, by the end of the session, the Co-coordinator should have a tabulated score of each student teacher out of 50 marks. This will form the internal assessment as a part of the final examinations.

At the end of the session, the students should have the final examination conducted by two examiners-one external and one internal. Both of them will observe the lesson and grade each student teacher out of 100 marks, so that the final grade becomes out of 150 marks-One hundred by external examiner and internal examiner and fifty for the sessional, assessment (Sessional Marks).

At the time of final examination, the student teacher should have written a lesson plan on the basis of draw of lots taken out three days prior to the final exam. Each candidate will pick up a chit on the basis of which the contents of the lesson will be decided like Calisthenics. Light apparatus, squad drill etc.

Reference:

1. Dhananjay Shaw, Seema Kaushik,"Lesson Planning Teaching Methods and class management in Physical Education, Khel Sahitya Kendra Delhi -2001
2. Samiran Chakraborty,"Activity for children" Sports Publication, Delhi 1998.
3. A.K. Datta,"Games and students for Children", utility books, Delhi 2004
4. Sports Authority of India, A prayer amme of mass Sports of Physical Fitness Activitieis, New Delhi.
5. Ministry of Education & Social Welfare, A programme of youth Rallies, Govt. of India.

Semester-IV

PC-401 Weight Lifting/ Training

1. Weight lifting

- 1.1 History of Weight Lifting (India and World).
- 1.2 Weight Categories for Men and Women

1.3 General Rules of all Lifts

1.4 Incorrect Movements and Positions for all Lifts, Snatch and Clean & Jerk.

1.5 Techniques of Weight Lifting (Two Hands Snatch & Two Hands Clean and Jerk)

1.6 Equipment, Specification and it's Dimensions

1.7 Platform, Stage and their Dimension

1.8 Major National and International Competitions in Weight Lifting.

2. Introduction to Power Lifting and Best Physique.

References:

1. Kumar N. Play and Learn Weight Lifting, 2003.
2. Lear John, Skillful Weight Lifting, 1991.
3. Narang Priyanka, Teach Yourself Weight Lifting, 2004.
4. Pullarn W.A., Weight Lifting made easy and interesting 8th edition, 2004.

PC-401 Hockey

A brief historical survey of hockey and an elementary knowledge of International and National developments, important competitions, achievements tables of India. Asia and World. Leading Nations and outstanding personalities especially of India.

1. Rules of hockey game.
2. Warming up exercises and conditioning.
3. Hygiene of hockey.
4. Etiquette.
5. Test.

Practice

A. Basic skills and their drills

1. Grip of stick, 2. Dribbling, 3. Stopping the ball, 4. Stroke, 5. Hit & Variations, 6. Push & Variations, 7. Scoop, 8. Reverse stroke, 9. Flick, 10. Jab, 11. Tackling, 11. Dodging right and left

B. Use of skills in game situations, lead up practices.

C. Positional Play

D. Strategy-attack and defense

PC-402 Archery

1. Introduction of Archery in International and National level.

2. International and National organisation of Archery.

3. Introduction of Archery Rules and Equipment.

 i) Types and dimension of Bow.

 ii) Events

 a) Indian Round

 b) Compound round

 c) Recurve Round

 iii) Position and Release

 iv) Scoring

4. Safety Rules

5. National and International Competition.

6. World and Olympic records.
7. Dronacharya and Arjuna Awardees.

Reference:

1. Jain D. plays&learns Archery. KhelSahitya Kendra, New Delhi.2008.
2. Beginner's Guide to Traditional Archery Jul 15, 2004 by Brian J. Sorrells
3. Archery 4th Edition: Steps to Success (Steps to Success Sports) Nov 8, 2013 by Kathleen Haywood and Catherine Lewis
4. Archery Fundamentals-2nd Edition Oct 27, 2014 by Teresa Johnson

PC- 403 Cricket

1. Brief history of cricket including important competition and personalities.
2. To familiarise with the rules and officiating of cricket.
3. To familiarise with the basic teaching patterns.
4. To familiarise with methods of construction, layout and marking of cricket field and pitch,

1. 1 Origin and brief history of Cricket.

1. 2. Development of Cricket in India and worldwide.
- 1.3. Establishment of national and international federations/associations of Cricket.
- 1.4. Major tournaments of Cricket.
- 1.5. Different format of cricket
- 1.6. Awards associated with Cricket.

2. Measurements and marking of Cricket ground

- 2.1. Specifications of equipments related to Cricket.
- 2.2. Preparation and maintenance of Cricket ground.
- 2.3. Officials, no. of officials and duties of officials in the game of Cricket.
- 2.4. Technical equipments for officiating and Latest technologies in Cricket

3. Fundamental skills of Cricket:

- a. Batting b. Bowling c. Wicket Keeping d. Fielding e. Catching f. Throwing

3.1. Warming up exercises and conditioning

3.2. Lead-up games.

4. Major rules and regulations of Cricket.

- 4.1.** Important Signals in Cricket.
- 4.2.** Knowledge of score sheet.
- 4.3.** Related sports terminologies.
- 4.4.** Eminent sports personalities associated with Cricket.

References:

1. Amarnath, M. "Learn To Play Good Cricket", New Delhi: UBS Publishers
2. Boycott, G. "Play Cricket The Right Way", UK: Great Northern Books Ltd
3. Davis, M. and Collins, S. "Bowling: Wisden Coaching", UK: Wisden
4. Dellow, R. "Cricket: Steps to Success", UK: Human Kinetics Publishers

Part-C Teaching Practices

TP-402 Games Specialization:

The Candidate has choice to select any one of the following games as the Specialization (*Any game offered by department on the basis of availability of teacher*

(during the particular academic session)

1.

- Introduction and Historical Development of games with special reference to India.
- Important Tournaments held at National and International Levels.
- National sports Awardees related to the game.

2.

- Organizational set-up at national and International level (governing Bodies)
- Measurement and Markings of concern game.
- Facilities and Equipment of games.

3.

- Training and development of fundamental skill and techniques of the game.
- Training and development of advance techniques of the game.
- Implementation of drills for the technical Training.

4.

- Strategy and tactics of the game
- Training and development of Basic tactics.
- Training and development of Advance Tactics.

5.

- Rules and their interpretation of concern game.
- Duties and responsibilities of the Technical Officials.
- Training / coaching Lesson plan of the game.