

Semester – I

Part A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-101	History, Principles and foundation of Physical Education	4	4	30	70	100
CC-102	Anatomy and Physiology	4	4	30	70	100
CC-103	Health Education and Environmental Studies	4	4	30	70	100
CC-104	Officiating and Coaching	4	4	30	70	100
Part-B Practical Course						
PC-101	Track and Field (Running Events)	6	4	30	70	100
PC-102	Yoga/Aerobics/Swimming/ Gymnastics/ Shooting	6	4	30	70	100
PC-103	Indigenous Sports: Kabaddi/Malkhambh/Kho-Kho /March past	6	4	30	70	100
PC-104	Mass Demonstration Activities: dumbbells /tipri/wands/ lezim / /hoop/umbrella etc	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

SEMESTER – II

Part A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-201	Yoga Education	4	4	30	70	100
CC-202	Educational Technology and Methods of Teaching in Physical Education	4	4	30	70	100
CC-203	Organization and Administration	4	4	30	70	100
CC-204	Contemporary issues in physical education, fitness and wellness	4	4	30	70	100
Part-B Practical Course						
PC-201	Track and Field (Jumping Events)	6	4	30	70	100
PC-202	Badminton/ Table Tennis/Squash/ Tennis (match practices)	6	4	30	70	100
PC-203	Teaching Practices (05lessons in class room teaching, 05 lessons sports skill-internal and 05lessons schools/ colleges-external)	6	4	30	70	100
PC-204	Leadership training camp (7 to 10 Day)	6	4	100	--	100
Total		40	32	310	490	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

SEMESTER – III

Part A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-301	Sports Training	4	4	30	70	100
CC-302	Computer Applications and Curriculum design in Physical Education	4	4	30	70	100
CC-303	Sports Psychology and Sociology	4	4	30	70	100
CC-304	Sports Medicine, Physiotherapy and Rehabilitation	4	4	30	70	100
Part-B Practical Course						
PC-301	Track and Field (Throwing Events)	6	4	30	70	100
PC-302	Combative Sports: Martial Art/ Karate/ Judo/Fencing/ Boxing/ Taekwondo/ Wrestling (Any two out of these)	6	4	30	70	100
PC-303	Team Games: Baseball/ Cricket/ Football/ Hockey/Softball/ Volleyball/Handball/ Basketball/Netball (Any two of these-match practices)	6	4	30	70	100
PC-304	Teaching Practice: (Teaching Lesson Plans for Racket Sport/ Team Games/Indigenous Sports) (out of 10 lessons 5 internal and 5 external at practicing school)	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester – IV

Part A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-401	Measurement and Evaluation in Physical Education	4	4	30	70	100
CC-402	Kinesiology and Biomechanics	4	4	30	70	100
CC-403	Research and Statistics in Physical Education	4	4	30	70	100
CC-404	Sports Management	4	4	30	70	100
Part-B Practical Course						
PC-401	Track and Field/ Swimming /Gymnastics/ Yoga (Any one)	6	4	30	70	100
PC-402	Kabaddi/ Kho-Kho/ Baseball/ Cricket/ Football/Hockey/Softball/ Volleyball/ Handball/ Basketball/ Netball/ Badminton/Table Tennis/ Squash/ Tennis (Any Two of these- match practices)	6	4	30	70	100
PC-403	Sports specialization: Coaching lessons Plans (One for Sports 5 lessons)	6	4	30	70	100
PC-404	Games specialization: Coaching lessons Plans (One for Games 5 lessons)	6	4	30	70	100
Total		40	32	240	560	800
		160	128	1030	2170	3200

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

**SCHEME OF EXAMINATION
SEMESTER – I**

Paper	Subject	Internal	External	Total
Theory (400)				
CC-101	History, Principles and foundation of Physical Education	30	70	100
CC-102	Anatomy and Physiology	30	70	100
CC-103	Health Education and Environmental Studies	30	70	100
CC-104	Officiating and Coaching	30	70	100
Practical (400)				
PC-101	Track and Field (Running Events)	30	70	100
PC-102	Yoga/Aerobics/Swimming/Gymnastics/Shooting	30	70	100
PC-103	Indigenous Sports: Kabaddi / Malkhambh/ / March past /Kho-Kho	30	70	100
PC-104	Mass Demonstration Activities: / dumbbells /tipri/wands/ hoop/umbrella /lezim etc	30	70	100
Total		240	560	800

SEMESTER –II

Paper	Subject	Internal	External	Total
Theory (400)				
CC-201	Yoga Education	30	70	100
CC-202	Educational Technology and Methods of Teaching in Physical Education	30	70	100
CC-203	Organization and Administration	30	70	100
CC-204	Contemporary issues in physical education, fitness and wellness	30	70	100
Practical (400)				
PC-201	Track and Field (Jumping Events)	30	70	100
PC-202	Badminton/ Table Tennis/Squash/ Tennis	30	70	100
PC-203	Teaching Practices: (05lessons in class room teaching, 05 lessons sports skill-internal and 05lessons in schools/ colleges-external)	30	70	100
PC-204	Leadership training camp (7 to 10 Day)	100	---	100
Total		310	490	800

SEMESTER –III

Paper	Subject	Internal	External	Total
Theory (400)				
CC-301	Sports Training	30	70	100
CC-302	Computer Applications and curriculum design in Physical Education	30	70	100
CC-303	Sports Psychology and Sociology	30	70	100
CC-304	Sports Medicine, Physiotherapy and Rehabilitation	30	70	100
Practical (400)				
PC-301	Track and Field (Throwing Events)	30	70	100
PC-302	Combative Sports: Martial Art/ Karate/Judo/ Fencing/ Boxing/Taekwondo/ Wrestling (Any two out of these)	30	70	100
PC-303	Team Games: Baseball/Cricket/ Football/ Hockey/Softball/ Volleyball/Handball/ Basketball/Netball (Any two of these-match practices)	30	70	100
PC-304	Teaching Practice: (Teaching Lesson Plans for Racket Sport/ Team Games/Indigenous Sports) (out of 10 lessons 5 internal and 5 external at practicing school)	30	70	100
Total		240	560	800

SEMESTER -IV

Paper	Subject	Internal	External	Total
Theory (400)				
CC-401	Measurement and Evaluation in Physical Education	30	70	100
CC-402	Kinesiology and Biomechanics	30	70	100
CC-403	Research and Statistics in Physical Education	30	70	100
CC-404	Sports Management	30	70	100
Practical (400)				
PC-401	Track and Field / Swimming /Gymnastics/Yoga (Any one)	30	70	100
PC-402	Kabaddi/ Kho-Kho/ Baseball/ Cricket/ Football/Hockey/Softball/Volleyball/ Handball/ Basketball/ Netball/Badminton/Table Tennis/ Squash/ Tennis (Any Two of these-match practices)	30	70	100
PC-403	Sports specialization: Coaching lessons Plans (Any One Sport- 5 lessons)	30	70	100
PC-404	Games specialization: Coaching lessons Plans (Any One Game- 5lessons)	30	70	100
Total		240	560	800

**B. P. Ed. – Outline of Syllabus
Semester – I**

Theory Courses

CC-101 HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION

Unit – 1: Introduction

- Meaning, Definition and Scope of Physical Education
- Aims and Objective of Physical Education
- Importance of Physical Education in present era.
- Misconceptions about Physical Education.
- Relationship of Physical Education with General Education.
- Physical Education as an Art and Science.

Unit- 2 – Historical Development of Physical Education in India

- Indus Valley Civilization Period. (3250 BC – 2500 BC)
- Vedic Period (2500 BC – 600 BC)
- Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD)
- Medieval Period (1000 AD – 1757 AD)
- British Period (Before 1947)
- Physical Education in India (After 1947)
- Contribution of Akhadas and Vyayamshals
- Y.M.C.A. and its contributions.

Unit- 3- Foundation of Physical Education

- Philosophical foundation:
- Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism and Indian Philosophy and Culture.
- Fitness and wellness movement in the contemporary perspectives
- Sports for all and its role in the maintenance and promotion of fitness.

Unit-4- Principles of Physical Education

- Biological
 - Growth and development, Age and gender characteristics,
 - Body Types, Anthropometric differences
- Psychological
 - Learning types, learning curve, Laws and principles of learning
 - Attitude, interest, cognition, emotions and sentiments
- Sociological
 - Society and culture, Social acceptance and recognition
 - Leadership, Social integration and cohesiveness

References:

- Bucher, C. A. (n.d.) *Foundation of physical education*. St. Louis: The C.V. Mosby Co.
- 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.

Obertuffer, (1970). *Delbert physical education*. New York: Harper & Brothers Publisher.

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
Theory Courses

CC-102 ANATOMY AND PHYSIOLOGY

UNIT-I

- Brief Introduction of Anatomy and physiology in the field of Physical Education.
- Introduction of Cell and Tissue.
- The arrangement of the skeleton – Function - of the skeleton – Ribs and Vertebral column and the extremities – joints of the body and their types
- Gender differences in the skeleton.
- Types of muscles.

UNIT-II

- **Blood and circulatory system:** Constituents of blood and their function –Blood groups and blood transfusion, clotting of blood, the structure of the heart-properties of the heart muscle, circulation of blood, cardiac cycle, blood pressure, Lymph and Lymphatic circulation. Cardiac-output.
- **The Respiratory system:** The Respiratory passage – the lungs and their structure and exchange of gases in the lungs, mechanism of respiration (internal and external respiration) lung capacity, tidal volume.
- **The Digestive system:** structure and functions of the digestive system, Digestive organs, Metabolism,
- **The Excretory system:** Structure and functions of the kidneys and the skin.
- **The Endocrine glands:** Functions of glands pituitary, Thyroid, Parathyroid. Adrenal, Pancreatic and the sex glands.
- **Nervous systems:** Function of the Autonomic nervous system and Central nervous system. Reflex Action,

UNIT-III

- Definition of physiology and its importance in the field of physical education and sports.
- Structure, Properties and functions of skeletal muscles.
- Nerve control of muscular activity, Neuromuscular junction, Transmission of nerve impulse across it.
- Fuel for muscular activity

UNIT-IV

- Effect of exercise and training on cardiovascular system.
- Effect of exercise and training on respiratory system.
- Effect of exercise and training on muscular system
- Role of oxygen-physical training, oxygen debt, second wind, vital capacity.

References:

- Gupta, A. P. (2010). *Anatomy and physiology*. Agra: SumitPrakashan.
- 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.
- 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.
- 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.
- Sharma, R. D. (1979). *Health and physical education*, Gupta Prakashan.
- Singh, S. (1979). *Anatomy of physiology and health education*. Ropar: Jeet Publications.

Semester I
Theory courses

CC-103 HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

Unit – I Health Education

- Concept, Dimensions, Spectrum and Determinants of Health
- Definition of Health, Health Education, Health Instruction, Health Supervision
- Aim, objective and Principles of Health Education
- Health Service and guidance instruction in personal hygiene

Unit – II Health Problems in India

- Communicable and Non Communicable Diseases
- Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population,
- Personal and Environmental Hygiene for schools
- Objective of school health service, Role of health education in schools
- 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

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

Unit – IV Natural Resources and related environmental issues:

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

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 – I
Theory courses

CC-104 OFFICIATING AND COACHING

Unit- I: Introduction of Officiating and coaching

- Concept of officiating and coaching
- Importance and principles of officiating
- Relation of official and coach with management, players and spectators
- Measures of improving the standards of officiating and coaching

Unit- II: Coach as a Mentor

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

Unit- III: Duties of Official

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

Unit- IV: Qualities and Qualifications of Coach and Official

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

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.
- 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 YOGA EDUCATION

Unit – I: Introduction

- Meaning and Definition of Yoga
- Aims and Objectives of Yoga
- Yoga in Early Upanisads
- The Yoga Sutra: General Consideration
- Need and Importance of Yoga in Physical Education and Sports

Unit - II: Foundation of Yoga

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

Unit - III Asanas

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

Unit – IV Yoga Education

- Basic, applied and action research in Yoga
- Difference between yogic practices and physical exercises
- Yoga education centers in India and abroad
- Competitions in Yogasanas

References:

- Brown, F. Y.(2000). *How to use yoga*. Delhi:Sports Publication.
- Gharote, M. L. &Ganguly, H. (1988). *Teaching methods for yogic practices*.Lonawala: Kaixydahmoe.
- Rajjan, S. M. (1985). *Yoga strenthening of relaxation for sports man*. New Delhi:Allied Publishers.
- Shankar,G.(1998). *Holistic approach of yoga*. New Delhi:Aditya Publishers.
- Shekar,K. C. (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra.

Semester – II
Theory Courses

**CC-202 EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN
PHYSICAL EDUCATION**

Unit – I Introduction

- Education and Education Technology- Meaning and Definitions
- Types of Education- Formal, Informal and Non- Formal education.
- Educative Process
- Importance of Devices and Methods of Teaching.

Unit – II Teaching Technique

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

Unit – III Teaching Aids

- Teaching Aids – Meaning, Importance and its criteria for selecting teaching aids.
- Teaching aids – Audio aids, Visual aids, Audio – visual aids, Verbal, Chalk board, Charts, Model, Slide projector, Motion picture etc
- Team Teaching – Meaning, Principles and advantage of team teaching.
- Difference between Teaching Methods and Teaching Aid.

Unit – IV Lesson Planning and Teaching Innovations

- Lesson Planning – Meaning, Type and principles of lesson plan.
- General and specific lesson plan.
- Micro Teaching – Meaning, Types and steps of micro teaching.
- Simulation Teaching - Meaning, Types and steps of simulation teaching.

Reference:

- Bhardwaj, A. (2003). *New media of educational planning*. New Delhi: Sarup of 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*. Jullandhar: Paul Publishers.

Semester – II
Theory Courses

CC-203 ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION

Unit – I: Organization and administration

- Meaning and importance of Organization and Administration in physical education
- Qualification and Responsibilities of Physical Education teacher and pupil leader
- Planning and their basic principles,
- Program planning: Meaning, Importance, Principles of program planning in physical education.
- Functions of Planning, organizing, staffing, directing, communicating, co-ordination, controlling, evaluating and innovating.

Unit- II: Office Management, Record, Register & Budget

- Office Management: Meaning, definition, functions and kinds of office management
- Records and Registers: Maintenance of attendance Register, stock register, cash register, physical efficiency record, Medical examination Record.
- Budget: Meaning, Importance of Budget making,
- Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.

Unit-III: Facilities, & Time-Table Management

- Facilities and equipment management: Types of facilities Infrastructure-indoor, out door.
- Care of school building, Gymnasium, swimming pool, Play fields, Play grounds
- Equipment: Need, importance, purchase, care and maintenance.
- Time Table Management: Meaning, Need, Importance and Factor affecting time table.

Unit-IV: Competition Organization

- Importance of Tournament,
- Types of Tournament and its organization structure - Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and challenge Tournament.
- Organization structure of Athletic Meet
- Sports Event Intramurals & Extramural Tournament planning

References:

- Broyles, F. J. & Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach*. New York: Prentice hall Inc.
- Bucher, C. A. (1983). *Administration of Physical Education and Athletic programme*. St. Louis: The C.V. Mosby Co.
- Kozman, H.C. Cassidly, R. & Jackson, C. (1960). *Methods in Physical Education*. London: W.B. Saunders Co.
- Pandy, L.K. (1977). *Methods in Physical Education*. Delhi: Metropolitan Book Depo.
- Sharma, V.M. & Tiwari, R.H.: (1979). *Teaching Methods in Physical Education*. Amaravati: Shakti Publication.

Semester – II
Theory Courses

CC-204 CONTEMPORARY ISSUES IN PHYSICAL EDUCATION, FITNESS AND WELLNESS

Unit – I Concept of Physical Education and Fitness

- Definition, Aims and Objectives of Physical Education, fitness and Wellness
- Importance and Scope of fitness and wellness
- Modern concept of Physical fitness and Wellness
- Physical Education and its Relevance in Inter Disciplinary Context.

Unit – II Fitness, Wellness and Lifestyle

- Fitness – Types of Fitness and Components of Fitness
- Understanding of Wellness
- Modern Lifestyle and Hypo kinetic Diseases – Prevention and Management
- Physical Activity and Health Benefits

Unit – III Principles of Exercise Program

- Means of Fitness development – aerobic and anaerobic exercises
- Exercises and Heart rate Zones for various aerobic exercise intensities
- Concept of free weight Vs Machine, Sets and Repetition etc
- Concept of designing different fitness training program for different age group.

Unit – IV Safety Education and Fitness Promotion

- Health and Safety in Daily Life
- First Aid and Emergency Care
- Common Injuries and their Management
- Modern Life Style and Hypo-kinetic Disease –Prevention and Management

References:

- Difiore, J.(1998). *Complete guide to postnatal fitness*. London: A & C Black,.
- Giam, C.K & The, K.C. (1994). *Sport medicine exercise and fitness*. Singapore: P.G. Medical Book.
- Mcglynn, G., (1993). *Dynamics of fitness*. Madison: W.C.B Brown.
- Sharkey, B. J.(1990). *Physiology of fitness*, Human Kinetics Book.

Semester – III
Theory Courses

CC-301 SPORTS TRAINING

Unit – I Introduction to Sports Training

- Meaning and Definition of Sports Training
- Aim and Objective of Sports Training
- Principles of Sports Training
- System of Sports Training – Basic Performance, Good Performance and High Performance Training

Unit – II Training Components

- Strength – Mean and Methods of Strength Development
- Speed – Mean and Methods of Speed Development
- Endurance - Mean and Methods of Endurance Development
- Coordination – Mean and Methods of coordination Development
- Flexibility – Mean and Methods of Flexibility Development

Unit – III Training Process

- Training Load- Definition and Types of Training Load
- Principles of Intensity and Volume of stimulus
- Technical Training – Meaning and Methods of Technique Training
- Tactical Training – Meaning and Methods of Tactical Training

Unit – IV Training programming and planning

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

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*. Patials: NSNIS.
- Uppal, A. K., (1999). *Sports Training*. New Delhi: Friends Publication.

Semester III
Theory Courses

CC-302 COMPUTER APPLICATIONS and CURRICULUM DESIGN IN PHYSICAL EDUCATION

Unit – I: Introduction to Computer

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

Unit – II: MS Word

- Introduction to MS Word
- Creating, saving and opening a document
- Formatting Editing features Drawing table ,
- page setup, paragraph alignment, spelling and grammar check printing option, inserting page number, graph, footnote and notes

Unit – III: MS Power Point

- Introduction to MS Power Point
- Creating, saving and opening a ppt. file
- format and editing features slide show , design , inserting slide number
- picture ,graph ,table
- Preparation of Power point presentations

Unit – IV: Curriculum-meaning and concept

- Meaning, Need and importance of curriculum, the role of the teacher in curriculum development-according to the need of the students.
- Factors affecting curriculum - Social factors - Personnel qualifications – Climatic consideration - Equipment and facilities -Time suitability of hours.
- Basic principles of curriculum construction.

Referances:

- Irtegov, D. (2004). *Operating system fundamentals*. Firewall Media.
- Marilyn, M.& Roberta, B.(n.d.).*Computers in your future*. 2nd edition, India: Prentice Hall.
- Milke, M.(2007). *Absolute beginner's guide to computer basics*. Pearson Education Asia.
- Sinha, P. K. & Sinha, P. (n.d.).*Computer fundamentals*. 4th edition, BPB Publication.
- 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

Semester – III
Theory Courses

CC-303 SPORTS PSYCHOLOGY AND SOCIOLOGY

Unit -I: introduction

- Meaning, Importance and scope of Educational and Sports Psychology
- General characteristics of Various Stages of growth and development
- Types and nature of individual differences; Factors responsible –Heredity And environment
- Psycho-sociological aspects of Human behavior in relation to physical education and sports

Unit-II: Sports Psychology

- Nature of learning, theories of learning, Laws of learning,
- Plateau in Learning; & transfer of training
- Meaning and definition of personality, characteristics of personality,
- Dimension of personality, Personality and Sports performance
- Nature of motivation: Factors influencing motivation; Motivation and techniques and its impact on sports performance.
- Mental Preparation Strategies: Attention focus, Self- talk, Relaxation, Imaginary.
- Aggression and Sports, Meaning and nature of anxiety, Kinds of anxiety
- Meaning and nature of stress; Types of stress, Anxiety, Stress, Arousal and their effects on sports performance

Unit-III: Relation between Social Science and Physical Education.

- Orthodoxy, customs, Tradition and Physical Education.
- Festivals and Physical Education.
- Socialization through Physical Education.
- Social Group life, Social conglomeration and Social group, Primary group and Remote group.

Unit-4 Culture : Meaning and Importance.

- Features of culture,
- Importance of culture.
- Effects of culture on people life style.
- Different methods of studying Observation/ Inspection method, Questionnaire method, Interview method

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.

Semester – III

Theory Courses

CC-304 SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

Unit-I: - Sports Medicine:

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

Unit-II: Physiotherapy

- Definition – Guiding principles of physiotherapy, Importance of physiotherapy,
- Introduction and demonstration of treatments - Electrotherapy – infrared rays – Ultraviolet rays –short wave diathermy – ultrasonic rays.

Unit-III: Hydrotherapy:

- Introduction and demonstration of treatments of Cry therapy, Thermo therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation – Massage: History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.

Unit-IV: Therapeutic Exercise:

- Definition and Scope – Principles of Therapeutic Exercise – Classification, Effects and uses of Therapeutic exercise – passive Movements (Relaxed, Forced and passive - stretching) – 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.

References:

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Semester – IV
Theory Courses

CC-401 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Unit- I Introduction to Test & Measurement & Evaluation

- Meaning of Test & Measurement & Evaluation in Physical Education
- Need & Importance of Test & Measurement & Evaluation in Physical Education
- Principles of Evaluation

Unit- II Criteria; Classification and Administration of test

- Criteria of good Test
- Criteria of tests, scientific authenticity (reliability, objectivity, validity and availability of norms)
- Type and classification of Test
- Administration of test, advance preparation – Duties during testing – Duties after testing.

Unit- III Physical Fitness Tests

- AAHPER youth fitness test
- National physical Fitness Test
- Indiana Motor Fitness Test
- JCR test
- U.S Army Physical Fitness Test

Unit- IV Sports Skill Tests

- Lockhart and McPherson badminton test
- Johnson basketball test
- McDonald soccer test
- S.A.I volleyball test
- S.A.I Hockey test

References:

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Semester – IV
Theory Courses

CC-402 KINESIOLOGY AND BIOMECHANICS

Unit – I Introduction to Kinesiology and Sports Biomechanics

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

Unit – II Fundamental Concept of Anatomy and Physiology

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

Unit – III Mechanical Concepts

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

Unit – IV Kinematics and Kinetics of Human Movement

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

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Semester – IV
Theory Courses

CC-403 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

Unit-I Introduction to Research

- Definition of Research
- Need and importance of Research in Physical Education and Sports.
- Scope of Research in Physical Education & Sports.
- Classification of Research
- Research Problem, Meaning of the term, Location and criteria of Selection of Problem, Formulation of a Research Problem, Limitations and Delimitations.

Unit-II Survey of Related Literature

- Need for surveying related literature.
- Literature Sources, Library Reading
- Research Proposal, Meaning and Significance of Research Proposal.
- Preparation of Research proposal / project.
- Research Report: A group project is to be undertaken by a small batch of students under the supervision of a teacher, wherein it is expected to survey school facilities of physical education, health assessment programme evaluation, fitness status of the students, staff and other stakeholders etc. and submit the report to the institution.

Unit-III Basics of Statistical Analysis

- Statistics: Meaning, Definition, Nature and Importance
- Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables
- Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram

Unit- IV Statistical Models in Physical Education and Sports

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

References:

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- Brown, L. E., & Ferrigno, V. A. (2005). *Training for speed, agility and quickness*, 2nd ed. Champaign, IL: Human Kinetics.
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Semester – IV
Theory Courses

CC-404 SPORTS MANAGEMENT

Unit-I

- Nature and Concept of Sports Management.
- Progressive concept of Sports management.
- The purpose and scope of Sports Management.
- Essential skills of Sports Management.
- Qualities and competencies required for the Sports Manager.
- Event Management in physical education and sports.

Unit-II

- Meaning and Definition of leadership, Leadership style and method, Elements of leadership.
- Forms of Leadership:-
 - Autocratic, Laissez-faire, Democratic, Benevolent Dictator
- Qualities of administrative leader.
- Preparation of administrative leader.
- Leadership and Organizational performance.

Unit-III

- Sports Management in Schools, colleges and Universities.
- Factors affecting planning
- Planning a school or college sports programme.
- Directing of school or college sports programme.
- Controlling a school, college and university sports programme.
 - Developing performance standard
 - Establishing a reporting system
 - Evaluation
 - The reward/punishment system

Unit-IV

- Financial management in Physical Education & sports in schools, Colleges and Universities.
- Budget – Importance, Criteria of good budget,
- Steps of Budget making
- Principles of budgeting

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