

**Bachelor of Physical Education(B.P.Ed)Degree Course
One Year**

Regulations :

1. Eligibility for admission to the course.

A Candidate shall be eligible for admission to the Bachelor of Physical Education degree course (B.P.Ed) if he/she has taken a degree of a recognized University subject to the following conditions.

1. Must have represented the school or college or University or District or State in any one of the games or athletics (as included in the interuniversity competitions).
2. Must have secured at least 50% marks in the selection tests as indicated below.

Qualifying Marks Scored in U.G.	-	25 Marks
Games and Sports Participation	-	20 Marks
Game Skills test	-	50 Marks
Track and Field (100 mts, Long Jump, Shot Put)	-	50 Marks
Bonus marks for professional basic degree in Physical Education B.Sc in Physical Education or B.P.E)	-	5 Marks
Total Marks	-	150 Marks

3. Should be medically fit and free from any deformity.

Coeducation : Both men and women are eligible for admission to B.P.Ed degree course. However, married women will not be eligible for admission.

2. Course of Study.

a. Duration of the Course.

The duration of the course of study is for one academic year, consisting of two semesters. The total working days shall not be less than 180 days in an Academic year (Each semester consists of not less than 90 working days excluding examination.)

Each working day shall consist of four hours of Practical Work (Morning and Evening - 2 hours each session) and three hours of theory in between

b. Undergoing Intensive Practice Teaching in neighboring schools and attending the annual leadership training camp village placement programme and educational tour have been compulsory for all the students.

- c. The Course of study shall consist of three parts Viz Part I, Part II and Part III as indicated below.

Part I - Theory

First Semester.

1. Principles of Physical Education & Educational Psychology
2. Anatomy, Physiology and Health Education
3. Organization, Methods and Supervision in Physical Education
4. Elective Courses
 - a. Fitness and Wellness
 - b. Yoga Education

Second Semester

5. History of Physical Education Recreation and camping.
6. Scientific Principles of Coaching and Officiating
7. Kinesiology and Exercise Physiology
8. Elective courses.
 - a. Management of Sports Injuries
 - b. Introduction to Test, Measurement & Evaluation and Computer Application in Sports

Part II - Practice Teaching.

Practice teaching includes observation, Teaching Practice internally at the college and externally in the neighbouring schools. Schools for visit by the teacher trainees may be chosen depending upon the suitability of schools as decided by the concerned faculty members.

Students are required to complete 10 General and 10 particular lessons under the supervision of the assigned physical education staff in the schools.

Part III - Practical Work

Participation and learning the skills and techniques and the teaching methods of the activities are as follows.

- a. Major Games (Badminton, Ball Badminton, Basketball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-kho, Tennis, Swimming, Table Tennis, Volleyball and Weight Lifting)
- b. Track and field events.
- c. Minor Games (Sense Training Games, Team and Relay Games, Circle Games, Running and Tag games, Partner contests, Simple ball games, Simple Stunts), Imitation and Dramatizational methods.

- d. Yogic practices (Asanas, Pranayamas, Kriyas, Mudras, Suryanamaskar and Meditation)
- e. Gymnastics, Tumbling and Pyramids.
- f. Conditioning Exercises (General and Specific)
- g. Marching and Calisthenics.
- h. Indigenous activities (Dands and Baithaks)
- i. Light apparatus (Indian clubs, Dumb-bells, Hoops, Wands, Pole drills.)
- j. Rhythmic activities (Classical dances, folk dances, Aerobic dance, Lezium)
- k. First Aid, Athletic injuries, Prevention, Management, Physiotherapeutic treatments, Rehabilitative processes and massage.
- l. Other activities such as
 - a. Organizing Tournaments and play days.
 - b. Camping.
 - c. Educational Tour (visits to fitness and Recreational centers, Stadia and other Physical Educational Institutions).

III. The Scheme of Examination shall be as follows:-

Part - I - Theory

First Semester						
Paper	Paper Code	Title of the Paper	Hours	Int	Ext	Tot
BPED	101	Principles of Physical Education & Educational Psychology	3	50	50	100
BPED	102	Anatomy, Physiology and Health Education	3	50	50	100
BPED	103	Organization, Methods and Supervision in Physical Education	3	50	50	100
Elective Courses						
BPED	104(a)	Fitness and Wellness	3	50	50	100
BPED	104(b)	Yoga Education				
Second Semester						
Paper	Paper Code	Title of the Paper	Hours	Int	Ext	Tot
BPED	201	History of Physical Education Recreation and camping	3	50	50	100
BPED	202	Scientific Principles of Coaching and Officiating	3	50	50	100
BPED	203	Kinesiology and Exercise Physiology	3	50	50	100
Elective Courses						
BPED	204(a)	Management of Sports Injuries	3	50	50	100
BPED	204(b)	Introduction to Test, Measurement & Evaluation and Computer Application in Sports				

**Part - II - Practical
Scheme of Practical Examination**

Practice Teaching.

1. General lesson
 - Internal 50 Marks.
 - External 50 Marks.
 - Total 100 Marks.**

2. Particular Lesson
 - Internal 50 Marks.
 - External 50 Marks.
 - Total 100 Marks.**

Total Marks for Part II - 200 Marks.

For the practice teaching and practical examination which shall be conducted by the University at the end of the II Semester, there shall be at least one external and one internal examiner. The Practice teaching practical work books should be submitted at the time of the University practice teaching practical examinations. The Internal assessment marks shall be submitted to the examiners at the time of University practice teaching and practical examination.

Part III Practical (Internal)

Sl No	Subject	Total	Passing Minimum
1.	Major Games (Playing ability and officiating) (Badminton, Ball Badminton, Basketball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Tennis, Swimming, Table Tennis, Volleyball, Weight lifting)	200 Marks	100 Marks
2.	Track and Field Events (Performance and Officiating)	100 Marks	50 Marks
3.	First Aid, Athletic injuries- Prevention, Management, Physiotherapy Treatment, Rehabilitation, Massage	100 Marks	50 Marks
4.	Minor Games (Sensar Training Games, Team and Relay Games, Circle Games, Running and Tag games, Partner contests, Simple ball games, Simple stunts), (limitation and Dramatizational methods)	50 Marks	25 Marks
5.	Yogic Practices (Asanas, Pranayamas, Kriyas, Mudras, Suryanamaskar, Meditation), Gymnastics, Tumbling and Pyramids	50 Marks	25 Marks

6.	Physical Activities such as Dands and Baithaks, Calisthenics Marching, Conditioning exercises, exercises with light apparatus, Rhythmic activities	50 Marks	25 Marks
7.	Other activities such as organizing competitions, play days, camping, Educational Tour etc.,	50 Marks	25 Marks
Total Marks for Part III		600 Marks	

Part I - Theory	-	800 Marks.
Part II - Practice Teaching	-	200 Marks.
Part III - Practicals	-	600 Marks.
Grand Total (Part I+II+III)	-	1600 Marks.

Credit System for the B.P.Ed., Course

I Semester	Subjects	Credits
Core Subjects	3	3 x 4 = 12
Elective Subjects	1	1 x 4 = 4
II Semester		
Core Subjects	3	3 x 4 = 12
Elective Subjects	1	1 x 4 = 4
Practice Teaching		
General Lessons	1	1 x 3 = 3
Particular Lessons	1	1 x 3 = 3
Practical	10	1 x 10 = 10
Camp	1	1 x 2 = 2
Total Credits for B.P.Ed course		50

Note:

- i) For the practice teaching examination conducted by the University, there shall be least one External and One Internal Examiner.
- ii) For Practice Teaching, each student should maintain a workbook, which shall contain records of atleast 20 lessons supervised by a qualified Physical Education Teacher and also the marks awarded by the College, which should be submitted to the Examiners conducting the University Examination in practice Teaching.
- iii) A candidate who fails in Practice Teaching Examination may present himself/herself University Examination in Practice Examination.

IV. Attendance

A Student must have 80% attendance in theory and practical classes to appear for university examination. If less than 80% in attendance he / she must produce a **Medical Certificate** (only in case he/she is medically unfit) and obtain the Certificate of Condonation from the concerned

authorities. In other cases if a student gets less than 80% in attendance he/she should **REDO** the semester.

V. Continuous Assessment for Part I - Theory Papers.

a. Written Examination (35 Marks)

Continuous assessment will be graded by the subject teachers. Three tests will be conducted for each paper. Each test carries a maximum of 35 marks and the average of best two tests will be considered. However, in the case of students who miss the tests for any valid reasons with prior permission from the Head of the Institution (Viz. Participating in Sports and Games competitions), he/she may be granted special permission to write the tests before the commencement of semester examination of that semester.

b. Assignment / Seminar (10 Marks)

The teachers will give assignments to the students and 10 marks are allotted for assignments. This may be of any accepted method such as Seminar, Project, Written materials, Record etc.,

c. Attendance (5 Marks)

Regularity in attending classes will be graded as per the percentage of attendance.

d. Pre-Semester (35 Marks)

Pre-Semester examination will be held at the end of each semester before the final semester examination covering all portions and 35 marks are awarded from this examination. Each paper carries 50 marks and this will be converted into 35 marks.

First Test	- 35 Marks.
Second Test	- 35 Marks.
Third Test	- 35 Marks.
1. Average of the above two tests and Presemester Examination	- 35 Marks.
2. Assignment / Seminar	- 10 Marks.
3. Attendance	- 50 Marks/2.
Total	- <u>50 Marks</u>

VI. Requirement for Passing.

No candidate shall be eligible for the award of the B.P.Ed degree unless he has passed the written examinations (Part I), the Practice Teaching (Part II) and Practicals (Part III).

VII. Grading System.

To pass in an examination a student has to score a minimum of 50% marks in each paper - Theory, Practice Teaching and Practicals (Internal and External Combined).

Minimum Passing	- 50% Marks.
50 to 59%	- Second Class.
60% and above	- First Class.

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

Sports Participation - University Examination - Special Permission

Internal Test - Special Permission

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

University Examination - Special Permission

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

Such a student appearing for a special / supplementary University Examination will not be deprived of **RANK in the University**, as his / her appearance will not be considered as an arrear / arrears in a paper / papers.

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

To qualify for the degree, supplementary candidates are required to pass all the papers prescribed for the

course within a period of three years after he/she completes the course. Beyond this period, the candidate will have to follow the current syllabi for the examination. A Separate fee will be collected in this case. Examination fees will be collected normally according to the rules and regulations of the university. A special will be collected for supplementary.

Screening.

Students who fail in any paper/papers would be permitted to apply to the examination section of the University to verify the valuation in case of doubt, for which they have to pay "Revaluation fee".

Appeal against the results of the semester examination may be made to the controller of examination by the student concerned through the principal of the affiliated college within 15 days of the participation of results by paying a fee of Rs..... For each paper, Revaluation may be done with a prescribed fee of.....

Internal Marks Breakup (50 Marks)			
A.	Internal Tests (Average of Best 2 out of 3)	35 Marks	
B.	Pre Semester 50 Marks converted to 35 Marks	35 Marks	
C.	Total Marks (A+B)	70 Marks / 2	35 Marks.
D.	Assignment/Seminar		10 Marks.
E.	Percentage of Attendance 100 % - 5 Marks 96 - 99% - 4 Marks 90 - 95 % - 3 Marks 85 - 89 % - 2 Marks 80 - 84 % - 1 Mark		5 Marks
Grand Total (C+D+E)			50 Marks

Part - I - Theory

(B.P.Ed - 101) Paper - I

Principles of Physical Education & Educational Psychology

Unit-I: Principles of Physical Education - Definition - Meaning - Nature and source of Principles in Physical Education - Definition of Education - Physical Education - Physical Culture and Physical training - Aim and objectives of Physical Education - Definition of Play - Theories of Play.

Unit-II: - Biological Principles of Physical Education - Exercise as biological necessity and various periods of growth and development - Differences between boys and girls during the period of adolescence - Hereditary traits - Muscle tone - Athletic heart - Unsynchronized Development - Reciprocal innervations - vital capacity - body types - Sheldon's and Kretschmers Classification.

Unit-III: - Sociological Principles of Physical Education - Sociology - Definition - Individual and Society - Desire for recognition and Response - Gregarious instinct - Social Groups and their significance - Family, Community, School, State, Nation - Democratic thinking - Group dynamics - National Integration - Competition and Co-operation in Physical Education.

Unit-IV: - Psychological Principles of Physical Education - Psychology - Meaning - Definition - Nature - Scope of Psychology in Physical Education - Heredity and Environment - Personality - Definition - Types of Personality - Intelligence - Definition - Individual differences in Intelligence.

Unit-V: - Motivation in Learning process - Theories of Learning - Conditional Response - Trial and Error - Imitation - Insightful Learning - Laws of Learning, Law of Exercise, Law of Effect, Law of Readiness, Law of Recency and Law of Frequency, Types of Learning - Primary, Associate and concomitant - Learning curve - Transfer of Learning.

Reference

- ❖ Kamalesh, M.L., & M.S Sangral, Principles and History of Physical Education, Parkash Brothers Educational Publishers, Ludhiana, 1981.
- ❖ Bucher, Charles A., & Deborah A. Wuest, Foundation of Physical Education and Sports, Times Mirror Mosby College Publishing, St. Louis 1987.
- ❖ Drowatzky, John N., Chalres W. Armstrong, Physical Education Career Perspectives and Professional Foundations, Prentice-Hall. Inc.,
- ❖ Mathur, S.S. Educational Psychology, Vinod Pustak Mandir, Agra, 1987.
- ❖ Thirunayananan C., & S. Hariharasarma, An Analytical History of Physical Education, The South India Press, Karaikudi, 1981.

(B.P.Ed - 102) Paper -II Anatomy Physiology and Health Education

Unit I

:

Meaning of Anatomy and Physiology - Cell - Structure and functions - Cell division - Mitosis - Tissues - Types - Structure and functions - Blood - Constituents of blood and their functions - Coagulation - Blood group.

Skeletal system - Construction of axial and appendicular skeleton - Arches of the foot - Sex differences in the skeleton - Joints - Definition - Classification and articulation.

Unit II :

Cardiovascular system - Heart - Structure and functions - Circulation of blood - Systemic, Pulmonary and portal circulation - Blood Pressure - Pulse - Lymphatic system - Lymph - Lymphatic circulation.

Respiratory system - Respiratory passage - Lungs - Structure and functions - Mechanism of respiration - Physiology of respiration - Control of respiration - Urinary system - Structure and functions of Kidney - Ureter - Urinary bladder - Urethra.

Unit III :

Digestive system - Structure and functions - Teeth - Salivary glands - Pharynx - Oesophagus - Stomach - Small and large intestines - Pancreas - Liver - Endocrine glands

- Pituitary - Thyroid - Parathyroid - Adrenals - Sex glands.

Nervous system - Brain - Parts of the brain - Structure and functions - Spinal cord - Reflex action - Peripheral Nerves - Autonomic nervous system - Sensory organs - Eye - Ear - Nose - Tongue - Skin.

Unit IV :

Health - Definition - Factors influencing health - Heredity and environment - Infection - Immunity - Public health measures to combat infection - Protected water supply - Disposal of garbage - Sewage - Night soil - Dead bodies - Industrial waste - Public health administration.

Unit V :

Common communicable disease - Definition - Causes - Mode of transmission - Prevention - Malaria - Filaria - Typhoid - Cholera - Dysentery - Poilo - Measles - Chicken pox - Tuberculosis - Tetanus - Rabies - Sex linked diseases - Aids and Syphilis - Personal hygiene - School health problems.

Reference:

- Chaurasia, B.D., **Human Anatomy**, CBS Publishers, Delhi, 1982.
- Chatterjee, Chandicharan, **Human Physiology**(Vol.I & II), Medical Allied Agency, Calcutta, 1980.
- Wilson, Kathleen J.W.Ross and Wilson - Foundations of Anatomy and Physiology, English language book Society, Churchill Livingstone, 1985.
- Park, K., Parks Text Book of Preventive and Social Medicine, Banarsildas Bhanot, Jabalpur, 2002.
- Sivaramakrishnan. S, Anatomy and Physiology, New Delhi: Friends Publications 2006.

(B.P.Ed - 103) Paper-III

Organization, Methods and Supervision in Physical Education

Unit-I: - Organization - Meaning, Definition, Importance and Guiding principles of organization and administration - schemes of Health and Physical Education in Schools, College, University, District, State-Nation.

Facilities and Standards in Physical Education - Play area - Standard recommended for schools and colleges - Care and Maintenance of play area - Gymnasium / Indoor Stadium - Size - Construction - Swimming Pool - Size - Construction -

Types - Care and Maintenance - Equipment - Types of Equipment - Purchase of Equipments - Care and Maintenance of Equipments.

Unit-II: - Need and Importance of Syllabus - Need for the time table - Preparation of time table - Types of Physical Education Periods - Qualities and Qualification of Physical Education Teacher - Student Leadership.

Finance and Budget - Sources of Income - Approved items of expenditure - Rules for the Utilization of games fund - Preparation and administration of a budget and Accounting - Office management - Maintaining Various records and Registers.

Unit-III: - Methods - Meaning and Importance of Method - Factors Influencing Method - Steps in Presentation - Teaching aids - Class management - Methods of teaching Physical Activities - Lesson plan - Values of lesson plan - Types of lesson plan -General - Particular - Teaching of activities - Calisthenics - Indigenous activities - Marching - Minor Games - Major Games - Gymnastics - Track and Field.

Unit-IV: - Tournaments - Drawing fixtures for tournaments - knock out - League Merits and demerits of knock out and league - Combination tournaments challenge, tournament - Intramural competition - Extramural competition - Sports meet - play days - Demonstration and Exhibition - Incentives and Awards.

Unit-V: - Supervision - Meaning and Need for supervision - Guiding principles of supervision - Qualities and qualification of a supervisor - supervisors relationship with the administrator and the physical education teacher.

Techniques of Supervision - Visitation - Periodical - Surprise - Request social - visitation procedure - report on the visit - Meeting -Individual and Groups - Demonstration for individual teacher / Group teacher - In service training - Short term Course - Refresher Course - Clinics - Seminars and conferences.

Reference

- ❖ Voltmer, Edward F., Arthur A. Esslinger, Betty Foster McCule and Kenneth G. Tillman, The Organization and Administration of Physical Education, Prentice Hall, Inc., New Jersey, 1979.

- ❖ Two Experienced Professors, Organization, Administration and Recreation in Physical Education, Parkash Brothers Educational Publisher, Ludhina 1976.
- ❖ Dheer, S., & Radhika Kamal, Organization and Administration of Physical Education, Friends Publication, New Delhi, 1991.
- ❖ Sachdeva, M.S., A. Modern Approach to School Organization and Administration, Parkash Brothers Educational Publisher, Ludhina 1983.

(B.P.Ed - 104 (a)) Paper -IV
Elective - Fitness and Wellness

Unit-I: - Definition and Meaning of Physical Fitness - Brief Historical Relevance of Exercise and Physical Fitness - Future Challenges, Strategies for increasing Physical Fitness in India - Values of Physical Fitness - Components of Health Related Physical Fitness and Athletic related Physical Fitness - Factors influencing fitness - Definition and components of wellness - Relationship between fitness, health and Wellness.

Unit-II: - Factors influencing Fitness - (Age, Sex, Climate, Diet, Exercise and Training) - Types of Exercises used in Fitness (Aerobic, Anaerobic, Isometric, Stretching, Agility and balancing). The acute and chronic effects of Physical Activity on various systems of the body - Health benefits of Physical Activity - Assessment of Cardio-respiratory Fitness, Musculo skeletal Fitness, Flexibility and body Composition.

Unit-III: - Prescription for aerobic exercise - modes of aerobic exercise - Implementing an aerobic fitness programme - Principles of cardiovascular exercise prescription - aerobic exercise programmes (walk-jog-run) aerobic dancing, rope jumping, treadmill running, Jogging in place, stair climbing, stationary bicycling.

Unit-IV: - Prescription for Flexibility - Principles of flexibility Exercise - Types of Flexibility and methods of training - Flexibility exercise for the low back, round shoulders, joggers, runners and various muscles of upper and lower extremities.

Unit-V: - Resistance Training - Meaning - Benefits of resistance training - Terminologies used in resistance training - sets, resistance (Load), repetitions maximum - Principles of exercise prescription the threshold - over load specificity reversibility - Progression - warm-up - cool-down-Types of exercise programme - Stamina, Suppleness and Strength - Exercise programming for resistance training - Forms of resistance training - constant resistance, variable resistance, accommodating resistance - Isotonic training - Isometric training - Isokinetic training.

Reference

- ❖ Williams H. Melvin (1995), Life time fitness and wellness, Brown Publicatinos, Dubugue.
- ❖ Introduction to Physical Education Fitness and Sport, Mayfield Publishing Company, Mountain view, California.
- ❖ Batman P. and Van capelle M. (1995) The Exercise Guide to Resistance Training, FITAU Publications, Australia.

(B.P.Ed - 104 (b)) Paper -IV Elective - Yoga Education

Unit I:

Concept of Yogic Practices - Kinds of Yogic Practices: Asana, Pranayama, Kriya, Bandha, Murda, Dhyana.

Asana: Definition, Scope and Limitation of Asanas - Classification of Asanas - Meditative Asanas - Relaxative Asanas-Cultural Asanas - Step by Step Performance of Asanas - Safety Measures and Precautions.

Unit II:

Pranayama: Meaning - different Phases in Pranayama Practice: Puraka (Inhalation), Kumbhaka (Retension) and Recaka (Exhalation) - Breathing Ratio in Pranayama Practice - Application of Bandhas in Pranayama - Safety Measures and Precautions.

Meaning of Bandha - Different Bandas: Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha.

Meaning of Mudra - Different Mudra: Brahma Mudra, Ashwini Mudra, Shanmugi Mudra.

Unit III:

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

Kaphalabhathi: Practicing Method - Benefits.

Trataka: Practicing Method - Benefits.

Neti: Jala Neti, Sutra Neti - Methods of Practice and its benefits.

Dhauthi: Varnana Dhauthi, Dhana Dhauthi, Vastra Dhauthi - Methods of Practice and its benefits.

Nauli: Practicing Method - Benefits.

Bastri: Practicing Method - Benefits.

Meaning and Concepts of Meditation.

Unit IV:

Yoga Practices and Other Systems of Exercises - Asanas Vs. Muscular Exercise - Pranayama Vs Deep Breathing - Importance of Nerve Culture in Yoga.

Yoga and Competition - Yoga and Modern Education

Need for Group teaching techniques for imparting instruction to large groups. Adoption of modern methods of classroom teaching in Yoga.

Unit V:

Meaning of Lesson Plan - Need for a Lesson Plan in Yoga - Stages in Yoga Lesson Planning - Effective methods for teaching various yogic practices.

Order of teaching the yogic practices. Do's and Don'ts of Specific Yoga techniques. Preparation of Model Lesson Plan for Yoga Practices.

Reference

- ⊕ Swami Kuvalayananda and S.L. Vinekar - Yogic Theraphy.
- ⊕ Asanas - Swami Kuvalayananda. Kaivalyadhama, Lonavla.
- ⊕ Swami Kuvalayananda, Kaivalyadhama, Lonavla - Pranayama.
- ⊕ K. Chandrasekar - Sound Health Through Yoga by Prem Kalyan Publications, Sedapatti, 1999.
- ⊕ Teaching Methods for - M.L. Gharote and Yogic Practive S.K. Ganguly, Kaivalyadhama, Lonavla.
- ⊕ M.L. Gharote - Applied Yoga - Kaivalyadhama, Lonavla.
- ⊕ Yogasanas: A Teacher's Guide - NCERT, New Delhi.
- ⊕ O.P. Tiwari - Asanas - Why? and How? -Kaivalyadhama, Lonvla.
- ⊕ R. Thirumalaisamy (1987) - Yoga for Good Health, Karaikudi Senthilkumar publishers.

(B.P.Ed - 201) Paper -V**History of Physical Education Recreation and Camping**

Unit-I: - Physical Education in Ancient Greece - Sparta - Athens

Origin and development of Ancient and Modern Olympic games - Physical Education in India - Epic Age -Mohammed period - Contribution of Basedow - Gutsmuth - John Spiess - Ling - Turnverine Movement.

Unit-II: - Teacher Training Institution in India - Asian Games - Sports Authority of India - National Sports Organization - Sports Development Authority of Tamil Nadu - School Games Federation of India - Inter University Sports

Board - Awards - Arjuna Award - Dronacharya Award - Rajiv Gandhi Khel Ratna Award.

Unit-III: Recreation - Meaning, Definition, Aim, Scope and Significance of recreation - Aim and objectives of recreation - Recreation of play - Recreation of work - Recreation and leisure organization and Administration of Recreation.

Unit-IV: - Historical Development of Recreation - In Primitive Culture - Greek Period - Roman period - Middle age - Recreation in U.S.A and India - Agencies offering recreation - Home, Governmental, Voluntary, Private - Commercial Agencies - Rural Urban, Community and Industrial Recreation - Areas Facilities, Equipment and their Maintenance.

Unit-V: - Camping - Definition and Meaning - Scope and significance of Camping - Types of Camps - Selection and layout of campsites - organization and administration of camps - camp programmes and activities - Evaluation of camp work.

Reference

- ❖ Dheer . S. & Radhika Kamal, Organization and Administration of Physical Education, Friends Publication, New Delhi - 1991.
- ❖ Two Experienced Professors, Organization, Adminsitration and Recreation in Physical Education, Parkash brothers, Educational Publishers, Ludhiana 1986.

(B.P.Ed - 202) Paper -VI Scientific Principles of Coaching and Officiating

Unit-I: - Motion - Meaning and Definition - Motion - Types of Motion - Laws of Motion - Centre of Gravity - Equilibrium - Factors determining stability - Lever - Types of lever.

Unit-II: - Meaning and Definition of Teaching, Training and Coaching. Relationship of Teaching, Training and Coaching - Philosophy of Coaching - Qualification and Qualities of a Coach.

Unit-III: - Ground markings and measurement - Standard equipment - Rules and Interpretation of Rules - System of

officiating - Duties of Officials - Official signals and score sheets.

Unit-IV: - Positional Play - Team Tactics - Attack and Defense - Team Strategy.

Unit-V: - Construction and Markings of Track and Field Events - Rules and Interpretations of Rules - Duties of Officials - Score Sheets - Combined Events.

Reference

- ❖ Bunn John W. Scientific Principles of Coaching
- ❖ Perinbaraj, S. and others, Play Field: Dimensions and its Requirements, Vinis Publication, Karaikudi.
- ❖ Book of Rules of Games and Sports, National Council of Y.M.C.A of India, New Delhi 2005.

(B.P.Ed - 203) Paper - VII Kinesiology and Exercise Physiology

Unit-I: - Kinesiology definition - History and Development - Objectives of Kinesiology.

Structure and functions of human joints - Major joint articulations.

Unit-II: - Origins, Insertion and action of the following muscles: Pectoralis Major, Pecoralis Minor, Deltoid, Biceps brachia, Triceps brachia, Trapezius, Latissimus dorsi, Rectus abdominus, Rectus Femoris, illio psoas, Sartorius, Quardriceps, Hamstring Group, Gastroenemius, Gluteus Maximums, Gluteus medius, Gluteus minimums. Application of Kinesiology to basic pattern of performance in walking and running.

Unit-III: - Muscular and Nervous system - Skeletal Muscle - structure and function (gross structure, electron microscopic structure) - Muscle fibre types, fibre distribution and performance, Sliding filament theory of muscular contraction, types of muscular contraction, energy for muscular contraction, acute and delayed muscular soreness, fatigue - Types of fatigue - prevention - Effect of exercise on muscular system.

Respiratory System: Respiratory muscles - mechanicsm of respiration - pulmonary ventilation - lung volumes and capacities - effect of exercise on pulmonary ventilation - second wind.

Unit IV: Cardio - Vascular and Nervous system - Circulation system: Cardiac Cycle, Heart rate - Stroke Volume - Systemic and pulmonary circulation - cardiac output during rest and exercise - factors influencing heart rate and blood pressure - circulatory adjustments during rest and exercise effect of exercise on circulatory system.

Nervous system: Functions of nervous system - Organization of nervous system - Structure of Neuron - Proprioceptors.

Unit-V: - Energy Sources - Adenosine triphosphate, aerobic and anaerobic metabolism - Energy metabolism during rest, exercise and recovery Factors affecting performance - factors limiting anaerobic and aerobic performance.

Reference

- ❖ Luttgenes, Kathryn, Helge Deutsch and Nancy Hamilton, Kinesiology: Scientific basis of Human motion, Dubuque: IA: WMC, Brown Communication Inc, 1992.
- ❖ Dhananjay Shaw, Pedagogic Kinesiology, Sport Publication, Delhi, 1998.
- ❖ Gladys Scott, M., Kinesiology, Sport Publication, Delhi, 1998.
- ❖ Clarke, David H, Exercise Physiology Prentice Hall, London 1975.
- ❖ Robergs, Robert A and Robers Scott, Exercise Physiology, Mobsy, London 1997.
- ❖ Sandhya, Tiwari, Exercise Physiology Sport Publication, Delhi, 1998.
- ❖ Shaver Larry G. (1985) Essentials of Exercise Physiology: New Delhi: surjeet singh publications.

(B.P.Ed - 204 (a)) Paper - VIII

Elective - I - Management of Sports Injuries

Unit-I: - Sports Injuries - 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 - Strapping and supports.

Unit-II: Physiotherapy - Definition - Guiding principles of physiotherapy, Importance of physiotherapy - Electrotherapy - infrared rays - Ultraviolet rays -short wave diathermy - ultrasonic rays.

Unit-III: Hydrotherapy: Cryotherapy, Thermo therapy, Contrast Bath, Whirlpool Bath - Steam Bath - Sauna Bath - Hot Water Formentation - 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.

Unit-V: - Posture: Meaning and Values of Good Posture - Causes of poor posture - Postural Examination - New York State Posture Rating Chart Test. Some Common Deviations in Posture - Normal Curvature of the Spine and its utility, Scoliosis, Lordosis and Scoliosis Flat back, [C and S Curve] round shoulder, Knock Knees, Bow Legs, Flat Foot, Causes for Deviations and corrective exercise.

Reference

- ❖ Dolan: "Treatment and Prevention of Athletic Injuries". The intestae Danville, Illinouis
- ❖ Edward Donald: Physiotherapy, Occupational therapy and Gymastics:. London Publishers.
- ❖ Sundarajan: "Sport Medical Lecturers" Rashan Publication.
- ❖ Rathborne Corrective Physical Education: J.I.W.B. Saunders and Co., London: 1965.
- ❖ E.M. Naru, Manual of Massage and Movement, Faberr and Faber Ltd.,
- ❖ William Mareiam and Catherrine Worthingham, Therapetuic Exercise for Body alignment and Education, W.B., Saunders and Co., 1965.
- ❖ M.C. Lace Massage and Medical Gymnastics: J & A Chruchil Ltd., 1915
- ❖ Stafford and Kolly, Preventive and Corrective Physical Education, New York, The Ronald Press, 1968.

(B.P.Ed - 204 (b)) Paper -VIII
Elective - II - Introduction to Test, Measurement &
Evaluation and Computer Application In Sports

Unit-I: - Meaning of the terms - Test - Measurement and Evaluation - Need for measurement and evaluation - Criteria for selection of a standard test - Validity - Reliability - Objectivity - Administrative Procedure - Norms.

Unit-II: - Classification of Pupils - Need and Importance - Methods of Classification - Motor Fitness - Definition - Components - JCR test - Cardio respiratory endurance - Coopers 12 minute Run/Walk Test.

Unit-III: - Tests of Specific Skills

Badminton - Miller wall volley test - French short service test.

Basketball - Johnson basket ball test - Leilich basketball test.

Hockey - Friedal field Hockey test.

Football - Johnson soccer test - McDonald soccer test.

Tennis - Dyer Tennis test.

Volleyball - Brady volley ball test - Russell Lange volleyball test.

Unit-IV: - Definition of Computers - Types of Computers - Microcomputer - Mini Computers, Mainframe Computers and Super Computers - Binary number system - Bits and Bytes - Hardware Input - Output - The arithmetic / Logic Unit - Control Unit. Computer Memory - Auxiliary Storage. The Punched Card - Magnetic & Tape - Disk oriented data entry system; Out-put devices - Impact and non-impact printers.

Unit-V: - MS-Word - Creating documents - Formatting, Editing, Deleting, Background and copying, Spelling check and Thesaurus - Ms-Excel-Opening - Saving - Editing File - Basic Mathematical Problems - Addition, Subtraction, Multiplication, Division - Ms Power Point - Opening - Creating Saving - Deleting Slides / Templates - Slide Show - Important Feature of Power point Presentation.

Reference

- ❖ Jensen, Clayne, R & Cynthia C. Tirst, Measurement in Physical Education and Athletics, MacMillan Publishing co., Inc New York, 1980.