## B. P. Ed. - Outline of Syllabus

#### 1st Paper

# History Foundation and Olympic Movement in Physical Education

- o Concept of Education:- Meaning, definition, aim and objectives
- o Physical Education:- Meaning, definition, scope, aim and objectives
- Philosophical principles:- Idealism, Naturalism, Pragmatism, Realism, Communism, Humanism, Existentialism
- o Physical Education as-an art and science
- o History of Physical Education in Ancient Greece, Rome, Denmark, Germany, And Sweden

#### Unit - 2:

- o Physical Education in India before Independence
- o Vedic period, Epic period, medieval period. etc.
- o British Period:- YMCA College of Physical Education, Madras, H.V.P Mandal, Amravati,
- o Contribution of Akhadas and Vyayamshals

## Unit - 3:

- o Physical Education in India after Independence
- o Governing bodies of Physical education and sports S.A.I., U.G.C., N.C.T.E., N.A.A.C.
- Governing Policies:- New Education Policy, National Policy on sports, Sports policy of Uttar Pradesh Govt.
- Governing Schemes:- Rajkumari Amrit Kaur coaching scheme, N.P.E.D., N.S.O.,
- Awards:- Arjuna Award, Dronacharya Award, Rajiv Gandhi Khel Ratna Award, Maulana Abul Kalam Azad Trophy, Laxman Award, Rani Laxmibai Award.

#### Unit - 4:

- o Olympic
- o Ancient Olympic Games:- Historical background, Awards, Decline & termination of games, etc.
- Modern Olympic Games:- Revival, charter, aim, objectives, spirit, motto, torch, flag, opening and closing ceremonies and closing ceremonies
- o Asian Games, Commonwealth Games, Afro-Asian Games

## 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
- 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.
- Osborne, M. P. (2004). Magictree house fact tracker: ancient greece and the olympics: a nonfiction companion to magic tree house: hour of the Olympics. New York: Random House Books for Young Readers.
- Burbank, J. M., Andranovich, G. D. & Heying Boulder, C. H. (2001). Olympic dreams: the impact of mega-events on local politics: Lynne Rienner
- Rajgopalan, K A Brief History of Physical Education.
- Majumdar, DG Encyclopedia of Indian Physical Culture.
- डॉ० मो० वाहिद एवं एन.के. दीक्षित शारीरिक शिक्षा का इतिहास.
- कंसल एवं अटवाल शारीरिक शिक्षा का इतिहास.
- मोहन, वी.वी. शारीरिक शिक्षा के सिद्धान्त.
- कमलेश एवं संग्राल शारीरिक शिक्षा का इतिहास, सिद्धान्त एवं मनोविज्ञान.

## 2nd Paper ANATOMY AND PHYSIOLOGY

#### UNIT-I Basic

- Brief Introduction of Anatomy and physiology in the field of Physical Education.
- Introduction of Cell and Tissue.
- c 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.

#### UNIT-II Muscles

- Structure, Composition, Properties and functions of muscles
- 2 Structure, Composition, Properties and functions of skeletal muscles.
- Nerve control of muscular activity:
  - c Neuromuscular junction
  - c Transmission of nerve impulse across it.
- 2 Fuel for muscular activity
- a Role of oxygen-physical training, oxygen debt-second wind, vital capacity,

#### UNIT-III System of Body

- 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.
- 2 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.
- a The Digestive system: structure and functions of the digestive system. Digestive organs, Metabolism.
- The Excretory system: Structure and function of the kidneys and the skin.
- 2 The Endocrine glands: Functions of glands pituitary, Thyroid, Parathyroid, Adrenal. Pancreatic and the sex glands.
- c Nervous systems: Function of the Autonomic rervous system and Central nervous system. Reflex Action.
- 2 Sense organs: A brief account of the structure and functions of the Eye and Ear.

## UNIT-IV Effect on System

- C. Definition of physiology and its importance in the field of physical education and sports.
- c. Effect of exercise and training on cardiovascula (system.
- 2. Effect of exercise and training on respiratory system.
- Effect of exercise and training on muscular system
- o Physiological concept of physical fitness, warming up, conditioning and fatigue.

## References:

- Gupta, A. P. (2010). Anatomy and physiology. Agra: SumitPrakashan.
- Gupta, M. and Gupta, M. C. (1980). Body and matomical 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 muscule vactivity. London: W.B. Saunders Co.
- Lamb, G. S. (1982). Essentials of exercise phy-hology. Delbi: Surject 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. Lendon: Faber & Faber Ltd.
- Sharma, R. D. (1979). Health and physical edit attor. Gupta Prakashan.
- Singh, S. (1979). Anatomy of physiology and health education. Repart Jeet Publications.
- E Pearce Anatomy & Physiology for Nurses.
- Dixit, Rajesh Anatomy & Physiology
- Perrot, T.V. Anatomy for Students and Teachers of Physical Education.
- कॅवर, आर.सी शरीर रचना एवं क्रियाविज्ञान.
- पाग्ड रणश दत्त व्यायाम क्रियाविज्ञान,
- शर्मा, आर.वह. व्यायाम क्रियाविज्ञान एवं खेल चिकित्सा शास्त्र

## 3rd Paper HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

## Unit - I Health Education

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

## Unit - II Health Problems in India

- o Communicable and Non Communicable Diseases
- o 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. Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

## Unit - III Environmental Science

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

#### Unit - IV Natural Resources and related environmental issues:

- Definition, Meaning, Types and Importance of Nature Resources, Water resources, food resources and Land resources.
- c Effects and control measures of:
- o Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution
- o 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.
- डॉ० कौर, मंजीत एवं डॉ० शर्मा, आर०पी० स्वारध्य एवं शारीरिक शिक्षा,
- डॉ० शंरा, जी०पी० स्वास्थ्य शिक्षा,
- डॉ० भटनागर राजन्द्र भानव स्वारथ्य एव प्राथमिक उपचार.

## 4th Paper YOGA EDUCATION

## Unit - I: Introduction

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

# Unit - II: Foundation of Yoga

- o Influences of relaxtive, meditative posture on various system of the body
- Types of Bandhas and mudras
- o Type of kriyas
- o Yoga in the Bhagavadgita Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga
- > Characteristics of yogi

## Unit - III Asanas

- c The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- c Effect of Asanas and Pranavama on various system of the body
- c Classification of asanas with special reference to physical education and sports

## Unit - IV Yoga Education

- c Basic, applied and action research in Yoga
- c 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 strenthering of relexation for sports man. New Delhi: Allied Publishers.
- Shankar, G. (1998). Holistic approac 1 of yoga New Delhi: Aditya Publishers.
- Shekar,K. C. (2003). Yoga for healtr. Delhi: Khel Sahitya Kendra.
   शर्मा, जय प्रकाश मानव जीवन एवं योग.
- व्यास, सुशील कुमार याग शिक्षा.
- पाण्डेय, प्रमीद कुमार एवं प्रमाणिक विद्यालय मं स्वारथ्य एवं यांग शिक्षा.

## 5th Paper Coaching and Officiating in Sports and Games

## Unit-1

- o Coaching:- Meaning & definition
- o Coaching:- Characteristics and principles
- o Coach:- Qualification, qualities, characteristics and responsibilities
- o Officiating- Meaning and principles
- Reasons for poor officiating and their remedies

## Unit-2

- O Warming up. Conditioning, Cooling down --- Meaning, benefits and significance
- o Load and Recovery:- Meaning, factors-intensity & volume, judgement of load.
- Over load:- Meaning and tackling over load
- o Recovery:- Phases, means and factors affecting recovery
- o Psychological preparation of team and individual sports persons

#### Unit-3

- Sports training- meaning, definition, aims, objectives.
- Characteristics and principles.
- Training methods:- Development of components of physical fitness and motor fitness through following training methods (continuous method, interval method, circuit method, fartlek speed play and weight training)
- Development of Techniques and Tactics

#### Unit-4

- o Duties of official in General, pre during & Post Game
- o Ethics of officiating
- o Philosophy of officiating
- o Mechanics of officiating position, singles andmovement etc.
- Marking of Track Field Court/ground for following: Athletics. Badminton, Basketball, Cricket.
- c Football, Handball, Hockey, Kabaddi, Kho-Kho and Volleyball.
- o Rules and their interpretations of events in Athletics.& other Games

## 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.
- Kamlesh & Sangral Coaching & Officiating in Games & Sports.
- अरांड़ा, पींoकेo खेल संचालन एवं प्रशिक्षण

## ORGANZATION AND ADMINISTRATION IN PHYSICAL EUCATION

#### Unit - I: Organization and administration

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

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

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

## Unit-III: Facilities, & Time-Table Management

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

# Unit-IV: Competition Organization

- o Meaning & Importance of Tournament,
- o Types of Tournament and its organizational structure Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and challenge Tournament.
- o Organization structure of Athletic Meet
- o 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. Lolis: The C.V. Hosby 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. Delhe: Metropolitan Book Depo.
- अरोड़ा, पी०के० शारीरिक शिक्षा में संगठन, संचालन एव मनोरंजन.
- श्रीवास्तव एवं करमरकर संगठन एवं प्रशासन.

#### 7th Paper EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION

## Unit - I Introduction

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

## Unit - II Teaching Technique

- o Teaching Technique Lecture method, Command method, Demonstration method, Imitation method, project method, Seminar ,Conferences, workshop etc
- o Teaching Procedure Whole method, whole part whole method, part whole method.
- o Presentation Technique Personal and technical preparation, Group Discussion, Extempore
- o Command- Meaning, Types and its uses in different situations.

## Unit - III Teaching Aids

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

## Unit - IV Lesson Planning and Teaching Innovations

- o Lesson Planning Meaning, Type and principles of lesson plan.
- o General and specific lesson plan.
- o Micro Teaching Meaning, Types and steps of micro teaching.
- o 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.
- डॉ० मो० वाहिद एवं दीक्षित, एन०के० शारीरिक शिक्षा में शिक्षण विधियाँ.
- कमलेश एवं संग्राल शारीरिक शिक्षा में शिक्षण विधियाँ.
- कौशिक, सीमा एवं शाह, धनंजय शारीरिक शिक्षा के पाठ नियोजन व शिक्षण पद्धित के सिद्धान्त.

#### 8th Paper CONTEMPORARY ISSUES IN PHYSICAL EDUCATION - FITNESS, SPORTS NUTRITION AND WEIGHT MANAGEMENT

## Unit - I Concept of fitness and Wellness

- Definition, Aims and Objectives, Scope & Importance of Physical Education, fitness and Wellness
- Understanding of Wellness
- Fitness Means, Types of Fitness and Components of Fitness
- Concept of designing different fitness training programme for different age group.

## Unit - II Lifestyle and Physical Education

- Physical Activity and Health Benefits
- > Health and Safety in Daily Life
- o Modern Lifestyle and Hypo kinetic Diseases Prevention and Management
- o First Aid and Emergency Care in Daily Life
- o Common Injuries and their Management

## Unit - III Introduction to Sports Nutrition

- Meaning and Definition of Sports Nutrition
- Basic Nutrition guidelines & Role of nutrition in sports
- Balance Diet Meaning, classification and its function
- Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population, Nutritional service
- o Role of carbohydrates. Fat and protein curing exercise
- 5 Role of hydration & Dehydration during exercise, water balance, and other Important

Vitamins .Nutrition - daily caloric requiren ent and expenditure

#### Unit - IV Nutrition and Weight Management

- Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
- Desity Definition, meaning and types of obesity
- 2 Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Con mon Myths about Weight Loss
- > Health Risks Associated with Obesity. Obesity Causes and Solutions for Overcoming Obesity.
- Weight management program for sport child. Role of diet and exercise in weight management.
   Design diet plan and exercise schedule for weight gain and loss

## References:

- Diffore, J. (1998). Complete guide to post satalfitness. London: A & C Black...
- Giam, C.K & The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
- · Meglynn, G., (1993). Dynamics of fitness. Madison: W.C.B Brown.
- Sharkey, B. J.(1990). Physiology of fitne. s. Human Kinetics Book
- Bessesen, D. H. (2008). Update on obesity. JClinEndocrinolMetab. 93(6), 2027-2034.
- Butryn, M.L., Phelan, S., &Hill, J. (2007). Consistent self-monitoring of weight: a key component of successful weight loss mai itenance. Obesity (Sliver Spring), 45(12), 30913096.
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- Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized control ed trial. (AMA, 299(3), 316-323.
- वर्षी संदुष्टः पावर एवं आहार
- डॉ) शुक्ता अनुल खेल पापण एवं न्यारध्य

	Part A: Theoretical Course					
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Tota
101	History Foundation and Olympic Movement in Physical Education	4	4	20	80	100
102	Anatomy and Physiology	4	4	20	80	100
103	Health Education and Environmental Studies	4	4	20	80	100
104	Yoga Education	4	4	20	80	100
105	Officiating and Coaching	4	4	20	80	100
106	Organization and Administration in Physical Education	4	4	20	80	100
107	Educational Technology and Methods of Teaching in Physical Education	4	4	20	80	100
108	Contemporary issues in physical education - fitness, sports Nutrition and Weight Management	4	4	20	80	100
	TOTAL	32	32	160	640	800
	Part-B Practical Course					
C-101	Track and Field 1.Running Events	6	4	20	80	100
C-102	Track and Field 2. Jumping Events	6	4	20	80	100
C-103	Yoga	6.	4	20	80	100
C-104	Aerobics/ Gymnastics (Any one)	6	4	20	80	100
C-105	Indigenous Sports: Kabaddi / Malkhambh/ lezim / March past(Any One)	6	4	20	80	100
C-106	Racket Sports: Badminton/ Table Tennis/ Squash/ Tennis	6	4	20	80	100
C - 107	Mass Demonstration Activities: Kho-Kho / dumbbells / tipri / wands / hoop /umbrella	6	4	20	80	100
	Teaching Practices (05lessons in class room (theory Lesson Plan) and 05 lessons in outdoor activities ( General Lesson Plan)	4	3	20	60	80
	CAMPING	2	1	20		20
-	Total	48	32	180	620	800

## 2<sup>nd</sup> Year B.P.Ed. Syllabus Ist Paper SPORTS TRAINING

# Unit = I Introduction to Sports Training

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

## Unit - II Training Components

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

## Unit - III Training Process

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

# Unit - IV Training programming and planning

- o Periodization Meaning and types of Periodization
- o Aim and Content of Periods Preparatory, Competition, Transitional etc.
- o Planning Training session
- o 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, 2<sup>nd</sup>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.

#### 2nd Paper

## COMPUTER APPLICATIONS AND EURRICULUM 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
- o Components of computer, input and output device
- o Application software used in Physical Education and sports

## Unit - II: MS Office

- o Introduction to MS Office
- 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
- MS Excel:- Introduction to MS Excel, Creating, saving and opening spreadsheet, creating formulas, Format and editing features adjusting columns width and row height understanding charts.
- 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-III Modern concept of the curriculum

- Need and importance of curriculum, Need and importance of curriculum development, the role
  of the teacher in curriculum development.
- Factors affecting curriculum Social factors Personnel qualifications Climatic consideration
   Equipment and facilities -Time suitability of hours.
- o National and Professional policies, Research finding
- o Curriculum design-Experience of Education, Field and Laboratory.

## UNIT-IV Curriculum-Old and new concepts, Mechanics of curriculum planning

- o Curriculum Design, Meaning, Importance and factors affecting curriculum design.
- o Basic-principles of curriculum construction.
- o Steps in curriculum construction.
- Principles of Curriculum design according to the needs of the students and state and national level policies.
- o Role of Teachers

## 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
- · 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.
- Underwood, G. L. (1983). The physical education curriculum in secondary school: planning and implementation. England: Taylor and Francis Ltd.
- Willgoose, C.E. (1979). Curriculum in physical education. 3rd Ed. Englewood Cliffs.: N.J. Prentice Hall, Inc.

# 3rd Paper

## SPORTS PSYCHOLOGY AND SOCIOLOGY

## Unit -It introduction

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

### Unit-II: Sports Psychology

- o Nature of learning, theories of learning, Laws of learning,
- o Plateau in Learning; & transfer of training
- o Meaning and definition of personality, characteristics of personality, o

Dimension of personality, Personality and Sports performance

- o Nature of motivation: Factors influencing motivation; Motivation and techniques and its impact on sports performance.
- o Mental Preparation Strategies: Attention focus, Self- talk, Relaxation, Imaginary.
- o Aggression and Sports, Meaning and nature of anxiety, Kinds of anxiety
- o Meaning and nature of stress; Types of stress, Anxlety, Stress, Arousal and their effects on sports performance

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

o Orthodoxy, customs, Tradition and Physical Education. o

Festivals and Physical Education.

- o Socialization through Physical Education.
- o Social Group life, Social conglomeration and Social group, Primary group and Remote

## Unit-4 Culture: Meaning and Importance.

- o Features of culture,
- o Importance of culture.
- o Effects of culture on people life style.
- o 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.
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# SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

## Unit-It - Sports Medicine:

- Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance.
- o Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches.
- o Need and Importance of the study of sports injuries in the field of Physical Education
- o 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

- o 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:

- · 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.
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- 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.

Pandey, P.K., (1987). Outline of sports medicine, New Delhi: J.P. Brothers Pub.
 Williams, J. G. P. (1962). Sports medicine. London: Edward Arnold Ltd.

## TEST MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

## Unit- I Introduction to Test & Measurement & Evaluation

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

## Unit- II Criteria; Classification and Administration of test

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

## Unit- III Physical Fitness Tests

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

# Unit- IV Sports Skill Tests

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

## References:

- Bangsbo, J. (1994). Fitness training in football: A scientific approach. Bagsvaerd, Denmark: Ho+Storm.
- Barron, H. M., &Mchee, R. (1997). A practical approach to measurement in physical education. Philadelphia: Lea and Febiger.
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- Pheasant, S. (1996). Body space: anthropometry, ergonomics and design of work. Taylor & Francis, New York.
- Phillips, D. A., &Hornak, J. E. (1979). Measurement and evaluation in physical education. New York: John Willey and Sons.
- Sodhi, H.S., & Sidhu, L.S. (1984). Physique and selection of sports- a kinanthropometric study. Patiala: Punjab Publishing House.

# KINESIOLOGY AND BIOMECHANICS

# Unit - I Introduction to Kinesiology and Sports Biomechanics

- o Meaning and Definition of Kinesiology and Sports Biomechanics
- Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches.
- o 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

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

#### Unit - III Mechanical Concepts

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

## Unit - IV Kinematics and Kinetics of Human Movement

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

# 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.
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## RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

# Unit-I Introduction to Research

- o Definition of Research
- o Need and importance of Research in Physical Education and Sports.
- o Scope of Research in Physical Education & Sports.
- o Classification of Research
- o 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

- o Need for surveying related literature.
- o Literature Sources, Library Reading
- o Research Proposal, Meaning and Significance of Research Proposal.
- o Preparation of Research proposal / project.
- o 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

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

## Unit- IVStatistical Models in Physical Education and Sports

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

## 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 quickness, 2<sup>nd</sup> ed. Champaign, IL:
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- 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.
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- Verma, J. P. (2000). A text book on sports statistics. Gwalior: Venus Publications.

## THEORY OF SPORTS AND GAMES

## UNIT-I INTRODUCTION

## General Introduction of specialized games and sports-

- o Athletics, o Badminton, o Basketball, o Cricket, o Football, o Gymnastic, o Hockey,
- Handball, O Kabaddi, O Kho-Kho, O Tennis, O Volleyball and Yoga.
   Each game or sports to be dealt under the following heads
- o History and development of the Game and Sports
- o Ground preparation, dimensions and marking
- o Standard equipment and their specifications
- o Ethics of sports and sportsmanship

## UNIT-II Scientific Principles of coaching: (particular sports and game specific)

- Motion Types of motion and Displacement, Speed, Velocity, Acceleration, Distance and Newton's Law of motions.
- o Force Friction, Centripetal and Centrifugal force, Principles of force.
- o Equilibrium and its types
- o Lever and its types
- o Sports Training Aims, Principles and characteristics.
- o Training load Components, Principles of load, Over Load (causes and symptoms).

## UNIT-III Physical fitness components: (particular sports and game specific)

- o Speed and its types
- o Strength and its types
- o Endurance and its types
- o Flexibility and its types
- o Coordinative ability and its types
- Training methods: Development of components of physical fitness and motor fitness through following training methods (continuous method, interval method, circuit method, fartlek/speed play and weight training)

# UNIT-IV Conditioning exercises and warming up.

- o Concept of Conditioning and warming up.
- o Role of weight training in games and sports.
- Teaching of fundamental skill & their mastery (technique, tactic and different phases of skill acquisition).
- o Recreational and Lead up games .
- o Strategy Offence and defense, Principles of offence and defense.

# References:

- . 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.
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	Part A: Theoretical Course					
Course	Title of the Papers	Total Hours	Credit	Internal	External Marks	Tota
201	Sports Training	4	4	20	80	100
202	Computer Applications And Curriculum Design in Physical Education	4	4	20	80	100
203	Sports Psychology and Sociology	4	4	20	80	100
204	Sports Medicine, Physiotherapy and Rehabilitation	4	4	20	80	100
205	Test Measurement and Evaluation in Physical Education	4	4	20	80	100
206	Kinesiology and Biomechanics	4	• 4	20	80	100
207	Research and Statistics in Physical Education	-4	4	20	80	100
208	Theory of sports and game	4	4	20	80	100
	TOTAL .	32	32	160	640	800
	Part-B Practical Course					
o soi		6	4	20 1	80	100
PC-201	Track and Field (Throwing Events)	0	4	20	00	100
°C-202	Combative Sports: Martial Art/ Karate/ Judo/ Fencing/ Boxing/ Taekwondo/ Wrestling (Any two out of these)	6	4	20	80	100
°C-203	Basic :-Team Games: Baseball/ Cricket/ Football/ Hockey/ Softball/ Volleyball/ Handball/ Basketball/ Netball (Any two of these)	6	4	20	80	100
C-204	Track and Field / Swimming / Gymnastics (Any one out of three)	6	4	20	80	100
C-205	Advance :- Kabaddi/ Kho-Kho/ Baseball/ Cricket/ Football/Hockey/Softball/ Volleyball/ Handball/ Basketball/ Netball/ Badminton/ Table Tennis/ Squash/ Tennis	6	4	20	80	100
P-206	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	20	80	100
P - 207	Sports specialization: Coaching lessons Plans (One for Sports 5 lessons)	6	4	20	80	100
P - 208	Games specialization: Coaching lessons Plans (One for Games 5 lessons)	6	4	20	80	100
	TOTAL	48	32	160	640 .	800.