

2022-865378

**Dr. Babasaheb Ambedkar  
Marathwada University**



**Bachelor of Physical Education  
B. P. E.**

(Three Year Degree Course)

(Progressively effective from June 1996)



Price : Rs. 30/-

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### B. P. E. OF THREE YEAR DEGREE COURSE

O.613 : The Degree of Bachelor of Physical Education (B. P. E.), shall be conferred on a candidate who satisfies following conditions :-

- (I) The candidate must have taken admission in the class after passing Higher Secondary (XII) Examination or any other examination recognised by the University as equivalent thereto.
- (II) The duration of course will be of three years. Ist Year Part-I, IInd Year Part-II, IIIrd Year Part-III. There will be Annual University examination at the end of each year i. e. Ist Part First Year, IInd Part Second Year and IIIrd Part in the Third Year and degree will be awarded after passing all the three parts.
- (III) The candidate will have to select one game for specialization after passing the first year examination.
- (IV) He will have to put 85% of attendance in theory classes and Physical and Sports activity classes separately.
- (V) A candidate appearing in the Ist Year examination must have attended a Leaders Training Camp organized by the College for atleast 10 days before appearing at the examination.
- (VI) Candidate will have to pass separately in the following examination :-
- (VII) Theory
  - PART (A) : Theory Papers
- (VIII)
  - PART (B) : Practical skills
  - PART (C) : Teaching Ability
  - PART (D) : Specialization in any one game.
 Internal marks in Part I, II, and III.
- (IX) The candidate should be of age between 16 to 23 years, in case of reserved category there shall be relaxation of two years. Preference will be given to the categories of

the candidates as per the rules prescribed by Government of India and the candidates who have attained one star level and in N. P. E. T. (National Physical Efficiency Test).  
 (X) Candidates, who have participated in Inter-school/ Inter-Collegiate / Inter-District / Inter-University / State / National level in the game and Sports, will be selected.  
 (XI) There shall be annual examination at the end of each year and a candidate will have to pass separately in Part A - Theory: Part B - Practical Skills, Part C - Teaching Ability and Part D - Specialization.  
 The result of examination shall be given separately in the Degree Certificate under four Heads - i. e. Part-A Theory, Part-B Practical Skills, Part-C Teaching Ability and Part-D Specializations.

To pass in Theory Papers in each of Part I, II, and III Examination a candidate must secure at least 35% marks in each Theory paper and obtain at least 40% marks for exemption in that paper. No minimum percentage is prescribed for the Internal grades in Theory. In Part 'B', 'C', 'D' minimum marks for passing will be 40.  
 (XII) Candidate may choose one of the following Games for specialization in Part D on the basis of admission test prevailing in the year when admission is sought in the college :-

- R.1144
- To get distinction a Candidate must obtain not less than 75% of the aggregate marks. To obtain I class a candidate must obtain a minimum of 55% marks in Part-I i. e. Theory and 60% and the above of the aggregate in remaining three parts.
  - 60% and above of the aggregate for 1st class.
  - 50% to 59% of the aggregate for IInd class.
  - 35% to 49% of the aggregate for pass class.

(R. 1145) The following shall be the Scheme of Examination of B. P. E. Part-I, II, III  
 PART-I (FIRST YEAR) Part (A & B)

Part - (A)	Written Papers Theory	Hours	Inter-nal theory Exam.	Uni. Theory Exam.	Total Maximum Marks	Aggregate required
SUBJECT	General Science	03	25	75	100	100
	Basic & Systematic Anatomy	03	25	75	100	35
Paper-I	General Science	03	25	75	100	35
Paper-II	Basic & Systematic Anatomy	03	25	75	100	35
Paper-III	History of Phy. Edn.	03	25	75	100	35
Paper-IV	Sociology	03	25	75	100	35
Paper-V	English	03	25	75	100	35
Paper-VI	Safety Edn. & First Aid	03	25	75	100	35
		150	450	600	210	

ART - (B) PRACTICAL SKILLS  
 Maximum marks prescribed 300  
 Minimum marks required for passing 120  
 with conduct the help of one Internal from the college and one external from the University. 300

Part-II : Second Year Part (A, B & C)

PART A - Written papers - (Theory)

Paper-I	Physiology and Exercise.	03	25	75	100	35
Paper-II	Kinesiology	03	25	75	100	35
Paper-III	Psychology guidance and group work.	03	25	75	100	35
Paper-IV	English	03	25	75	100	35
Paper-V	Method in Phy. Edn.	03	25	75	100	35
Paper-VI	Introduction to Edn. & Educa- tional Methods	03	25	75	100	35
Paper-VII	Citizenship and Government.	03	25	75	100	35
Total		175	525	700	245	

PART-(B)

**PRACTICAL SKILLS** (Internal marks average)  
Maximum marks prescribed Minimum marks  
for practical Exam. i. e. 350 required for 140

PART-(C)

Teaching Ability  
Internal marks which is to be (Minimum marks for  
50 passing-20)  
conducted by :-  
internal & external examiner  
University examination 40  
Minimum marks required for  
passing.

Part-III : Third Year (Part A, B, & D)

Part-(A)

Written Papers	Hours	Inter- nal theory Exam. out of 25	Uni. Theory Exam.	Total Maximum Marks	Mini- mum required for
✓ Paper-I Principle of Physical Edn.	03	25	75	100	35
Paper-II Organisation & Administration of Phy. Edn.	03	25	75	100	35
✓ Paper-III Recreation.	03	25	75	100	35
✓ Paper-IV Corrective Phy. Edn. & Preve- nition care and Treatment of Athletic Injuries.	03	25	75	100	35
Paper-V Health Education	03	25	75	100	35
⊗ Paper-VI Test and Measurement	03	25	75	100	35
Paper VIII Principle of Coaching in one sports & games.	03	25	75	100	35
Total		175	525	700	245

PART-(B)

**PRACTICAL SKILLS**  
Maximum marks prescribed  
for practical skills will be 150  
and conducted by internal  
college examiner and one  
University external examiner  
minimum marks required for  
passing is any 60 for 4 games  
sports.

150 60

PART-(D)  
Paper-VII

Specialization in any one game  
Principal of Coaching in the  
games/Sports.

I	Internal Marks in Skills.	100	—	100	40
II	Coaching (Lesson Planning)	50	—	50	20
III	Coaching Lesson of Final Examination to be conducted by the Internal & External Examiner.	—	—	100	40
Total		150	250	100	

GRAND TOTAL :- 3200 - 1180

(R-1146) The following shall be the syllabus prescribed for

B. P. E. F. Y

B. P. E. PART - I EXAMINATION

Paper-I : General Science

Importance of Science- Various basic sciences, value of knowledge required for Physical Education.

Physics :

MECHANICS - GENERAL PROPERTIES OF MATTER

Motion Velocity, Projectile, Laws of Motion, Force centrifugal force, centripetal force, Gravity, Force of gravity, Centre of gravity, Equilibrium, work, power, Efficiency Energy, Transformation of Energy, Friction, Levers Fluid Pressure, Barometer, Boyle's Law, Pumps (exhaust pump & ball inflator) Osmosis, Diffusion, Density, Specific gravity.

Heat :-

Effect of heat, Thermometer, Specific heat and latent heat (their importance in daily life), Transference of heat (Conduction, Convection, Radiation).

Light :-

Nature of light, Refraction of light, at plane onurved surfaces (Celine-ra, Human Eye, Astronomical Telescope and Compound Microscope).

Sound :-

Characteristics of sound, Elementry idea of production and transmission of sound, Loudness, pitch, Hearing process.

MAGNETISM AND ELECTRICITY

Magnetic attraction and repulsion, magnets, Electrification, by Friction and Induction, Conductors and non-conductor, Current Volt, Ampere, Electric Cells (Simple Cell, Daniel Cell), Electromagnetics induction Alternation current machine. Direct current machine motor Transformer.

*Note :-* The topics mentioned above are not meant for detailed study but to acquaint the student with general principles and their application in the modern scientific age. The course of study does not include the solution of mathematical problems connected with the topics mentioned above.

#### Chemistry :-

Indestructibility of matter, Atom, Molecule, Element Compound & Mixture, The atmosphere, Oxygen, Oxidation & Reduction, Combustion, Respiration, Acids, Bases, Salts, solubility, Crystallization, Hydrogen, Water, Hard and Soft water, Carbon, Carbon dioxide, Nitrogen, Ammonia, Uses of Nitrates, Chlorine.

Introduction to Organic chemistry, Carbohydrates, Proteins, Amino Acids, Fats, Oils, Soaps.

#### Biology :-

Living organism, Cell, Proteolasm, Cell division, Cellular structure of plants and animals, Reproduction in plants and animals, An elementary study of Angiosperm, Gymnosperm, Fern Moss Alge. Fungus, Bacterium and virus. An elementary study of Hydra. Tapeworm. Earth-worm, Cockroach, Mosquito. House Fly, Frog from a point of view of their external structure and reproduction, Inter dependence of Plant and Animals, Evolution and Heredity.

#### Book Recommended :-

- 1 Physics by W. L. Whitey Published by University Tutorial Press Ltd. Clifton House, Eouth Road, London N. W. 1. 1959 Sh. 15.6 d.
- 2 Chemistry for Matriculation by G. H. Baily and H. W. Bansom, University Tutorial Press, London, 1956.
- 3 Biology made simple by E. P. Hansasur, Publishers Duddy and Co. Inc. Garden City, New York, 1956 Dollar 1.45.

#### Paper - II : Basic and Systemic Anatomy

- 1 Introduction :  
What is Anatomy? Various terms used in Anatomical position: Need and Importance of Anatomy for the students of Physical Education.
- 2 Definition of cell tissue, organ and system, Microscopic structure of cell.  
Tissues : classification, structure and functions of various types of tissues.
- 3 Skeletal system :  
Composition, Microscopic and Microscopic structure of bones, classification and functions of bones general features of scapula, ulna, humerus, hip bone, Femur, Tibia Typical Rib. Typical Vertebra and Bones of Skull.
- 4 Joints :  
Definition and classification of Joints : Anatomical structure of synovial joints, Terminology of movements around a joint.
- 5 Structural and functional classification of muscles, Microscopic structure of muscles (skeletal cardiac and smooth) and its significance, General characteristics of muscles (Elasticity, Contractibility and Irritability). Attachments and Action of the important Muscles in Relation to following parts of body - Shoulder Girdle, shoulder Joint, Elbow Joint. Hip Joint, Knee Joint, Ankle Joint.
- 6 Systems :  
a) Basic knowledge of cardio-vascular system including structure of heart artery vein & capillary.  
b) Respiratory system with special reference to lungs. bronchial tree & muscles of respiration. Mechanism of respiration.  
c) Digestive system : Anatomical structure & function of various parts of elementary canal, liver, pancreas, gall bladder etc.  
d) Nervous system : structure of brain, spinal cord & peripheral nerve, reflex arch and reflexes.  
e) Brief account or Urinary system, structure of kidney and Urinary Tract.

- f) Endocrine glands, Anatomical structure of pituitary thyroid pancreas, adrenals and glands.
- g) Brief account of reproductive system.
- h) Brief account of body fluids, Lymphatics, composition and microscopic structure of blood.
- i) Special senses: Anatomical structure of sense organs for vision hearing, tests and smell.
- j) Microscopic structure and function of skin.

**Books Recommended:**

- 1 Anderson T., Mc, Clarg Human Kinetics and analysis Body Movements London William Helman Medical Books Ltd., 1961 Rs. 22-50.
- 2 Davis D. V. wiaiy's anatomy London. Longmans Green and Co. Ltd., 1967. Rs. 120.
- 3 Deval. Ellen Naill Kinesiology. The Anatomy of Motion.
- 4 Pearce, Evelyn B. Anatomy and Physiology for Nurses London Faber and Faber Ltd., 1962.
- 5 Pearce J. W. Anatomy for students and Teachers of Physical Education, London, Edward Arnold and Co. 1959. sb 30.

**Paper-III : History of Physical Education**

- 1 Meaning and Process of Education, Definition of Physical Education The need and importance of physical education.
- 2 Physical Education in ancient India-Vedic period, Epic Period, Buddhist period. Development of Indigancous activities especially Yogic Physical Exercises.
- 3 Physical Education in the city states of Sparta & Athens.
- 4 Physical Education in ancient Rome. Physical and moral education The circus-Glatatorial combats.
- 5 Contribution to the growth of Physical Education by leaders and movement in the following countries.  
Germany (John Fredarick, Gius muhls Fredrich Ludwing John, Adolyh Spices Phylauthropopinum Turnvercin Movement and the

Hirschsch Schartu, Sweden (Per Henric Ling) Denmark (Franz Nachtegall, Niels Burke Swadish Medical Gymnastic).  
Great Britain (Archibald MacIeren, British Games & Sports, public playground and their coaching systems) U. S. A. (Dr. Dio Larcis Dr. Dudley Alen Sargant, Tow Turnvarime Movement in America Training of physical Education Teachers (Y. M. C. A. and its contribution) U. S. S. R. Physical Education in Schools, the Spartakiad, Japan (Before and After world war II, Famous sports of Japan). Persia.

- 6 Modern Olympic Games.
- 7 Survey of Modern Physical Education in India.
  - a) Contribution of Akhadass and Vyayamshalas,
  - b) Y. M. C. A. and its contribution,
  - c) The British influence - Gymkhana Sports, Clubs, Physical Training,
  - d) India Olympic Associations, National Sports Federation and State Associations.
  - f) Professional Organisations-All India Association of College of Physical Education, Indian Association of Teachers of Health, Physical Education and Recreation, Indian National Recreation Association.
  - g) Youth Welfare Programmes - N. C. C., N. S. S., N. S. O., Scouting and Guiding. Youth Hostels, Youth Festivals, Camping, Mountaineering.
  - h) National Fitness Corps, Programme in Secondary Education.
  - i) Scheme for promotion of Physical Education preparation of popular Literature, Research in Health, National physical Fitness Programme, Arjun Awards. NA and State Council of sports, National Institute of Sports. Regional Coaching Centres.

**Books Recommended:**

- 1 Khan Eraj Ahmed, History of Physical Education, Patna Scientific Book Co.
- 2 Leonard, Frad Eugena and Affieck G. orge B., Gulde to the History of Physical Education, Philidelphia Lec & Fabiger, 1962, Dollar, 550.

- 3 Majumber D. C. Encyclopaedia of India Physical culture Baroda Good Companions 1952, Rs. 40-00.
- 4 Rice Emmett. A. Hutchinson John L. and Lee Marbal. A brief History of Physical Education. New York : The Ronald Press Co., 1960, Rs. 60-00.
- 5 Rajgopalan K. A. Brief History of Physical Education in India, Delhi Army Publisher 1962, Rs. 50/-
- 6 Wakharkar D. G. Manual of Physical Education, Bombay. Pearl publishers Pvt. Ltd., Rs. 5/-

#### Paper-IV : Sociology

- 1 Nature, Scope and Method of Sociology, Relationship of Sociology with other social sciences.
- 2 Society and its basic factors :-
  - a) Culture - Concept of culture and Civilization, Folk ways and norms.
  - b) Biological Factors-Role of heredity Influence of environment, race Prejudice.
  - c) Geography-Geographical influence on physical life and civilization, geographical factors in evolution of culture, influence of culture on geography.
- 3 Group behaviour :-
  - a) Formation of groups, social stratification status.
  - b) Social control-Nature and techniques of social control and their social consequences.
- 4 Personality - Concept of personality and the influence of group and culture in its formation :
 

Community - Study of the total organised life of a group inhabiting a locality, primitive communicatives, town and cities, urbanization, community characters and patterns changing community patterns and adjustment.
- 5 Social order and Institutions, Institution and associations, social organization, growth and development of family, economic institutions and religious institution.

Books Recommended (not for detailed study) :

- 1 McJiver R. M. Society, London : Memillan & Company.
- 2 Obburn, William F. and Ninkoff Myer F and Book of Sociology, Eurasia Publishing House, New Delhi-1954.

#### Paper-V : English

##### COURSE CONTENTS -

- 1 Oral (Common for B. P. E. I and II)
 

Speech and pronunciation with emphasis on.

  - a) Introduction.
  - b) Rhythm.
  - c) Stress.
  - d) Phonetics.
  - e) Fluency.

No prescribed examination shall be held in this but special stress on these points have to be given in regular teaching classes.

Written - B. P. E. I Paper - V

Section-(A) GRAMMER :

- i) Sentence structure-simple, compound, complex variations and transformation.
- ii) Sentence forms like assertive, interrogative etc., variations and transformation.
- iii) Practice in use of grammatical usages of articles, number, gender, tense (general simple forms) voice, prepositions, narration.

##### (b) IDIOMS AND PHARASES INCLUDING :

- i) Idioms - general and professional.
- ii) Idioms derived from verb-preposition combination like 'bring up' of etc.
- iii) Sports Phraseology,
- iv) Politeness forms in spoken English.

(C) VOCABULARY INCLUDING :

- i) Synonyms, antonyms,
  - ii) Substitution of one word for many words.
  - iii) Common imagery used to better expression, like 'White as a sheet', 'pure as lily, and the like.
  - iv) Words of general knowledge - like name of Animals their cries, trees, flowers having special reference and symbolism in the language.
  - v) Difference between words looking alike (with slight difference in spelling) like 'Stationary' and 'Stationary'.
- (D) CORRECTION OF COMMON ERRORS IN MECHANICS INCLUDING :
- i) Hand writing :
  - ii) Spellings :
  - iii) Punctuations :
  - iv) Use of capital letter :
  - v) Sentence constitution :
  - vi) Items of para(a)

SECTION-(B) APPLIED LANGUAGE :

Construction of a narrative from skeletal outline

Books Recommended for Research :

- i) Living English structure - W. S. Allan.
- ii) High School English Grammar and Composition & Martin.

Marks Allocation :

Minimum one question from each section is to be attempted.

Section-A	Marks	Max.
(a)	(i) (ii) (iii)	30
(b)		10
(c)		10
(d)		60
Section		75
		15

Paper-VI : Safety Education & First Aid

PART—A : SAFETY EDUCATION

- 1 The concept of Accidents and Safety. Psychological principle concerned with accidents and promotion of safety consciousness. The need for teaching principles of safety Education.
- 2 Safety Home-Environment and structure, Electrical connections, Bath room and lavatory, storing articles, kitchen and fire place, storing medicines, principles of movements in daily living.
- 3 Safety at school-structure and environment, furniture and fixtures, school procedures precautionary and emergency equipment, collection of information (addresses of parents, hospitals and doctors, police, fire station, ambulance service).
- 4 Safety in Physical Education and Sports : Principle of Safety with respect to buildings and playgrounds. Principles of safety with respect to equipments, dress, etc. Principles of safety with respect to organisation of classes, demonstration and matches. Polices and practices to prevent accidents and rendering first aid and treatment. Accident reporting and maintenance of records. Safety considerations with special reference to specific games in the school and college curriculum.
- 5 Safety on roads, camps picnics and courts.
- 6 Safety in water, fire, flood, Hurricane, thunder and lightning and air raids.

PART—B : FIRST AID

This is a functional Practical-Oriented course.  
 The topics covered in the First Aid Manual of the St. John Ambulance Association, New Delhi will be taught.

Books Recommended :

- 1 Safe a School-(Education Pamphlet Number 33) London : Her Majesty's Stationary office.
- 2 School Safety Policies- Washington D. C. American Association for Health, Physical Education and Recreation.

- 3 Stack, Harbert J. Cuke Elkoffi-Education for star living. Englewood Criffs, New Jersey, Prentice Hall Inc.
- 4 Florio, A. A. & Stafford G. T. Safety Education New York MC. Graw Hill Book Co.
- 5 Evans, A. William Everyday safety Chicxgo : Lyons and Carnahan.

**TEXT BOOK :**

- 1 Royappa Dr. Daisy Joseph & L. K. Govindarajulu, Safety Edu.
- 2 First Aid to the Injured New Delhi, St. John Ambulance Association.

(R. 1147), The following shall be the syllabi prescribed for  
B. P. E. Part-II. Examination.

**BPE II<sup>nd</sup>**

**Paper-I : Physiology and Physiology of Exercise**

**SECTION—I : PHYSIOLOGY**

**A-General :**

- a) Concept of Physiology.
- b) Description of terms-cell, tissues, organs and systems.
- c) General outline of the minute structure of cell and tissues.
- d) Essential properties of living matter.
- e) Elementary constituents of protoplasm.
- f) Basic and Elementary idea of solutions and colloids and the passage of water and solubles through membranes.
- g) Bio-electric potentials.
- h) Enzymes-definition main and functions.

**B-Systems :**

Study of the following systems and process with a view to understand how the normal human machinery works and how it makes an effort to adjust itself in health and under stress.

**I THE CARDIO VASCULAR SYSTEM :**

- a) The Cardiac cycle.
- b) Pumping action of the heart and its regulation.

- 3 Stack, Harbert J. Cuke Elkoffi-Education for star living. Englewood Cliffs, New Jersey, Prentice Hall Inc.
- 4 Florio, A. A. & Stafford G. T. Safety Education New York MC. Graw Hill Book Co.
- 5 Evans, A. William Everyday safety Chicxgo : Lyons and Carnahan.

#### TEXT BOOK :

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- 2 First Aid to the Injured New Delhi, St. John Ambulance Association.

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##### I THE CARDIO VASCULAR SYSTEM :

- a) The Cardiac cycle.
- b) Pumping action of the heart and its regulation.

- c) Blood pressure its maintenance and regulation.
- d) Blood flow and its regulation according to needs.
- e) The cardiac out-put and its regulations.

##### II BLOOD AND LYMPH :

- A) Composition and functions of blood and lymph.
- b) Clotting of blood.

##### III THE EXCRETORY SYSTEM :

- a) Excretion of water from the body.
- b) Function of Kidney and Skin.

##### IV RESPIRATORY SYSTEM :

- a) Mechanism of respiration.
- b) Pulmonary ventilation and its regulation.
- c) Second wind. oxygen debt.

##### V GASTRO INTESTINAL SYSTEM :

- a) Gastro intestinal movements.
- b) Secretion and function of the digestive juices.
- c) Functions of liver
- d) Absorption of food.

##### VI METABOLISM AND TEMPERATURE : REGULATION

- a) General metabolism.
- b) Elementary idea about metabolism of proteins, Carbohydrates and fats.

##### VII NERVOUS SYSTEM :

- a) Functions of the important part of the nervous system, spinal cord. medulla oblongata, cerebrum etc.
- b) Autonomic nervous system and its functions.
- c) Physiological mechanism governing posture and equilibrium.

## VIII SENSORY SYSTEM :

- a) General sensation like cutaneous and kinesthetic sensations.
- b) Special sensations -  
Vision, distance and peripheral vision.  
Hearing, sense of balance and rotation, smell and taste.

## IX ENDOCRINE SYSTEM :

Secretion of endocrine glands and their role in growth, development and regulation of body functions, pituitary, Thyroid, Para thyroid, Adrenal Glands and pancreas.

## X REPRODUCTIVE SYSTEM AND HEREDITY :

- a) Physiology of human reproduction.
- b) Secretion and properties of human milk.
- c) The role of heredity and environment in growth and development simple ideas of transmission of hereditary characteristics.

## SECTION—II : PHYSIOLOGY OF EXERCISE

A Physiological concept of health and fitness. Effect of Exercise on the various systems of the body with special emphasis on the circulatory and respiratory system.

## B3 MUSCLE CONTRACTION AND SPORTS :

- a) Properties and composition of voluntary muscles.
- b) Minuate structure of voluntary muscles.
- c) Changes in muscle contraction.
- d) Nerve control of muscular activity.
- e) Conditions affecting muscular contraction.
- f) Relation between duration and severity of exercise.
- g) Warming up.
- h) Conditioning.
- i) Tensing.
- j) Physiological factors affecting skill, strength and endurance.

- k) Stitch and cramps.
- l) Aging, changes in muscle.

PHYSIOLOGY PRACTICALS  
(for sessional work only)

The students will attend demonstration and perform experiments themselves.

DETAILS OF PHYSIOLOGY PRACTICAL AND  
DEMONSTRATION WORK  
(for sessional work only)

## SECTION I : EXPERIMENTAL PHYSIOLOGY

- 1 To study the electrical apparatus used for stimulating excitable tissue and recording muscular contraction.
- 2 To draw the simple muscle curve.
- 3 To demonstrate the effect of repeated stimuli.
- 4 To demonstrate the effect of fatigue on simple muscle nerve preparation.
- 5 To demonstrate the effect of temperature on a simple muscle nerve preparation.
- 6 To demonstrate the effect of load of muscular contraction.
- 7 To demonstrate the effect of various strengths of stimuli on a simple muscle curve.
- 8 To draw the curve of complete and incomplete tetanus.
- 9 To record the normal heart beat of a frog.
- 10 To observe circulation of blood in the frog's web.

## SECTION II : HUMAN EXPERIMENTS

- 1 To listen the breath sound by means of stethoscope.
- 2 To listen the heart sound by means of the stethoscope.
- 3 To study the effect of exercise on pulse rate.
- 4 Harvard step up test.
- 5 To find the vital capacity by means of the spirometer.

- 6 To record chest movements by means of Pneumograph.
- 7 To study the effect of rate, movement, load and obstruction to blood supply on the onset of fatigue by means of Erogograph.
- 8 To find out Reaction time.
- 9 Demonstration reflex action e. g. knee joint.
- 10 To test vision with Snollen's Test Chart.
- 11 To test colour vision by Ishihara's chart.
- 12 Study of goat's heart.
- 13 Study of goat's respiratory organs.

### SECTION III : CHEMICAL EXPERIMENTS

- 1 To demonstrate the presence of reducing sugar in the given solution -
  - a) Benedict's Test.
  - b) Fehling's Test.
- 2 To demonstrate the presence of starch in Rice, Potato Wheat flour etc.
- 3 To demonstrate the presence of proteins in :
  - a) Egg White.
  - b) Wheat flour.
- 4 To examine thnormal urine :
  - a) Quantity.
  - b) Specific gravity.
  - c) Turbidity.
  - d) Chemical tests for.
    - i) Urea and
    - ii) Urice Acid.
- 5 To find the percentage of Heemoglobin in human blood.

### SECTION IV : HISTOLOGY

- 1 To study a compound microscope.
- 2 Use of the Microscope :
  - a) To see a Hair under the microscope.
  - b) To see a nylon or cotton thread under the microscope.
  - c) To see the fat globules in a drop of milk under the high power of the microscope.

- 3 To draw a blood film and to stain it with Leishman's stain and study the blood cells.
- 4 Circulation in Forg's web.
  - a) Muscles.
  - b) Nerve Cells.
  - c) Adipose (Coveol and Adipose).
  - d) Bone.
  - e) Cerilage.
  - f) Tongue.
  - g) Spinal Cord.
  - h) Salivary glands.
  - i) Oesophagus.
  - j) Stomach.
  - k) Small and large intestines.
  - l) Liver.
  - m) Pancreas.
  - n) Kidneys.
  - o) Overy.
  - p) Teates.
  - q) Thyroid.
  - r) Skin.
  - s) Lymph-gland.
  - t) Blood vessels.

### REFERENCE :

- 1 Guyton, A. C., Function of the human body London : W. B. Saunders Company (latested) Dollars 8-50.
- 2 Srivastava, etc. Text book of Practical Physiology Calcutta : Scientific Book Agency. Rs. 10/-
- 3 Morehouse and Millar. Physiology of Exercise St. Louis : The C. V. Mosby Company (Latested) Dollars 775.
- 4 Karpovich and Sinning Physiology of Muscular Activity, London : W. B. Saunders Company, 1955, Dollars 5-00.

Paper

Paper-II: KH

Definition  
Aristotle, Leo  
Brown and Fra  
and Physical M

FUNDAMENT

Centre of  
Analysis of Fun  
Shoulder gl  
Hip joints, knse  
Muscular A  
Jumping, Thro  
Human motion,  
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MACHANIES

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stic and continu  
Mechanical  
Catching and Han  
Characteristic  
Selection an  
conditioning and c

TOOLS OF INVE

Brief understa  
Electromyographic

Paper-II : Kinesiology

INTRODUCTION :

Definition, brief history, aims and objectives, contribution of Aristotle. Leonards Da Vinci, G. A. Borrali, Woder Brothers, Marey, Brown and Fisher, Duchane, Role of Kinesiology in Physical Education and Physical Medicine.

FUNDAMENTAL CONCEPTS :

Centre of Gravity, Line of gravity, strating positions Muscular Analysis of Fundamental Movements of Joints of the body. Shoulder girdle, shoulder joints, Elbow joints, Radio, inner joints, Hip joints, knse joint, Ankle joint and Foot, Head, Neck & trunk. Muscular Analysis of Fundamental skills like Walking, Running, Jumping, Throwing, Catching, Striking and Hanging Physiology of Human motion. Muscular function and development. Muscular contraction and gradation of contraction (All or None Law).

MACHANIES OF HUMAN MOTION IN SPORTS AND GAMES :

Definition and Principles of application derived from Physics (Mass weight, force, moment of force, equilibrium, motion linear and rotary, projectile, friction, law of rebound, speed, velocity, momentum. ballstic and continuous tension movements, effect of spin.

Mechanical analysis of walking, Running, Jumping, Throwing, Catching and Hanging.

Characteristics of skill learning. Selection and evaluation of exercise for developmental conditioning and corrective purposes.

TOOLS OF INVESTIGATION :

Brief understanding of the use of stimulus electric innervation Electromyographic & Photographic Techniques.

BOOKS RECOMMENDED :

- 1 Brower, Marion R. Efficiency of Human Movement Philadelphia : W. B. Saunder Co. 1966. Dollar 7-50.
- 2 Buan John. W. Scientific Principles at Coaching Engle-Wood Chiffs N. J. Prentice Hall Inc. 1966. Dollar 894.
- 3 Cooprer, John M. and R. B. Glassgow, Kinesiology St. Louis : C. V. Mosdy Co. 1963. Dollar 2.20.
- 4 Duvall Elien, Kinesiology, Englewood Cliff. N. J. Prantice Hall Inc. 1956. Dollar 295.
- 5 Rasch Philip J. and R. K. Burke. Kinesiology and Applied Anatomy, Philadelphia, Eca and Febigar. 1967. Dollar 8.50.
- 6 Scot. M. Gladys. Analysis of Human. Motion, New York.
- 7 Wells, Katherine, P. Kinesiology, Philadelphia W. B. Saunders Co. 1966. Dollar 6-50.

Paper-III : Psychology, Guidance and Group Work.

Paper III Ind

- I Importance of psychology in Education with special reference to Physical Education.
- II The concept of mind-Cognition. Affection and Conation, Conscious and Unconscious aspects of mind.
- III Brief account of the Development of self, Influence of heredity and environment.
- IV Individual differences, Intelligence, Aptitude, Ability, Capacity and Achievement. Importance of these in teaching and learning of Physical Education skills.
- V (a) Learning, Meaning, Types of learning (Trial and error conditioned reflex. learning by insight. learning by insight. learning by imitation). (b) Principles of Learning, Thorndike's laws of learning (Readiness, Exercise, Effect). Maturation and Learning. (c) Transfer of Training: Conditions for Transfer.
- VI Motivation Unlearned (Innate) and Learned (equited) motives. Motive, Incentive, Stimuli. Motivation for learning and performance.

VII Problems of achievement and adjustment among individuals in learning, influence of Intelligens, Culture, Training Social Class, Environment.

Guidance :

- I Guidance-Meaning and purpose Types of Guidance (Self adjustive educational, vocational)
- II Procedures of Guidance Organisation of Guidance. Specialist and Classroom Teacher. The Part played by youth Welfare Programmes. Admission and Orientation Programmes. Co-curricular activities, Information Centre, Employment Bureau.
- III Guidance Records-Cumulative Records, personal date sheet, Anecdotal Records, Individual Abilities Interest and Achievement Records, Health, Physical Ability Records, Interview Date Sheet, Case Study methods, Importance of Records in Guidance Programmes.

Group Work :

- I Group work-meaning of Group work, characteristics (Nature) and objective of Group work. Kinds of Groups (Home, Educational Institution, Workshops, Clubs, Associations, Hostels, Special Institutions) Ground process and education Decision Making and Individual contribution. Programme Planning group process-Nature and scope of activities in the Programme-Leader and follower in Group work Responsibilities and Quantities of leader.

Reference Books :

PSYCHOLOGY :

1. Boaz, C. D. General Psychology : Publisher by Boaz Institute of Psychological service, Madras, 1957, Rs. 15-50.
2. Garret, H. F. General Psychology, New Delhi Eurasia Publishing House, 1964, Rs. 10/-
3. Gates, A. Social Educational Psychology: New York Macmillan Company, 1957, 30/-.

Lindgran H. E. Educational Psychology in Class Room New York John Willy and Sons, Inc. 1263. Dollar 8-98.  
Skinner : C. E. Educational Psychology, New Delhi, Prentice Hall of India Pvt. Ltd. Rs. 13/-.

GUIDANCE :

Crow, L. D. & Crow A., An Introduction to Guidance, New Delhi: Euresia Publishing House. 1963, Rs. 10/-.  
Jones A. J. Principles of Guidance. New York. Mc. Graw Hill Book Co. 1963, Rs. 73-50.  
Iraxler, Arthur E. and North R. D. Techniques of Guidance. New York, Harper and Row Publishers, 1962, Dollar 10-50.

GROUP WORK :

Wilson G. and Ryland F. Social Group Work Prantice, Cambridge, Houghton Mifflin Co. Dollar 9-24.  
Slawson, S. R. Creative Group Education, New York - Association Press, 1949, Rs. 50/-.

Paper-IV : English

essay writing on topics :-

- 1) Reflective.
- 2) Narrative.
- 3) Imaginative.
- 4) Professional.

SECTION - A

Paper IV th

SECTION - B

(With special emphasis on Physical Education and Sports)

Correspondance :-

- a) Personal letters.
- b) Business letters.
- c) Applications.
- d) Circulatory letters.
- e) Invitations (formal and informal).

2 General

- a) Vol
- b) Will
- c) Draft
- d) Publ
- e) Notic

Questions

- 1. Home com
- 2. Doctor's we
- 3. Elias writer
- 4. The Gift of
- 5. The Lunch

Books Recomm

- 1. Stories from Marks ellocn is to be atten
- Section - A
- Section - B
- Section - C

Paper-V : Method

1 Meaning of the determining th conditions of lea

- 2 Age and sex cha
  - i) Pre-schov
  - ii) Secondary
  - Sex differ

## 2 General :-

- a) Vote of thanks and Welcome speeches.
- b) Writing of reports on functions, sports events and work completion.
- c) Drafting of minutes of meetings.
- d) Public relations.
- e) Notice.

## SECTION - C :

Questions based on text prescribed i. e. "Stories from Home and Abroad" - following stories are included in this text book :

- 1 Home coming written by R. K. Tagore.
- 2 Doctor's work written by R. K. Narayan.
- 3 Elias written by Leo N. Tolstoy.
- 4 The Gift of the Megi by O'Henry.
- 5 The Luncheon written by Somerset Maugham.

*Books Recommended :*

1. Stories from Home and Abroad Collected by A. N. Kapoor.  
Marks allocation : (Minimum of one question from each section is to be attempted).  
Section - A 25 Marks.  
Section - B 30 Marks.  
Section - C 20 Marks.

**Paper-V : Methods in Physical Education.**

- 1 Meaning of the term Method and the factors to be considered in determining the method of teaching, Learning Process and conditions of learning.
- 2 Age and sex characteristics.
  - i) Pre-school, Primary School, Middle School, High School and College level.
  - ii) Sex differences among boys and girls.

- iii) Activity Planning according to age and sex characteristics.
- iv) Physiological, Psychological and Sociological needs.

Method of teaching (with special reference to different kinds of Physical Activities).

- i) Calisthenics.
- ii) Gymnastics.
- iii) Minor games.
- iv) Major games.
- v) Rhythmic activities.

Principles of teaching :

- i) Simple to complex.
- ii) Part to whole.
- iii) Learning by doing.
- iv) Intrinsic and Extrinsic Motivation.
- v) Frequency and duration of instructional Periods.
- vi) Recognition.
- vii) Material taught and capacity of the learner.
  - i) Presentation technique and steps in the way of presentation.
  - ii) Steps in teaching motor skills. Establishing concept providing experience with wholes and parts, analysis of performance etc.

Command and Class Management :

- i) Types of Commands - Situations when used, different commands.
- ii) Types of formation.
- iii) Class Management - Principal for good class management.

Lesson Planning :

Types Planning.

- i) Physical Education and Objectives - Values of Lesson Plans. Preparatory, skills part, group activity and concluding Part.
- ii) Coaching Lesson - Various parts of lessons, Warming up Physical (General and Special) Technical and Tactical Preparation.

## 8 Tournaments - Meaning and Type of Tournaments.

- i) Knock out or Elimination Tournaments.
- ii) League or Robin Tournaments.
- iii) Combination Tournaments.
- iv) Challenge Tournaments-Different types to be covered under each category.

## 9 Organisation and conduct of competition in :

- i) Individual and Dual Sports - Track and Field, gymnastic Weight Lifting and Best Physique. Wrestling, Swimming and Diving. Badminton Table Tennis and Tennis.
- ii) Team Sport-Football, Hockey, Volleyball, Basketball Kabaddi etc.
- iii) Group Competitions.

## 10 Marking of play grounds as Practical projects. Track and Field Play Fields of Football, Hockey, Kabaddi, Volleyball, Basketball, Cricket, Softball, Badminton, Kho-Kho.

## 11 Ways and means of improvisation of equipment.

## 12 Publicity-Meeting and important methods of preparation for :

- i) Demonstration.
- ii) Play Day.
- iii) Exhibition.

## 13 Audio-visual Aids in Physical Education :

- i) Values and uses of Audio-visual Aids.
- ii) Criteria for selecting the aids.
- iii) Steps to be followed in using aids.
- iv) Suggestion for the use of selected types of aids.
  - a) Black Boards.
  - b) Charts and Diagrams.
  - c) Models.
  - D) Bulletin Boards.
  - d) Magnetic Boards.
  - e) Still and Motion Pictures.
  - g) Projected Devices.
  - h) Radio and Television.
  - i) Books.

## Evaluation :

- i) Need and importance evaluation.
- ii) Basismethod of evaluation-Observation, Interview Tests and measurements. Self evaluation, co-operative evaluation by pupil and teacher.

## Books Recommended :

- 1 Knapp, Clyde and Hagman E. P. Teaching Methods for Physical Education : New York, Mc. Graw Hill Book Co. INC, 1948. Dollar 4.59.
- 2 Kozman, B. Cassidy Rosalind and Jaksen, C. O. Methods in Physical Education : London, W. B. Saunders Co. 1960, Dollar 6-00.
- 3 Tirunarayanan, C. Hariharan, S. Methods in Physical Education : Karakudi, south India Press, 1962, -Rs. 4-00.

## Paper-VI : Introduction Education and Educational Methods

## 1 Meaning and Aims of Education.

## 2 Agencies of Education :-

- a) Agencies of Informal Education. Home, Community religion, Play ground, Sports clubs, Welfare agencies of culture like Museum, Library and theatres, Mass media agencies like television and press.

- b) Agencies of Formal Education - Educational Institution. its role in social reforms and community development.

## 3 Types of Education - Vocation Education - Craft Education religious education social education and physical education. Education and Democracy, for citizenship, and International understanding.

## 4 Curriculum - Philosophy, Objectives, Courses of studies and syllabus, curricular activities.

## 5 Methods of Teaching - Lecture-cum-demonstration method. Unit method, Harvartain steps and lesson planning, uses of teaching aids, evaluation procedure.

## 6 School

and programme

## 7 Land Mark

Curricula,

## 8 Government

Public, Ang

## 9 Educational

Gandhi and

## Books Recommended

- 1 Bossing, N. School Prem
- 2 Bhatia, B. D. Book Sellers
- 3 Ministry of Commission
- 4 Mukerji, S. Book-Depot,
- 5 Walla, J. A. F. N. N. 11, Gol
- 6 Nurulla Syed Bombay, Mac
- 7 Raymond, Th Longman and
- 8 Yokam, G. A. of Teaching, N
- 9 Kocchar, S. K Publishers (Pw

- 6 School-Its structures and role, staff time-table students classification and promotion, method of motivation and discipline Educational code Relating to Central School Organisation.
- 7 Land Marks of Education in Ancient, Medieval and British Periods Gurukul, Madarsa, Macaulay's minutes woods despatch, Government of India resolution of Education Policy 1913).
- 8 Present structure of our Educational Pattern - Government aided. Public, Anglo Indian, Sanik and Technical Schools 10+2 pattern, Multipurpose schools, Residential teaching and affiliated Universities. Agricultural and Technological Universities, Rural Universities. Polytechnics.
- 9 Educational Philosophers - Rousseau, Froebel Montessori dewey, Gandhi and Tagore.

*Books Recommended :*

- 1 Bossing, N. Lt. Progressive Methods of Teaching in Secondary School Prentice Hall of India New Delhi.
- 2 Bhatia, B. D. Theory and Principles of Education Deoba House, Book Sellers and Publishers, 1968, Nai Sarak, New Delhi-110006.
- 3 Ministry of Education Govt. of India (i) Report of University Commission 1948, (ii) Report of Secondary Education Commission 1953, (iii) Report of Education commission 1964-66).
- 4 Mukerji, S. N. History of Education in India : Baroda, Achary Book-Depot, 1966, Rs. 30/-.
- 5 Walla, J. A. Principles and Methods of Education. Paul Publishers N. N. 11, Gopal Nagar, Jallunder.
- 6 Nurulla Syed Naik, J. P. Student History of Education in India. Bombay, Mac Millan Co., 1968. Rs. 10/-
- 7 Raymond, The modern Education, its aims & Methods London, Longman and Co. 1960. Rs. 136/-.
- 8 Yokam, G. A. and Simpson, R. G. Modern Methods and Techniques of Teaching. New York, Mac Millan Co. 1951.
- 9 Kocchar, S. K. Methods and Techniques of Teaching. Starling Publishers (Pvt, Ltd. New Delhi, Bangalore, Jallunder.

- 10 Oliyev, R. A. Effective Teaching, Toronto, J. M. Ditt and Sons Ltd. 1963.
- 11 Mathur, V. S. Gandhiji as an Educationist Metrocolitan Book, Co. Delhi.

**Paper-VII : Citizenship and Government**

**SECTION - I**

- 1 State as social institution : Its development and growth concept of Citizenship, its right and duties, Law Liberty and Equality.
- 2 Forms of Government, Monerchy, Democracy and Dictatorship their Strengths and weaknesses.
- Unitary and Federal states, Problem of Federal Governments. Rigid and Flexible constitution.
- 3 State Control Laissez faire, individualism, socialism, communism and fascism modern totalitition State.
- 4 Organisation of Governments : Franchise and election, Political parties, their need and role in democracy. Function of legislature, types and functions of executive, organisation and function of Judiciary, Separation of powers and its application to modern Governments, role of permanent civil service, Local Self Governments.
- 5 International Organisation : One world Ideal. The U. N. O. its organisation and function. An estimate of its working.

**SECTION - II**

- 1 Indian Construction : Indian Independance, Constituent Assembly, Salient feastures of the constitution, Preamble and directive principles.
- 2 The Union Executive : President and Prime Minister, their position and authority, The Council of Ministers.
- 3 The Parliamentary : Its composition and powers.
- 4 The Supreme Court : Its Jurisdiction Judicial review.
- 5 Fundamental Rights : Various provisions under fundamental right and their limitations : Preventive detention.
- 6 The State Government : Governor, State Legislature and High Courts, Nature of Indian Federation and centre State relations.

**Books Recommended :**

- 1 Appadorai, A. The Substance of Politics Madras : Oxford University Press, 1963, Rs. 1250/-.
- 2 Nandi : Arnat, The Constitutions of India, Calcutta Bookland private Ltd. 1962, Rs. 400/-
- 3 Singh Gurmukh Nihal, Fundamental of Political Science and its Organisation, Allahabad : Kitab Mahal Pvt. Ltd, 1966, Rs. 12-50.

(R. 1148) The following shall be the Syllabus prescribed for exam.

**.B. P. E. PART - III****Paper - I : Principles of Physical Education.****GENERAL :**

- 1 Definition of Terms : Hygiene and Health, Physical Training, Physical Culture and Physical Education, Coaching.
- 2 (a) Aims and objectives of Physical Education and contribution to Education.
- (b) Objectives of Physical Education in :
  - i) Primary Elementary / Higher Elementary.
  - ii) Secondary, and
  - iii) College Education.
- 3 Physical Education - As an Art Science. Its nature and sources of Principles - application of these Principles.
- 4 Need for Co-ordinated Programme of Physical Education. Health Education and Recreation.

**BIOLOGICAL PRINCIPLES :**

- 1 Evaluation - morphological and physiological changes, performances of the Physical basis of life.
- 2 Heredity and Environment.
- 3 Principles Governing Physical and Motor growth and Development.
- 4 The Biped position - Movement of Man-Reciprocal innervation.
- 5 Differences in Males and Females.
- 6 Chronological, Anatomical, Mental and Physiological ages in individuals.

Effects of Exercise underload, norms load, overload and crest load, Training and Physical Fitness. Body Types (Somato Types).

**PSYCHOLOGICAL PRINCIPLES :**

- i) Notions about mind and body, Psycho-Physical unity of Man.
- ii) Impulses, drives and habits,
- iii) Theories of learning (Traditional and Modern),
- iv) The learning process :-
  - a) Laws of learning, (Principles of Learning),
  - b) Transfer of Training / Learning,
  - c) Primary, Associate and concomitant Learning,
  - d) The Learning curve,
  - e) Factors and conditions which promote learning.

**PSYCHOLOGICAL PRINCIPLES :-**

- i) The nature of Man, Human Nature and Human needs,
- ii) Social Institutions and their influence on Human behaviour,
- iii) Games and Sports as Man's cultural heritage,
- iv) Development social unity, Physical Education as factor in socialization of individuals and groups.
- v) Role of Physical Education in National Integration.
- vi) Theories of Play,
- vii) Role of Physical Education in the context of social problems, Youth Problems, Mental Health, Unemployment and automation.

**Books Recommended :**

- Bucher, Charles, A Foundations of Physical Education, St. Louis : The C. V. Mosby Com, 1986, Dollar 9-50.
- Nixon Eugene E, and Gozen W : Introduction Physical Education Philadelphia London : W. B. Saunders Co. 1069, Dollar 7-00.
- Odartuffer, Delbert : Physical Education, New York, Harper and Brothers Publishers, 1870, Dollar 5-95.

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- Nixon Eugene E, and Gozen W : Introduction Physical Education Philadelphia London : W. B. Saunders Co. 1069, Dollar 7-00.
- Odartreuter, Delbert : Physical Education, New York, Harper and Brothers Publishers, 1870, Dollar 5-95.

- 4 Sharma Jakson R. : Introduction to Physical Education, New York  
A. S. Narnas and Company 1964, Dollar 6-50.
- 5 Williams Jesse Feiring : The Principle of Physical Education  
Philadelphia W. B. Saunders Co. 1964.

**Paper-II : Organisation & Administration of Physical Education.**

- I) Meaning - Nature and scope of Organisation and Administration, Principles of Organisation and Administration.
- II) Scheme of Organisation :
- III) Facilities :
- a) Play field location, area, standard, preparation, Layout and Maintenance,
- b) Gymnasium-construction, factors, care and maintenance allied facilities,
- c) Swimming Pool - Construction, Dimensions, Marking, Filtration, supervision of Pool.
- VII) Equipment in Physical Education :-  
Need and importance, List of Equipments, Suggested type equipments, criteria of selection, procedure of purchase, care and maintenance, Storekeeping, storing, Routing care, Repair Disposal.
- V) Staff and Leadership :-  
Importance of a qualified teacher, qualifications of a good teacher, values, staff co-operation, student leadership, Value of student leadership, Selection and Training of Student Leadership.
- VI) Curriculum :-  
Need and importance - Preparation and Development of course of study.
- VIII) Time Table :-  
Physical Education classes, Factors affecting time table, Required periods, Instruction period, Practice period, game participation periods.

- (III) Class Details :-
- (X) Programme of Activities :-
- a) Intramurals : Importance of Organisation of Intramurals, Units of Competition, Activities, Points Systems Role, Award and Incentives for Participation.
- b) Extramurals : Educational emphasis, Evil practices, Extent of participation, Selection conditioning of terms.  
Training Team and Management, Sports Tours.
- X) Office Management :-  
Setting up and management of office correspondance, Records and Reporting filing, Relationship with superior officer and Assistants, parents, pupils.
- FINAL BUDGET :-  
Physical Education Budget - Budget making, income and expenditure, Accounting, Petty Cash, Fund, imprest.
- PUBLIC RELATIONS :-  
Definition - Need of Public relations in Physical Education. Principles of Public Relations in Physical Education. Techniques and Media of Relation with the Public, Parents, Pupils and other agencies.
- III) EVALUATION :-  
Need and importance - Method of evaluation in terms of objectives. Detection of deficiencies, Examination in Physical Education, Follow up action for improvement.
- III) SUPERVISION :-  
Meaning of supervision (Definitions). Changing concepts of supervision in Physical Education Principles of Supervision. Techniques of supervision in brief visitation individual and Group Conference, Bulletins and demonstration.

**Books Recommended :**

- Vollmer and Esslinger - Organisation and Administration Bombay  
Times of India Press, 1964, Rs. 6-50.

- 2 P.M. Joseph - Organisation of Physical Education, O. S. A. P. E. Kaudivali Bombay, 1966, Rs. 10/-.
- 3 Hughes and French - Administration of Physical Education. New York, Ronald Press Co. 1954, Rs. 25/-.
- 4 Forsyth and Duncan - Administration of Physical Education, New York Prentice Hall, 1951, Rs. 33/-.
- 5 Bucher Administration of School Health and Physical Education Programmes, St. Louis, G. V. Mosby Co. 1967, Dollar 8-75.
- 6 J. P. Thomas - Organisation of Physical Education.
- 7 Evans, Ruth and Gans, Leo Supervision of Physical Education, New York Mc. Graw Hill Book Co. Lac, 1950, Rs. 5/-.
- 8 Irwin Leslie W, and Humnyhrey, James H - Principles and Technique of Supervision in Physical Education, St. Louis C. V. Mosby 1960, Dollar 4.95.
- 9 Bennett, Bruce L. Mapwell, L. Howell and Vriel Simri - Comparison Physical Education and Sports. Philadelphia, Lea and Febiger Pu. 1983.

#### Paper-III : Recreation.

- 1 Introduction to Recreation :
  - a) Meaning, Definition, Characteristics and Misconceptions Recreation.
  - b) Importance of Recreation.
  - c) Satisfaction gained through Recreation.
- 2 Brief Survey of Recreation Activities in India and abroad.
  - a) Mughal Period, Maratha Period, British Period, Independence Period.
  - b) Recreation Movements in U. S. A. : U. K. and U. S. S. R.
- 3 Agencies providing Recreation :
  - a) Municipal Agencies, Public Agencies, Private Agencies, Voluntary Agencies, Youth Serving Agencies, Employment Recreation, Commercial Recreation. for handicapped delinquents.

- b) Recreation and influence of Social Institutions.
  - i) Family
  - ii) School
  - iii) Community and
  - iv) Religious Organisations.
- 4 Financing Community Recreation.
- 5 Facilities :
  - a) Planning criteria & objectives of recreation Facilities.
  - b) Different types of Indoor and Outdoor recreation facilities for urban and rural population.
  - c) Operation and Maintenance of different recreational area and facilities.
  - d) Selection, use and care of equipment.
- 6 Programme in Recreation :
  - a) Criteria & Principles for community Recreation Programmes.
  - b) Classification of Recreational Activities.
    - i) Arts and Crafts.
    - ii) Dancing.
    - iii) Dramatics.
    - iv) Literary Activities.
    - v) Music.
    - vi) Nature and outing.
    - vii) Social events.
    - viii) Indoor and outdoor sports and games.
  - c) Hobbies-Introduction & Types of Hobbies.
- 7 Camping :-
  - a) Importance of camping,
  - b) Aim and objectives of camping,
  - c) Organisation of different types of Camp.
    - i) Selection and Layout of Camp site.
    - ii) Camping Leadership.
    - iii) Camp facilities and Programmes.

- Paper-IV : Cor
- and
- 1 Corrective P
  - a) Posture a
  - Values of
  - b) Postural
  - Kelly's P
  - for postur

## 8 Leadership in Recreation :-

- a) Meaning, Nature & Objectives of Recreation Leadership.
- b) Types and functions of Recreation Leadership.
- c) Qualifications, qualities & professional training.
- d) Volunteer Services.

**Books Recommended :**

- 1 Bulter, G. D. - Introduction to Community Recreation. New York : Mc. Graw Hill Book Co. Inc. 1959.
- 2 Meyer, H. D. and G.K. Brightbill - Community Recreation. A guide to its Organisation, New Jersey : Prentice Hall Inc. 1961.
- 3 Mayer H. D. and G. K. Brightbill - Recreation Administration. Prentice Hall, 1961.
- 4 Jenny, Hohn H. - Introduction to Recreation Education. London, W. B. Saunders Company, 1956.

**RECREATION PRACTICALS :**

- 1 Fundamental skills in Arts and Crafts.
- 2 Card and Paper Pencil Games.
- 3 Stunts and Stunts.
- 4 Music, Drama and Folk Dances.
- 5 Pionics and excursions.
- 6 Celebrations of various Festivals.
- 7 Organisation of play days for children, National days & Carnival.

**Paper-IV : Corrective Physical Education and Prevention. Care and Treatment of Athletic Injuries.**

- 1 Corrective Physical Education, its Definition and objectives.
  - a) Posture and Body Mechanics - Standards of standing posture, Values of good posture, Drawback and causes of bad posture.
  - b) Postural Tests Examination of the spine, Lowa posture Test, Kelly's Foot Test, Pedograph, Organisation of special classes for postural correction.

- c) Some common deviations in posture Normal curvature of the spine and its utility, Kyphosis, Lordosis, Kypholordosis, flat back, scoliosis (C&S) Curve, functional and Structural, Round shoulders. Knock knees, Bow legs, flat foot, causes for these deviations and treatment including exercises.

## 2 Therapeutic Exercises or Medical Gymnastics :-

- a) Definition and scope.
- b) Practical instruction about classification and effective use of therapeutic movements.
  - i) The passive movements (Relaxed, Forced and Passive stretching).
  - ii) The active movements (Free, Resisted).
  - iii) Types of corrections in resisted movement (Concentric, Eccentric (Isotonic) and Static (Isometric).
- c) The Physiological Classification of movements :-
  - a) Voluntary Movements.
  - b) Involuntary Movements.
    - i) Associated Movements.
    - ii) Reflex movements.
    - iii) Peristaltic movements.
    - iv) The movements of the Heart.
  - c) Physiological effects of Passive & Active movements.
  - d) Purpose and effective use of various fundamental positions :
    - i) Lying,
    - ii) Sitting,
    - iii) Kneeling,
    - iv) Standing and
    - v) Hanging.
- e) Application of the Therapeutic Exercises :
  - i) Free mobility exercises,
  - ii) The foot ankle and knee joints,
  - iii) The finger, wrist, elbow, radio-ulnar joints,
  - iv) The trunk and shoulder joints.
- f) The formation of a corrective Gymnastic class and the points to be observed.

## 3 Massage :

- A A brief history of massage and remedial exercises.
- B Muscle relaxation as an aid to massage,
- C Points to be considered in giving massage,
- D Physiological effects of Massage,
- E Classification of the manipulations used in massage and their specific uses of the Human Body.
  - a) Stroking manipulation :
    - i) Effleurage,
    - ii) Stroking.
  - b) Pressure Manipulation :
    - i) Kneading,
    - ii) Petrissage,
    - iii) Friction.
  - c) Percussioh Manipulation (Tapotment) :
    - i) Hacking,
    - ii) Clapping,
    - iii) Beating,
    - iv) Pounding.
  - d) Shaking Manipulation.
  - e) Deep massage according to Dr. Cyriax.
  - f) Contra Indication of Massage.
  - g) Technique of massage for the limbs & back and some Modifications.
  - h) Technique of massage for the Neck, Chest, Abdomen, Head and Face and modifications.

## 4 Athletic Injuries and Treatment :

- A Principles Pertaining to the prevention of injuries :
  - i) Relating to the maintenance of balance and prevention of falls.
  - ii) Relating to the range of movement.
  - iii) Relating to the intensity and quality of muscular exercise.
  - iv) Relating to the body segments and weight bearing joints.
  - v) Relating to the reception of one's own weight (landing).

- vi) Relating to lifting and carrying of external weights.
- vii) Relating to receiving the impact of external force.
- B Common Athletic Injuries and their Treatment :-
  - i) Sprains,
  - ii) Strains,
  - iii) Contusions,
  - iv) Abrasions, Principles of applying Heat Cold, Ultraviolet rays, infra-redrays.

*Books Recommended :*

- Corrective Physical Education : Rathborne J. I. W. B. Saunders and Co. London, 1965, Dollar 7.00.
- Manual of Massage and Movement, Prof. E. M. Naro Faber and Faber Ltd.
- Therapeutic Exercise for Body Alingment and Education by William Marciam and Catherine Worthingham, W. B. Saunders and Co. 1965, Rs. 3.75.
- Massage and Medical Gymnastics : M. V. Laee. J. & A. Churchill Ltd. 1951, Rs. 12.10.
- Preventive and corrective Physical Education : Stafford and Kelly New York, the Bonald Press Co. 1988, Dollar 5.00.
- Test and Measurements : Mc. Cloy and Young, New York Appleton Century Crofts, 1954, Dollar 7.50.

**Chapter - V : Health Education**

- Definition of Health and description of its components.
- Positive Health : Spectrum of Health.
- Ecology of Health, Determinants of Health.
- Public Health Education in attainment of Health Goals; Indicators of Health.
- Organisation & Administrative set up of Health services in India.
- Health through ages.
- Definition of Health Education, Why Health Education scope and principles of Health Education.

- 8 Communication in Health Education.
- 9 Practice Planning and Evaluation in Health Education Programme.
- 10 Effect of Heredity, Genetics and Health.
- 11 Brief account Health Problems of India.
- 12 Relationship of Agent, Host and Environment in Production of disease stimulus.
- 13 Dynamic and Disease Transmission mode of Disease Transmissible Immunity and Susceptible Host.
- 14 Personal Hygiene Care of skin, mouth, nails, clothing, bathing, etc.
- 15 Importance of rest, sleep and exercise.
- 16 School Health Programme :
  - a) History.
  - b) School Health Problems.
  - c) Appraisal aspect including morning health inspection.
  - d) Brief introduction of safety education first aid emergency care.
  - e) Remedial Measures.
  - f) Healthful School Living.
  - g) School Health Administration.
  - h) Mental Health and Child Placement.
  - i) School Health Records.
  - j) Mid day School Meal Programme.
- 17 National Family Welfare Programme-Need and Importance Role of Health Educator, Sex Education.
- 18 Nutrition :-
  - a) Classification of food.
  - b) Description of Proximate Principles.
  - c) Role of various Vitamins and minerals.
  - d) Balanced diet for and Indian, players and school children
  - e) Assessment of Nutritional Status, Malnutrition, Food Additives, Adulteration of Food.
- 19 Health of the Community Brief account of Housing Water supply Milk and Food hygiene, Sewage and refuse disposal, Swimming Pool sanitation.

Brief description of maternal and child health.  
 Role of Health Education in various National Health Programmes with brief explanation of important communicable Diseases.  
 World Health Organisation and other National and International Organisations and Agencies.  
 Role of Government in Health Education.  
 Planning Evaluation Administration and Organisation of Health Education in India.

#### Books Recommended :

Health Education by Moss and others (National Education Association of U. T. A.) Latest Edition, Dollar 2.50.  
 Turner et. al. : School Health and Health Education St. Louis, the C. V. Mosby Co. 1970.  
 Nemir A. : The School Health Education, Harper and Brothers, New York, Latest Edition, Dollar 9.05.  
 Obertruffer D. : School Education Harper and Brothers, New York, Latest Edition, Dollar 9.05.  
 Park J. E. : Test book of Preventive and Social Medicine (A Treatise on Community Health. Latest Edition-Messers Banarside Bharat Publishers 1953, Napier Townm Jabalpur).

#### Part-VI : Tests and Measurements

Meaning of Statistics - Test and Measurement - Evaluation.  
 Need and importance of Statistics and tests and Measurements in Physical Education.  
 Mathematical operations (Algebraic additions, subtractions, divisions, multiplication, extraction of square root).  
 Meaning of data, kinds of data - continuous and discrete, construction of frequency tables meaning, uses and calculations of measures of central tendency (Mean, Median and Mode) and Measures of variability (Range, Qualitative calculations of percentiles and quartile.

- 5 Graphical representation of data :-
  - a) Frequency Polygon,
  - b) Cumulative frequency Polygon,
  - c) Smoothed frequency Polygon.
- 6 Correlation - Meaning, Magnitude and interpretation of sign.
- 7 Meaning of the terms "Population" and "Sample" Important and Principles of sampling.
- 8 Sampling techniques : Random, Stratified, Sequential, Cluster and systematic.
- 9 Criteria of tests - Scientific authenticity (Reliability, Objectivity, Validity, Availability of norms) Administrative feasibility and Educational application.
- 10 Anthropometric measurements - Significance and technique taking measurements.
- 11 Roger's Physical Fitness Index Battery, AAHPER Youth Fitness Test, National Physical Fitness Tests, Indian Motor Fitness Test, JCR Test and Kraus - Weber Test.
- 12 Classification - Meaning and purpose - Classification Indices.
- 13 A brief account of Somato typing (Kretschmer's and Sheldon body types).
- 14 Meaning and Measurements of Muscular Strength (Dynamometer and Tensionmeter) Muscular endurance (Ergograph, Bicycle Ergometer) Cardio - Respiratory endurance (Tuttle Pulse-Ratio Test, Harvard Step Test, Copper 12min. Run and walk Test) Agility (Shuttle run and squat thrust) speed (50 m. dash) flexibility (Goniometer and flexometer), Muscular power (vertical jump and standing broad jump).
- 15 Selected Medical Tests : Visor (Shellen's Chart) Hearing (Watnick method Audiometry) Blood pressure (Sphygmomanometer) vital capacity (Spirometer) and pulse rate.
- 16 Nutritional Status - Concept of balanced diet and nutrition.
- 17 Measurements of Nutritional Status (Subjectives and objective method) Use of age - height - weight table and measurement skin fold thickness by skin calipers.

- 18 Social Efficiency - Meaning and administration and Interpretation of behaviour rating scales.
- 19 Sports Skills :-
  - a) Lockhart and McEpherson Badminton Test.
  - b) Johnson Basketball Ability Test.
  - c) McDonald Soccer Test.
  - d) Borer Miller Tennis Test.
  - e) Brady Volleyball Test.
  - f) Russel Lange Volleyball Test.
  - g) Dribbling and Goal Shooting Test in Hockey.
- 20 Administration of testing Programmes :-
  - a) Selection of test, Skills and techniques in administering tests and application of test results.

#### Books Recommended :

- 1 Clarke A. : Application of Measurement to Health and Physical Education, Prentice Hall Inc, 1967, Dollar 10.50.
- 2 Larson, L. A. and Yacon. R. D. : Measurement and Evaluation in Physical, Health and Recreation Education, St. Louis, C. V. Mosby Co. 1951, Rs. 25-00.
- 3 Mathew : Donald : Measurement in Physical Education, London : W. B. Saunders and Co. 1951, Dollar 7.50.
- 4 Nelison N. P. : An Elementary Course in Statistics Tests and Measurement in Physical Education, California national Test Polo Alth, 1960, Dollar 2.54.
- 5 Singh, Harbans : Teaching Hockey Through Testing Karnal Laxmi Sports Industries, 1960, Rs. 38-50.
- 6 Wilks S. S. : Elementary Statistical Analysis, Calcutta, Oxford and I. B. H. Publishing Co. 1964, Rs. 1-00.

Paper VII : P  
 Students who  
 the following :  
 a) Aquatic  
 b) Track  
 c) Badminton  
 d) Basketball  
 e) Cricket  
 f) Football  
 g) Gymnastics  
 h) Hockey  
 i) Kabaddi  
 j) Volleyball  
 k) Weightlifting  
 l) Tennis  
 m) Badminton  
 n) Yoga

This syllabus will  
 classes with referen

- 1 History and Deve  
 a) In India,  
 b) In Asia,  
 c) In the Wo
- 2 Organisation :  
 a) National Leve  
 b) Internatio  
 c) Main Inter

**Paper-VII : Principles of Coaching in one Sports & Games Specialization.**

Students who are outstanding in a sport can opt for one sport form the following :-

- i) Aquatics (Swimming, Diving and Water Polo).
- ii) Track and Field.
- iii) Badminton (Shuttle).
- iv) Basketball.
- v) Cricket.
- vi) Football (Men only).
- vii) Gymnastics.
- viii) Hockey.
- ix) Kabaddi.
- x) Volleyball.
- xi) Weight Lifting (Men only).
- xii) Wrestling (Men only).
- xiii) Tennis.
- xiv) Judo.
- xv) Yoga.

This syllabus will be adopted for instruction in theory and practical classes with reference to each sport listed above.

**THEORY**

- 1 History and Development :-
  - i) In India.
  - ii) In Asia.
  - iii) In the World.
- 2 Organisation :-
  - i) National Level,
    - a) National Federation and its affiliated units.
    - b) International Federation and its affiliated bodies.
    - c) Main International Competitions.

**1 Officiating :-**

- i) Rules and their interpretations.
- ii) Mechanics of Officiating.

**4 Techniques :-**

- i) Classification of Techniques.
- ii) Physical characteristics and basic fundamentals.
- iii) Specific Training.
  - a) Preparatory exercises.
  - b) Basic exercises.
  - c) Supplementary exercises.
- iv) Recreational and lead up games.

**5 Tactics :-**

- i) Formation in team games.
- ii) Attacking tactics (Individual combined and team).
- iii) Defensive tactics (Individual, combined and team).

**6 Training :-**

- i) a) Training methods for the development of motor abilities (Strength, Speed, Endurance, Flexibility and Co-ordinative Abilities).
  - b) Load, Principles of Load, distribution of Load, relationship between load and recovery.
  - c) Periodisation : Transitional, Preparatory and competition.
  - d) Cyclic process of training.
  - e) Training Schedule.
- ii) General Psychological Preparation :-

**7 Planning :-**

- i) Short term Plans :
- ii) Long term Plans :

**TESTS MEASUREMENTS :-**

- ii) General Fitness Tests.
- b) Specific Fitness Tests.
- c) General Skill Tests.
- d) Functional skill tests.
- e) Match Analysis.

- i) Individual Analysis.
- g) Graphic (Records and results of major competitions).

### PRACTICAL WORK

- 1 Warming up :-
  - i) General Warming up.
  - ii) Specific Warming up.
- 2 General Training :-
  - i) Free hand exercises.
  - ii) Weight Training.
    - a) Isometric exercises.
    - b) Isotonic exercises.
    - c) Isokinetic exercises.
  - iii) Exercises for the development of flexibility, agility, co-ordination and rhythm.
  - iv) Continuous running.
  - v) Interval running.
  - vi) Resistance running.
  - vii) Circuit training.
  - viii) Fartick.
  - ix) Wind Sprint and other methods of development speed.
- 3 Techniques : Each technique will be dealt under the following heads :-
  - i) Teaching of skills.
  - ii) Training of skills.
  - iii) Coaching of skills.
- 4 Tactics and Strategies :
  - i) Formation in team games.
  - ii) Individual tactics and strategies (attack and defence).
  - iii) Combined tactics and strategies (attack and defence).
  - iv) Team tactics and strategies (attack and defence).

- 4 Officiating and Organization :
  - i) Officiating and organising meet and tournaments.
  - ii) Laying out of play fields.
  - iii) Maintenance of play-fields and equipment.

### SELECTED REFERENCES :

- 1 Doherty, J., Menheth - Modern Track and Field, Englewood Cliffs, N. J. Prentice Hall, Inc.
- 2 Domosey, J. C. - Better, B. dinton for all.
- 3 Wade Allen - The F. A. Guide to training and coaching.
- 4 Ambruster, Allen and Billing - Swimming and Dipping.
- 5 Raijki Bele - Waterpolo.
- 6 Kunzle, G. C. and Thomas B. W. - Olympic Gymnastics Vol. No. I and II.
- 7 N. C. C. The N. C. C. Cricket Coaching Book.
- 8 Buon J. W. - Basket Ball Techniques and Team play.
- 9 Keith Art Complete guide to Championship Wrestling.
- 10 Barry C. Pelton - Tennis.
- 11 Dr. Feeune Mezo - The Modern Olympic Games Gudapest, Penonia Press.
- 12 Seaton D. C. Dhyton I. K., Laibo, H. C. and Messurnoth, I - Basic Book of Sport, Englewood Cliffs, N. J. Prentice Hall.

### YOGA FOR B. P. E. III-rd YEAR

Yoga may be introduced as a subject of specialization at the third year B. P. E. level. It should be of 100 marks divided into three sessions follow :-

- 1 Theory paper  
(Anatomy and Physiology in relation to Yogic Practices).
  - 2 Practicals.
  - 3 Teaching practice.
- The theory paper should be as per the syllabus enclosed. Practicals should contain different Yogic practicals as per list enclosed.

The Teaching practice should contain executing 5 lessons allotted, for the final examination 1 (one) lesson should be given for 50 marks.

**i) Theory Paper :**

Anatomy and Physiology with reference to Yogic practices.

- 1 Purpose, scope and Limitations of the subject.
- 2 Concept of Cell, tissues organs and systems.
- 3 Structure and functions of the skeletal, muscular nervous, circulatory, respiratory digestive, excretory and endocrinal system, and sense organs.
- 4 Types of Yogic practices like Asana, Pranayama, Bandha, Mudra, Kriya and Meditation and their effects on various systems of the body.
- 5 Influence of emotions on body functions and effect of Yogic practices on their relationship.
- 6 Tone, Posture, equilibrium and influence of Yogic practices on them.
- 7 Comparison between vigorous muscular exercises and Asanas, breathing exercises and pranayama.
- 8 Homeostasis and adaptation with special reference to Yogic practices.

**ii) Practiclas :**

**(i) Asanas**

Padmasan, Vajirasana, Sarvangasana, Matsyasana, Halasana, Bhujangasana, Shalabhasana, Dhanurasana, Archa, Matsyendrasana, Paschimottanasana, Mayurasana.

**(iii) Meditative Pose**

To be maintained for 15 minutes.

**(iii) Pranayama**

Bhasrika (with Kumbhaka).

**(iv) Bandha**

Jalanehra.

**(v) Mudra**

Yoga-Mudra.

**(vi) Kriya**

Agnisara, Jala neti, Sutra neti.

**iii) Teaching Practice :**

- 5 Lessons preferably on different Yogic practices.
- 1 Lesson for final examination.

**Books Recommended :**

- 1 Kavalayucenda Asanas - Popular Prakashan, Bombay.
- 2 Kunalayananda, Pranayama - Popular Prakashan, Bombay.
- 3 Kuvatapannanda and Vinekar, S. D. - Yogic Therapy Central Bureau of Health Services, Ministry of Health, New Delhi.
- 4 Desai, Ranjit Rai - Sharir Kriya Vijnan (Hindi) Vidyanath Prakashan.
- 5 Digambji (Ed.) Collected papers on Yoga, Kalvaladhama, Lonavala.
- 6 Yoga Minasa Voluines, I to XIX, Keivalyadhama, Lonavala.
- 7 Bhave V. N. - Sharir Vignan.
- 8 De Vries, H. A. - Physiology of exercise for Physical Education and Activities, London : Steples Press.
- 9 Gore, M. M. - Anatomy and Physiology of Yogic, Practices, Kanchan Prakashan, Lonavala, 1984.

**ACTIVE SYLLABUS FOR B. P. E. I AND II**

**1 BADMINTON - ①**

- 1 Introduction of the game and historical development with special reference to India.
- 2 Important tournament held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :
  - 1 Racket parts, racket grips, shuttle grips.
  - 2 The basic stances.
  - 3 The basic strokes.
    - a) Serves.
    - b) Forehand-Overhead and underarm.
    - c) Back hand-overhead and underarm.
    - d) Drills and Lead up games.
  - 4 Types of games-singles, doubles, including mixed doubles.
  - 5 Rules and their introduction and duties of officials.

EVALUATION

1 Skills Test	70
2 Written Test	20
3 Diary	10
	100

Books Recommended for Study :

- 1 Dpway, J. C. - Better Badminton for All : Great Britian, Pelham Book Ltd. 1969.
- 2 Davic Part - Better Badminton Learn in yourself Book : London, Orient Paper Books, 1979.
- 3 Brown E. - Better Badminton : London Faber, Faber, 1969.
- 4 Rogers Wynn - Advanced Badminton : IWOOA, WMC, Brown Co. Publishers, DUBU, 1970.

2 BASKETBALL

- 1 Introdution of the game historical development with special reference to India.
- 2 Important tournaments held at National and International Levels and distinguished personalities related to the sport.

Part - I

- 3 Fundamental Skills :
  - 1 Players stence and ball handling.
  - 2 Passing and receiving Techniques.
    - a) Passing :
      - (i) Two hand chest pass.
      - (ii) Two hand Dounce pass.
      - (iii) One hand Base Ball pass.
      - (iv) Side arm pass.
      - (v) Over head pass.
      - (vi) Hook pass.

b) Receiving :

- (i) Two hand receiving.
- (ii) One hand receiving.
  - Receiving in stationery position.
  - Receiving while running.
  - Receiving while jumping.

3 Dribbling :

- a) How to start dribble.
- b) How to stop dribble.
- c) High dribble.
- d) Low dribble.
- e) Reverse dribble.
- f) Rolling dribble.

4 Shooting :

- a) Lay-out shot and its variations.
- b) One hand set shot.
- c) One-hand jump shot.
- d) Hook shot.
- e) Free throw.

Part - II

1 Rebounding :

- a) Defensive rebound.
- b) Ofensive rebound.
- c) Knock out.
- d) Rebound organisation.

2 Individual Defence :

- a) Guarding the man with the ball.
- b) Guarding the man without the ball.

3 Pivotec :

- 4 Group Tactics :

- a) Offensive :
  - (i) Give and go.

- (iii) Crise-Cross.
- (iii) Screening.
- (iv) Splitting the post.
- (v) Out numbering situation.

b) Defensive :

- (i) Defence against give and go.
- (ii) Sliding (Slide in)  
(Sliding out)  
(Sliding over).
- (iii) Suitabing.
- (iv) Sandwitch.

3 Rules and their interpretations and duties of officials.

EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
		100

Books Recommended for Study :

- 1 Mootsdr, Abbas - Principal of Basket Ball, Bombay, Skenda Publication, 1979.
- 2 Hoe, Clair and Norton, Kon, - Men to Men Defence and Attack, New York, The Ronald Press, Company, 1959.
- 3 Hoe Clair and Norton Kon, - Zone Defence and Attach, New York, The Ronald Press Company, 1959.
- 4 Abraham, C. C. - Basket-Ball for Men and Women, Madras, Y. M. C. A. Publishing House, 1956.
- 5 Julian, Alvin, F. - Bread and Butter Basketball, London, Prentice Hall Inc.
- 6 Colbert A. L. - Modern Basketball-A Fundamental Analysis of Skills and Tactics, London, Nicholas Kaya, 1966.
- 7 Srivastisan, S. - Basketball, NIS, Publication, Patlia.

3 CRICKET

- 1 Introduction of the game and historical development with special reference to India.
- 2 Important tournament held at National and International Levels and distinguished personalities related to the game.
- 3 Fundamental Skills.

Part - I

- 1 Batting
  - a) Forward defensive stroke.
  - b) Backward defensive stroke.
- 2 Bowling.
  - a) Simple bowling techniques.
- 3 Fielding.
  - a) Defensive fielding.
    - (i) Orthodx
    - (ii) Unorthodx.
  - b) Offensive fielding.
- 4 Catching.
  - a) High Catching.
  - b) Slip Catching.
  - c) Stopping and Throwing techniques.
- 5 Stopping Throwing techniques.
- 6 Wicket keeping techniques.

Part -II

- 1 Batting.
  - a) Forward defensive stroke.
  - b) Backward defensive stroke.
  - c) Forward aff drive.
  - d) Forward on drive.

- 2 Bowling.
  - a) Simple bowling techniques.
  - b) Different between pace.
- 3 Bowling and spin bowling.
  - a) Off and Leg spin bowling.
- 4 Fielding.
  - a) Different techniques of fielding and its importance.
- 5 Catching.
 

Different types of catching, its techniques and importance.
- 6 Stopping and throwing.
 

Difference techniques and its importance.
- 7 Wicket keeping.
 

Different techniques and their.
- 4 Rules and their interperations and duties of Officials.

## EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
		100

*Books Recommended for Study :*

- 1 Michards, Barry, Barry Richard - Cricket, London, Pelton Book, 1979.
- 2 Mankad, Vinodi, - How to play Cricket, Rupa and Company, 1976.
- 3 Greig, Tony, - Greie on Cricket, Bombay, S. Publication, 1974.
- 4 John Snow, - Cricket, London, William Busmombly Publisher, Ltd. 1973.
- 5 N. I. S. Publication Cricket Inc.
- 6 Gooi G. R. - Crecet Sports Officer, Stadium Sign.
- 7 Mustaque M. S. - How to play Cricket, Vikas Publishing House, New Delhi, 1981.

## 4 FOOTBALL

- 1 Introducation of the game and historical development with special reference to India.
- 2 Important tournament held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental skills.

## Part - I

- 1 Kick.
  - a) Kicking with the inside of the foot.
  - b) Kicking with the instep of the foot.
  - c) Kicking with the outer instap of the foot.
  - d) Lofted kick.
- 2 Trapping.
  - a) Trapping, Rolling, ball-with the inside sole and in step of the foot.
  - b) Trapping bouncing ball with the sole.
- 3 Dribbling.
  - a) With the instep of the foot.
  - b) With the inside of the foot.
  - c) With the outer instep of the foot.
- 4 Handling.
  - a) From standing position.
  - b) From running.
  - c) From jumping.
- 5 Throwing.
- 6 Feinting.
  - a) With the lower limb.
  - b) With the upper part of the body.
- 7 Tackling.
  - a) Simple tackling.
  - b) Slide tackling.
- 8 Goal keeping.
  - a) Collection of balls.
  - b) Ball clearance kicking, throwing and deflecting.

- 1 Licking.
  - a) Chip.
  - b) In-swing and outswing.
  - c) Volley (low drive, back volley and scissors Volley).
  - d) Half volley.
- 2 Ball reception and control.
  - a) Reception rolling ball with inside and outside of the foot and changing direction.
  - b) Trapping the moving ball with the.
  - c) Trapping the moving ball with the lower leg.
  - d) Receiving the moving ball with the inside and outside of the foot and changing direction.
  - e) Receiving a flying ball with the inside, instep thigh, chest and head.
- 3 Dribbling.
  - a) Controlled dribbling.
  - b) Fast dribbling.
  - c) Straight dribbling.
  - d) Zig-Zag dribbling.
  - e) Dribbling around/between obstacles.
- 4 Heading.
  - a) From running and jumping.
  - b) Heading for long clearance.
  - c) Downward heading.
- 5 Rules and their interpretations and duties of officials.

## EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

## Books recommended for Study :

- 1 Darche, Harry E. - Techniques of Football Coaching, London : A. S. Barnes and Company, 1969.
- 2 Lonziak, Conard, - Understanding Soccer Tactics, London : Faber and Faber, 1966.
- 3 Saunders, Tom, - Play better Soccer in All Colour, London : Colling Geagow, 1972.
- 4 Singh, Gian, Football quiz, Delhi and Services Publishing House, 1977.
- 5 Batty, Cris, - Soccer Coaching the Modern Way, London : Faber and Faber, 1969.
- 6 Helder and Stranghton - Play Football with Pale, London.

## 5 GYMNASTICS (MEN) (S)

- 1 Brief history of gymnastics, with special reference to India.
- 2 Improvement competitions at the National and International level, Distinguished personalities connected with gymnastics.
- 3 Fundamental Skills.
  - 1 Floor exercise :-
    - a) Forward roll.
    - b) Backward roll.
    - c) Sideward roll.
    - d) Cart Wheel.
    - e) Hand stand and forward roll.
    - f) Backward roll to hand stand.
    - g) Diving forward roll.
    - h) Side split.
    - i) Head Stand.
    - j) Different kinds of scale.
    - k) Head Spring.
    - l) Dive roll from beat board.
    - m) Press hand stand from best arms.
    - n) Round off.
  - 2 Parallel Bard :-
    - a) Mount from one bar.

- b) Straddle walking on parallel bars.
  - c) Single and double step walk.
  - d) perfect swing.
  - e) Shoulder stand on one bar and roll forward.
  - f) Roll side.
  - g) Shoulder stand.
  - h) Front on back vault to the side (dismount).
- 3 Vaulting Horse :-
- a) Approach, run and jump from best board.
  - b) Cat vault.
  - c) Squat vault.
  - d) Straddle vault.
  - e) Hand spring on board horse.
- 4 Roman Rings :-
- a) Different positions on roman rings.
  - b) Perfect swing on roman rings.
  - c) Bird's nest.
  - d) Inlocation with bent body.
  - e) Vertical pull up.
  - f) Up start.

**Part - II**

- 1 Floor exercises :-
- a) Repetition of exercises done in the previous turn,
  - b) Hand spring backward (Flic-Flac) with help.
  - c) Salto front from mini trampoline or beat board.
- 2 Horizontal Bar :-
- a) Perfect swing on Horizontal bar.
  - b) Back up to support.
  - c) Mill circle forward.
  - d) Up start.
  - e) Front roll.
  - f) Dismount from knee hand.

- 3 Pommel Horse :-
- a) Grip shifting from support position.
  - b) Half single leg circle.
  - c) One leg circle.
  - d) Single leg circle inward (Front support).
  - e) Scissors forward.
  - f) Swing leg circle dismount (From uneven support).
- 4 Training of small combination of exercises consisting of 8 to 10 elements on all apparatuses.
- 5 Types of gymnastics, types of competitions, competition attire, introduction of code of points.  
(Seating of judges in different competitions, evaluation of compulsory and optional exercises, requirements of A, B, C part in different competitions, structure group of exercises).
- 6 Rules of gymnastics and their interpretations and duties of officials.

**EVALUATION**

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

**6 GYMNASTICS (WOMEN)**

- 1 Brief History of Gymnastics, with special reference to India.
- 2 Important competitions at the National and International levels distinguished personalities connected with gymnastics.
- 3 Fundamental Skills :-

**Part - I**

- 1 Floor exercises :-
- a) Forward roll.
  - b) Backward roll.

Part - II

1 Floor exercises :-

- a) Hand spring
- b) Cat W
- c) Double
- d) Dismount

2 Balance

- a) W
- b) To
- c) Cat
- d) D

3 Vaulting

- a) Approach
- b) Take
- c) Cat V
- d) Squat

4 Uneven Bars

- a) Hand spring
- b) Different
- c) Back
- d) Dismount

- c) Sideward roll.
  - d) Different kinds of scales.
  - e) Leg split.
  - f) Bridge.
  - g) Dancing steps.
  - h) Head stand.
  - i) Jumps-Leap, Scissors leap.
- 2 Balancing Beam :-
- a) Walking and running on the beam.
  - b) Turning movement on the Beam.
  - c) Cat jump.
  - d) Dancing steps and movements.
  - e) Different kinds of scales.
  - f) Mount (turn to cross sitting).
  - g) Dismount (jump for the end of the beam with less straddle in the air).
  - h) Straddle mount.
  - i) Forward roll on the bench and beam.
  - j) Dismount (from front support leg: swing, upward dismount sideways).
- 3 Vaulting Horse :-
- a) Approach run.
  - b) Take off from the beat board.
  - c) Cat vault.
  - d) Squat vault.
- 4 Uneven Board :-
- a) Different kinds of grips.
  - b) Different kinds of swings.
  - c) Back turn over (Mount).
  - d) Dismount from knee hang.
- Part - II
- 1 Floor exercises :-
- a) Hand stand.
  - b) Cart Wheel.
  - c) Combination of forward roll and backward roll.
  - d) Combination of some exercises already learnt.

- 2 Rhythmic gymnastics :-
- a) Dancing movements with music.
  - b) Sequence of dancing movements and free hand exercises.
  - c) Exercises with skipping rope, clubs, ribbon, hoop and ball.
- 3 Vaulting Horse :-
- a) Repetition of vault already learnt.
  - b) Straddle vault.
- 4 Balancing Beam :-
- a) Stag mount.
  - b) Repetition of forward roll on the bench and beam.
  - c) Repetition of backward roll on the bench and beam.
  - d) Side split on the bench and beam.
  - e) Dismount cart-wheel.
- 5 Uneven Bars :-
- a) Repetition of exercises already learnt.
  - b) Strade Circle-backward and forward.
  - c) Back hip circle.
  - d) Straddle dismount.
- 6 Combination of exercises consisting of 8 to 10 elements on all the apparatuses.
- 7 Types of gymnastics, types of competitions, Competition attire, introduction of code of points.
- 8 (Seating arrangement of judges, bridges evaluation of compulsory and Optional exercises, requirements, of A, B, C, parts in different competitions, structure group of exercises).
- 9 Rules of gymnastics and their interpretations and duties of officials.

## EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
	Total	100

*Books Recommended :*

- 1 Sturm, Nik - Competitive Gymnastics, London : Stonlly Paul and Company Ltd. 1970.
- 2 De Carle, Tom - Hand of Proquartarressive Gymnastics, Englewood Cliffs : N. J. Prentice Hall, 1963.
- 3 Lokon, Newtan, C. and Wiliugbby, Roder, J. - Complete Book of Gymnastics, Englewood Cliffs : N. J. Prentice Hall, 1954.
- 4 Cochranu, Tunvi, S. - International Gymnastics Girls and Women, London : Addison Wolly Publishing Co. 1.
- 5 Cartur, Exhestsne R. - Gymnastics for Girls and Women, New Jersey : Prentice Hall, 1969.
- 6 Drury, Blanchnu, J. and Schmid Andore B. - Gymnastics for Women Californis : National Book, 1970.
- 7 Code of points for Men, International Gymnastics, Fede copyright by Fig. Men Technical Committee, 1975.
- 8 Federation Rules in Gymnastics.

7 **HANDBALL**

- 1 Introdution of the game and historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :
  - 1 Running, Catching the ball with two hands, Catching at chest height, Catching the high ball and Catching the low ball.
  - 2 Passing and throwing :
    - One handed shoulder pass, two handed chest pass the long throw.
  - 3 Bribbling (Running with the ball)
  - 4 Shooting :
    - a) The standing throw shot.
    - b) The side throw shot.
    - c) The jump shot.
    - d) The reverse shot.
    - e) The fall shot.

5 **Goal Keeping :**

- Basic stance, hand and feet movement.
- 4 Rules and their interpretations and duties of officials.

**EVALUATION**

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

*Books Recommended :*

- 1 Rowland B. J. - Handball A Complete Guide, London, Feber and Feber Ltd. 24 Runsel Square, 1970.
- 2 Mand, Charles L. - Handball, Eunamentals, Cinion, Charles, E. Merri Company, Columbia, 1968.
- 3 Philips B. E. - Handball its Play and Management, New York : The Ronald Press Company, 1967.
- 4 Hobarson, Richad and Olson Herbert - Begining Handball, California : Wadsworth Company, Inc. Belmoun, 1969.

8 **HOCKEY**

- 1 Introdution of the game and historical development with special reference to India.
- 2 Important tournament held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :
  - 1 Grip.
  - 2 Skills.
    - a) Relling the ball.
    - b) Dribbling.
    - c) Push.
    - d) Stopping.
    - e) Hit.
    - f) Flick.
    - g) Scoop

- 3 Passing :-  
Forward pass, square pass, triangular pass.
- 4 Drills and lead up games related with skill taught.

#### Part - II

- 1 a) Reverse hit, hitting on the wrong foot.
- b) Stopping the ball on the right, left side and stopping the ball in the air.
- c) Pushing on the wrong foot.
- d) Reverse flick.
- e) Dodging (through the legs, right and left).
- f) Tecking-front, right, left.
- g) Passing-Through pass, diagonal pass, return pass.
- h) Common bully.
- 2 Positional play in attack and defence.
- 3 Drills and lead up games.
- 4 Rules and their interpretations and duties of Officials.

#### EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
	Total	100

#### Books Recommended for Study :

- 1 Platt, Rachael, H. - London : Palhan Books Ltd 1976.
- 2 Millford, D. S. - Hockey Practice Tactics, London : Edward and Company, 1949.
- 3 Singh Gian and Wallia Kaku - Learn this way, New Delhi International Hockey institute, 1975.
- 4 Wein, Horts, - The Science of Hockey, London : Pelham Books 1979.

- 5 Ahmed Khan, Eraj, - Hockey For Boys and Girls, Patna, Scientific Book Company, 1976.
- 6 Thani, Yograj, - Hockey, 1976.
- 7 Durairaj, Techniques of Hockey.
- 8 Kapur, - Rules of Hockey with Interpretations, (Boys and Girls), 1975.

#### 9 JUDO

- 1 Introduction of the sport and historical development with special reference to India.
- 2 Important tournaments held at National and International levels, and distinguished personalities related to the game.
- 3 Fundamental Skills :-
  - 1 Rej (Salutation) :-
    - a) Ritsurei (Salutation in standing position).
    - b) Zaroi (Salutation in the sitting position).
  - 2 How to wear judo Costume.
  - 3 Kumi Kata (Methods of holding judo costume).
  - 4 Shisei (Posture in Judo).
  - 5 Kuzushi (Act of disturbing the opponent posture).
  - 6 Tskuri and Kake (Preparatory action for attack).
  - 7 Ukemi (Breakfall).
    - a) Urthiro Ukemi (Rear break fall).
    - b) Yoko Ukemi (Side break fall).
    - c) Mac Ukemi (Front break fall)
    - d) Mac Mawari Ukemi (Front rolling break fall)
  - 8 Shinatai (Advance or Retreat foot movement).
    - a) Sur-ashi (Gliding foot).
    - b) Tsugi-ashi (following foot steps).
    - c) Ayumi-ashi (Walking steps).
  - 9 Tai Sabaki (Management of the Body).
    - a) Hiza Guruma (Knee wheel).
    - b) Sesae Tsurikomi-ashi (Drawing ankle throw).
  - 10 Nagae-Waze (Throwing Techniques).

- c) De-asahi hari (Advance foot sweep).
  - d) Orgoshi (Major Loin).
  - e) Seoinage (Shoulder throw).
    - i) Ippon seoinage.
    - ii) Morote seoinage.
- 11 Ketama-Waze (Grappling Techniques).
- a) Kesa-gatame (scarf hold).
  - b) Kata-gatme (Shoulder hold)
  - c) Kami-shiho gatama (Looking of upper four quarters)
  - d) Methods of escaping from each hold.
- 12 Lead-up games :
- a) Break, fall relay maximum number of falls from standing position in one minute duration.
  - b) Mae-mawri-ukemi relay (maximum number of falls in one minute duration).
  - c) Maximum number of shoulder throw in one minute.
  - d) Maximum number of obstacles jumped while doing mae-mawri-ukemi.
- 4 Rules and their interpretations and duties of Officials.

## EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

## Books Recommended :

- 1 Feldenkrais, M. - Higher Judo, General Work, Fredrick Warne and Co. Ltd., London and New York, 1962.
- 2 Smith, Robbrt, W. - Judo its Story and Practice, Charles E. Tuttle Company of Hulmond Vermont, Tokyo and Japan, 1958.
- 3 Ewen Harry, - Your Book of Judo, Faber and Faber Ltd. 3, Queen Square, London, W.C.1. 1972.

- 4 Herrison C. J. - Judo on the Ground, W. Foulsham, Co. Ltd. 2-5, old Bond street London, W.1. 1954.
- 5 Uyenishi S. K. - Judo Text Book of Su-jitsu, Athelctic Publication Ltd. Link House Store Street, London, W. C.1.

## 10 KABADDI

- 1 Introduction of the game and historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :-
  - 1 Skills in raiding :-
    - a) Touching with hand.
    - b) Various kicks.
    - c) Crossing of Baulk line.
    - d) Crossing of Bank Line.
    - e) During the appoint to Catch.
    - f) Pursuing.
  - 2 Skills of holding the raider :-
    - a) Various formations.
    - b) Catching from particular position.
    - c) Different catches.
    - d) During the raider to take particular position so as to facilitate catching.
  - 3 Chain formation and techniques.
  - 3 Additional skills in raiding :-
    - a) Bringing the Anus into particular position.
    - b) Escaping from various holds.
    - c) Techniques of escaping from chain formation.
    - d) Combined formation in offence.
    - e) Combined formation in defence.
  - 4 Various lead up games.
- 4 Rules and their interpretations and duties of Officials.

EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

Books Recommended :

1. Rao, G. V. - Kabaddi, Patiala, N. I. S. Publication, 1971.
2. Reddy, B. A. - Scientific Kabaddi, Madras, Ramen's Printing Press, 1974.

11 KHO - KHO

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. Fundamental Skills :-
  1. General Skills of the game- running, chasing dodging, faking etc.
  - a) Skills in chasing correct Kho, moving on the lanes, pursuing the runner, trapping the inactive runner, trapping the runner on heels, trapping on the pole, diving judgement in giving Kho, rectification of foul.
  - b) Skills in running - Zigzag running, single and double chain, ring play, rolling on the sides, dodging while facing and on the back fakes on the pole fakes- legs, body arm etc. combination of different skills.
4. Rules and their interpretation and duties of officials.

EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

Books Recommended :

1. Kho-kho the game of chase and Trill, Bombay. Maharashtra Kho-kho Association.
2. Yogesh Yadav, - Kho-kho, Maharashtra Kho-kho Association, 1969.

12 LEZIM

(7)

1. Introduction and historical development of the Sport.
2. Important tournament held at National and International levels and distinguished personalities related to the sport.
3. Fundamental Skills :-
  1. GHATLEZIM - Fundamental position :-
    - a) Lezim Skandh.
    - b) Lezim Aram.
    - c) Lezim Hosshiyar.
  2. Exercises :-
    - a) Att. Avaj.
    - b) Kadam Tal.
    - c) Age Pao.
    - d) Peeche Pao.
    - e) Baithak.
    - f) Pavitra.
    - g) Hool.
    - h) Phirki.
  3. Turning :-
    - a) Adha Chakra.
    - b) Pao Chakra.
    - c) Pura Chakra.
    - d) Pon Chakra.
  4. Chal :-
    - a) Age Chal.
    - b) Peeche Chal.
    - c) Bhadange Chal Ek.
    - d) Bhadange Chal Do.

5 HINEL Lezin - Position :-

- a) Lazim Lepet.
- b) Lazim Aram.
- c) Pavitra Hosshiyar,
- d) Char Avaj.

6 Exercises :-

- a) Do Rukh.
- b) Adhi Lagao.
- c) Juge Pen.
- d) Age Phalang.
- e) Peeche Phalang.
- f) Do Mal.
- g) Do Mal Baitan.
- h) Chandrarvar Baithak.
- i) Caowmukhi.

4 Rules and their interpretations and duties of officials.

EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
	Total	<u>100</u>

13 LIGHT APPARATUS AND MINOR GAMES

1 Introduction of the sport and historical development.

2 Fundamental Skills :-

1 Dumbbell exercises :-

- a) Two counts exercises.
- b) Four count exercises.
- c) Eight count exercises.
- d) Sixteen Count exercises.

2 Indian Clubs exercises :-

- a) Rigid exercises (eight).
- b) Swinging exercises (eight).

3 Wands exercises :-

- a) Two Counts exercises.
- b) Four counts exercises.
- c) Eight counts exercises.
- d) Sixteen counts exercises.

4 Hoops exercises :-

- a) Two counts exercises.
- b) Four counts exercises.
- c) Eight counts exercises.

MINOR GAMES

At least 50 minor games to be taught at the end of the period for 10 - 12 minutes.

ASSIGNMENT :

At least 50 minor games with and without apparatus are to be written by students in their diary.

3 Rules and their interpretations and duties of Officials.

EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
	Total	<u>100</u>

14 MALKHAMMB

1 Introduction to Malkhamb, its origin and the historical development.

2 Important tournaments held at State and National levels, Distinguished personalities related to the sports.

3 Fundamental Skills :-

- a) Learning and demonstrating fundamental skills.
- b) Stance, Leg grips and hard grips, landings.

- b) Varieties of front grips/holds-both hands and legs.
  - c) Varieties of reverse grips/holds-both hands and legs.
  - d) Creeps for developing endurance.
  - e) Demonstration holds.
  - f) Single handed holds/grips.
  - g) Postures on the pole.
  - h) Advanced skills without support.
  - i) Group Pyramids.
- 4 Rules, their interpretations and duties of Officials.
  - 5 Scope of Malkhamb as an activity of display.

#### EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

#### 15 SOFT BALL

- 1 Introduction of the game historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the game.
- 3 Fundamentals Skills :-
  - 1 Batting :-
    - a) The grip-short, Long and standard.
    - b) Stance- Parallel, Open and closed.
    - c) Swing and hitting.
    - d) Bunting.
  - 2 Pitching :-
    - a) The grip Three and Four finger.
    - b) Windmill and figure-of-eight.

- 3 Dairunning :-
  - a) Running to first base.
  - b) Running more than one base.
  - c) Base stealing.
- 4 Fielding :-
  - a) Fielding ground balls.
  - b) Fielding fly balls.
- 5 Teetics :-
  - a) Batting strategy.
  - b) Fielding strategy.
- 4 Rules and their interpretation and duties of Officials.

#### EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
Total		100

#### 16 SWIMMING

- 1 Introduction of Swinning and its historical development with special reference to India.
- 2 Important Championships held at National and International levels and distinguished personalities related to swimming.
- 3 Fundamentals Skills :-
  - 1 Entry into the pool.
  - 2 Developing water balance and confidence :-
    - a) Water-fear removing drills.
    - b) Floing-Mushroom and jelly-flish etc.
    - c) Sliding-with and without kickboards.
  - 3 Teaching of competative swimming strokes (minimum two strokes) Body position, leg kick arm pull, breathing and co-ordination.
  - 4 Strats and Turns of the concerned strokes.
  - 5 Water treating and simple jumping.

- 4 Rules of competitive swimming - officials and their duties, pool specification, seeding of heats and finals, rules of the race and swimming strokes.

## EVALUATION

1	Skills Test	70
2	Written Test	20
3	Diary	10
*Total		100

## Books Recommended :

- Helen, Elkington, Swimming - A Hand Book for Teachers, London : Cambridge University Press.
- Counsilmen, James E. - Science of Swimming, London, Pelham Books.
- Gallagher, Harry, Herry Gallagher on Swimming, London Pehlan Books, 1970.
- Torney, John. A. - Swimming, London, Mc-Graw Hill Books Company, Inc. 1960.
- Spitz, Mark and Lemond, Alan, - The Mark Spitz Complete Book of Swimming, L.Ondon, Pelham Books Ltd. 1976.
- Harlen, Bruce, - How to Improve your diving, Poona : Modern Book Stall.
- Fair Banks and Anne, Rose, - Teaching spring Board, Diving, Englewood Cliffs : Prentice Hall Inc. N. J. 1963.
- Reckhan, George, - Diving complete, London : Faber and Faber Ltd.

## 17 TRACK AND FIELD

- 1 Introduction of the sport and historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the sport.

## 3 Fundamental Skills :-

## Part - I

## 1 Track events :-

- a) Starting techniques
- b) Finishing techniques
- c) Relays

Standing start, Crouch start and its variations proper use of Blocks.

Run, Through, Forward

Lunging, Shoulder Shrug.

Various patterns of Baton Exchange and under-standing of Relay zones.

## 2 Field events :-

- a) Long jump  
(Hang style)
- b) High jump
- c) Shot put  
(O'Brien technique)
- d) Discuss Throw

Approach run, take off flight in the air and landing.

Approach run, take off clearance over the Bar and Landing.

Grip, Stance Glide. Release and Reserve.

Grip, Stance, Release and Reserve.

## 3 Rules of track and field events.

## Part - II

## Track events :-

- a) Hurdles
- b) Middle and Long distance Running.
- c) Steeplechase

Approach, Clearance over the Hurdle and Recovery.

Approach, Clearance, recovery walking technique.

## 2 Field events :-

- a) Triple Jump

Approach run, take off flight in the air and landing.

- b) Polo vault Hand Crip and pole carry, The run and pole plant, take off, Bar clearance and
- c) Javelin Grip, Carry, Release and Reverse.
- d) Hammer throw Crip, Turning, Release and Reverse.
- 3 Rulesy of track events :-

EVALUATION:	
1 Skills Test	70
2 Written Test	20
3 Diary	10
<b>Total</b>	<b>100</b>

*Books Recommended for study :*

- Dybbob, Geoffrey, G. H. - The Mechanics of Athletics, London : University of London Press Ltd. 1962.
- Doderty, J. Menneth, - Modern Track and Field, Englewood Cliffs : N. J. Prentice Hall. Inc.
- Hooks, Gene, Application of Weight Training to Athletics, Englewood Cliffs, N. J. Prentice Hall Inc. 1962.

**BOOKS RECOMMENDED :**

- 1 Mahotra, Ashok Kumar - A guide to be an Athletic, Krishna Publication, New Delhi. 1980.
- 2 Mohan, V. M. - Athletics for Begins, Metropolitan Books, New Delhi.
- 3 Robinson, Johnson, James and Hirschi, - Modern Techniques of Track and Field, Henry Kimpton Publishers, 1974.
- 4 Ken. O. Bosen, - Track and Field Fundamental Techniques, NIS Publications, Patiala.
- 5 Parchiwala J. - Athletics.

18 TENNIS ✓

- 1 Introdication of the game and historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :-
  - 1 Grips :-
    - a) Eastern Forehand grip.
    - b) Eastern Backhand grip.
    - c) Western grip.
    - d) Continental grip.
    - e) ,Chopper grip.
  - 2 Stance and Footwork.
  - 3 Basic Ground Strokes :
    - a) Forehand drive.
    - b) Backhand drive.
  - 4 Basic service.
  - 5 Basic volley.
  - 6 Smach.
  - 7 Lod Defensive.
- 4 Rules and their interpretations and duties of Officials.

EVALUATION	
1 Skill Test	70
2 Written Test	20
3 Diary	10
<b>Total</b>	<b>100</b>

*Books Recommended for study :*

- 1 Brawn, Jon. - Tennis-Strokes Stategy and Frugrams, New Jersey : Prentice Hall Inc. Englewood Cliffs, N. J. 1989.
- 2 Hawton, Mary, - How to Play Winning Tennis, New York, Eookth with one West 39th Street, 1979.

- 3 Elghton, Jim, - Inside Techniques of Winning, New Jersey, Prentice Hall, Inc. Englewood, Cliffs, 1967.
- 4 Trengove Alan, - The Art of Tennis, London, Holdex and Strayahthen Ltd. Workwide Lane, 1984.

#### 19 TABLE - TENNIS ✓

- 1 Introduction of the game and historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the game.
- 3 Fundamental Skills :-
  - 1 The grip :-  
The tennis grip (Forehand grip and backhand grip) and penholder grip.
  - 2 Service :-
    - a) Forehand (Foreward and backward spins).
    - b) Back hand (Foreward and backward spins).
    - c) Side spin.
    - d) High Tose.
  - 3 Strokes (From both forehand and backward):
    - a) Push.
    - b) Chop.
    - c) Drive (with top spin).

#### 20 RHYTHMICS (GIRLS)

- 1 Fundamentals of Rhythm and its importance in Physical Education.
- 2 Historical background of Rhythm with special reference to Folk Dances, Folk Dances of India, their origin and significance.
- 3 Fundamental Skills :-
  - 1) Walk-cover Rhythm.
  - 2) Run-cover Rhythm.
  - 3) Hop-over Rhythm.
  - 4) Jump-over Rhythm.

- 5) Skip-un cover Rhythm.
- 6) Side-un Cover Rhythm.
- 7) Gallop-un Cover Rhythm.
- 4 In wesern style for rhythmic steps :-
  - 1) Do-is-do (with walking and skipping).
  - 2) Hul-toe step.
  - 3) Grapevine step.
  - 4) Polke.
  - 5) Step hold.
  - 6) Step draw.
- 5 Some Popular Western Folk Dances :-
  - 1) Shoe maker's dances.
  - 2) Mayeun.
  - 3) Machol Oradya.
  - 4) Hawangila.
  - 5) Comberland squared dance.
- 6 Some Popular Indian Folk Dances :-
  - 1) Tipre Nritya (Gujrat).
  - 2) Machiva Nritya (Maharashtra).
  - 3) Nervest Dance (Rajasthan).
  - 4) Desh ki Prashansa (Bengal).
- 4 Block :-
  - i) Double Block.
  - ii) Triple Block.
- 5 Dive :-
  - (i) Forward Dive.
    - a) Dive combined with dig (Two handed).
    - b) Dive combined with dig (One handed).
- 6 Rules and their interpretations duties of officials.

## EVALUATION

1	Skill Test	70
2	Written Test	20
3	Diary	10
Total		100

*Books Recommended for study :*

- 1 Dhanraj, V. Hubert, - Volley for Men and Women, Calcutta : Y. M. C. Publishing House, 1969.
- 2 Nicholla, Keith, - Modern Volleyball for Teachers, Coach and Player, London, Lepus Book, 1970.
- 3 Siaymaker, Thomes and Brown Virgine H. - Power Volleyball London, Saunders Company, 1976.
- 4 Sait, Nicolas, - Whipping Volleyball, London Stanley Paul, 1975.
- 5 Sandeul Kandy, - Volleyball, California : Goodyear Publishing Company, Inc. 1970.
- 6 Anthony, Don, - Success in Volleyball, London : John Murraray Publishers Ltd. 1978.
- 7 Lavage, Robert E. - How to Improve your Volleyball, Chicago The Athletic Institute, 1968.
- 8 Soudhu, G. S. - Volleyball Basic and Advanced : Chandigarh, The Sports people.

## 21 WEIGHT TRAINING (BOYS AND GIRLS)

- 1 Introduction of the sport historical development with special reference to India.
- 2 Difference among weight training, weight lifting and power, lifting, safely principle of weight training and introduction of the muscular system of the body.
- 3 Fundamental Skills :-
  - (i) The following exercises covering the major groups of muscles are to be taught and performed using different type of muscle contractions, i.e. isometric and isotomic.

- a) Two arms curls.
  - b) Front Press.
  - c) Press behind the neck.
  - d) Dead lift.
  - e) Quarter squat, Half squat and Full squat.
  - f) Rise on toes (Heel Raise).
  - g) Straight arm pull over.
  - h) Bent cover, rowing,
  - i) Bench press.
  - j) Leg press.
  - k) Wrist rolling.
  - l) Peonation and supination.
  - m) Trunk Twisting.
  - n) Good morning exercise.
  - o) Sit ups with weight.
  - p) Alternate Press.
  - q) Spot running with weight.
  - r) Stepping on bench.
  - s) Jack Knife.
  - t) Lateral rise.
  - u) Iron shoe exercises.
- (ii) Orientation of student to weight lifting, power lifting and best physique.

## EVALUATION

1	Skill Test	70
2	Written Test	20
3	Diary	10
Total		100

## Books Recommended for study :

- Kalyal, P. N. - Manual of Weight Lifting, Ambale Cant : Green Printing Press.  
 Krikeley, George, W. - Modern Weight Lifting, London : Faber Popular Books, 1957.  
 Murray, Jim and Karpovich Peter V. - Weight Training, in Athletics, Englewood Cliffs : N. J. Prentice Hall, 1965.  
 Kirkley, George and Geohody John, - The Manual of Weight Training, London : Stenlay Paul and Company, 1971.

## 22 WRESTLING

- 1 Introduction to Wrestling and its historical development with special reference to India.
- 2 Important tournaments held at National and International levels and distinguished personalities related to the sport.
- 3 Fundamental Skills : -
  - 1 Learning and demonstrating fundamental skills involving drills and lead up games, if any, therein. (Catch as can style).
  - a) Take down Stance leg tackles, arm drag.
  - b) Counters for take downs : cross face, whizzer Series.
  - c) Escape from under : Sitout-turn in triped.
  - d) Counters, for escapes from under : Basic control back drop, countres for stand up.
  - e) Pinning combination : Nelson series (Half nelson, Half Nelson and bar arm) leg lift series leg cradle series, Reverse double bar arm, chicken wing and half nelson.
  - f) Escaper from pinning : Wing lock series, Double arm lock roll, bridges.
  - g) Standing wrestling : Head under arm series whizzer series
  - h) Referee position's.
- 4 Rules their interpretations and duties of Officials.

## EVALUATION

1 Skill Test	70
2 Written Test	20
3 Diary	10
Total	100

## Books Recommended for study :

- 1 Dubey, C. H. A. - Wrestling Guide, 201 Raipur : Saugar (M. P.)
- 2 Collanger, E. L. & Dex, perry, - Wrestling, New York, A. S. Barnes & Co.
- 3 U. S. Naval, Institute, - Wrestling Arnapolis, Manyla, U. S. A.

## 23 YOGA

1. Concept of health, Ist importance in human life.
- 2 Factors affecting health.
- 3 Exercise in relation to health.
- 4 Types and systems of exercise.
- 5 Characteristics of an ideal system of exercise.
- 6 Yogic system of exercise. Its broad features, Scope and Limitations.
- 7 Contribution of Yogic practices for the promotion of various aspects of health and fitness.
- 8 Emotional stability and Yogic practices.
- 9 Varieties of Yogic practices with special reference to their significance of name, technique and utility.

## PRACTICALS

## A) Asanes :-

- Meditative : Sukhasan, Swastikasana, Padmasan, Vajrasan and Siddhasan.  
 Cultural : Bhujangasan, Ardha-Shalabhasana, Dhanurasana, Naukasana, Padhastasana, Halasana, Matsyasana, Vakrasan, Chakrasan, (Lateral bend)  
 Tadasan, Ukatasana, Trikshasan, Parvatasan, Shavasana.

b) Prati  
 c) Ban  
 d) Muc  
 c) Kriy

Books R

- 1 Kuva
  - 2 Kuva
  - 3 Kuva
  - 4 Yoga
  - 5 Yoge
  - 6 Yoga
  - 7 Gosw
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- b) Pranayam : Anuloma - Viloma and Ujjal (Both without Kumbhak).
- c) Bandha : Uddiyan.
- d) Mudra : Viparitakarani.
- e) Kriya : Kapalabhati.

**Books Recommended :**

- 1 Kuvvalayananda, - Asanas, Bombay, Popular Prakashan.
- 2 Kuvvalayananda, - Pranayana, Bombay Popular Prakashan.
- 3 Kuvvalayananda and Vinekar, S. L. - Yogic Therapy, New Delhi Central Bureau of Health Services, Ministry of Health.
- 4 Yoga, - Mimamsa, Journal Vol. I to XIX, Kalvalyadhama, Lonavala.
- 5 Yogeshwar, - Text Book of Yoga, Yoga Centre, Mylopore, Madras.
- 6 Yoga se Arogya, Indian Yoga Society, Sagar.
- 7 Goswami, S. S. - Halyayoga, Fowler, London.
- 8 The National Fitness Corps, Syllabus for Schools, Ministry of Education, Govt. of India, 1965.

**B. P. E. - I and B. P. E. - II**

**B. P. E. - I**

The students of B. P. E. I are expected to develop efficiency in formal commands and marching which are important skills of a Physical Education teacher. In view of this, for B. P. E. I students, the concentration ought to be on these aspects and conducting the calisthenics exercises.

As per the present practice, only one period per work has been provided in the time table which seems to be inadequate. A minimum of two periods may be provided per week so that each student. Teacher shall have an opportunity to develop the required confidence in the class handling skills (PE) mentioned above. During each period, eight student teachers should be assigned to take a practice lesson and there should be a minimum of ten subjects per student teacher.

Since, B. P. E. II Practice Teaching Programme would be a continuation of this programme. The Co-ordinator of practice teaching for B. P. E. II ought to be aware of the progress of this group as well. Hence he/she be entrusted with this responsibility.

**Course Contents :**

- (a) Commands : Fall in, Attention, Stand at Ease, Stand easy, Eyes, right-eyes front (dressing), Open and close order march, twirling right, left, about.
- (b) Marching : Quick march, Half, Wheeling) Left, Right), turning while marching, marking time, Double march etc.
- (c) Calisthenics : Performing an exercise rhythmically by counts explaining the movements, proper counting (suitable voice any rhythm).

**Examination :**

The students should have the final examination conducted by two internal examiners. A time limit of 15 minutes should be there for each student teacher and he/she be graded out of a minimum of 50 marks.

**B. P. E. - II**

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

During B. P. E. - I they have already been oriented to Commands and have conducted marching, calisthenics etc. It will be added with formal apparatus work, games skills as well as recreative activities in the form of minor games and relays which will make a full lesson.

Each student teacher is expected to take ten lessons during the course of the year. Out of these, the first five should be treated as Practice

- lesson and they need not be asked to prepare a written lesson plan.
- b) But the mental preparation is expected and these will be supervised by the faculty members who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons the duration should slowly increase and all the parts of the lesson covered progressively. These five lessons are to be conducted within the campus only.

- 1 Following the campus lessons, the student teachers should conduct a minimum of five lessons. In all, the Co-ordinator of practice teaching programme ought to have three detailed and two outlined lesson plans by the end of the session whether these are conducted in the campus or outside is immaterial. Out of these, first three ought to be with detailed lesson plans and the last two with only brief outlines.

- 2 Out of the five lessons, which are expected to be with lesson plans two should be for primary level - action songs, story plays, simple rhythmic, natural movements etc. Two should be suitable for middle school level. Callisthenic light apparatus, rhythmic, etc. and one should be for, secondary level - any game, skill or competitive sports skills.

#### Examination :

During the course of the year, the lessons which are conducted by the student teachers will be graded by the faculty members each carrying 10 (ten) marks. So, by the end of the session, the Co-ordinator should have a tabulated score of each student teacher out of 50 marks. This will form the internal assessment as a part of the final examination. In case of the need felt, the Dean, Dr. Babasaheb Ambedkar Marathwada University, may have a moderation committee as well.

At the end of the session, the students should have the final examiners conducted by two examination - one external and one internal. Both of them will observe the lesson and grade, each student teacher out of 100 marks. But the award of the internal examiner be reduced out of 50 marks so that the final grade becomes out of 200 marks. One hundred by external examiner, fifty by internal examiner and fifty for the Year, assessment.

#### Sessional Marks

At the time of final examination, the student teacher will not have any lesson plan but he/she be prepared to conduct a lesson on the basis of draw of lots. Each candidate will pick up a chart on the basis of which contents of the lesson will be decided like Callisthenic, games, skill, light apparatus, rhythmic, etc. Their drawing of chart will be done 30 minutes before of the commencement of the lesson.

It is recommended that there should not be more than two lessons conducted simultaneously so that the examiners could minutely observe the lesson which is without a written lesson plan, if desirable the number of external examiners may be more with equal number of internal examiners. In order to avoid, possible inconvenience, the games sports, lessons may be conducted in the campus only. Whereas the lessons pertaining to inconvenience, the games sport, lesson may be conducted in the campus only. Whereas the lessons pertaining to callisthenic, light apparatus rhythmic may be conducted preferable in schools.