

Syllabus for B.P. Ed. Course under Jiwaji University, Gwalior, 2013-14.

B.P. Ed. (1st Sem.)

PAPER-I

HISTORY AND FOUNDATIONS OF PHYSICAL EDUCATION

Code PHY T 01

UNIT-I

- a) Definitions of Physical Education.
- b) Meaning and Importance of Physical Education.
- c) Misconceptions about Physical Education.
- d) Aims and objectives of Physical Education.
- e) Physical Education as an Art, and Science, Academic discipline and multidisciplinary science.
- f) Physical Education in ancient India-Vedic period, Epic Period and Buddhist periods.
- g) Physical Education in the city states of Greece.

UNIT-II

- a) Survey of Modern Physical Education in India-Pre and Post independence periods.
- b) Physical Education and Sports Training Institutions in India.
- c) Indian Olympic Associations.
- d) Schemes for promotion of Physical Education and Sports;
 - a. Sports Authority of India, Arjuna Awards, and Dronocharya Awards.
 - b. National Sports Scholarships, National Associations and State Councils of Sports.

UNIT-III

A. Modern Olympic Games

- a. Start of Olympics.
- b. Objectives of Olympics.
- c. Olympics motto and Flag.
- d. Opening and closing ceremonies.
- e. Olympic charter.
- f. Olympic commissions and their functions

B. Contributions to the growth of Physical Education by different leaders of various Countries;

- a. Germany : John Bastedow, Guts Muths, Turnverein Movement,
- b. Sweden: Per Henric Ling, Swedish medical Gymnastics.
- c. Denmark: Frank Nachtegal, Niels Burke.
- d. U.S.A.
- e. Y.M.C.A. and its contributions.
- f. India: Shri H.C. Buck, Pt Jawaharlal Nehru, Prof. G.D. Sondhi, Raj Kumar Amrit Kaur, Prof. Karan Singh, Dr. P.M. Joseph, Prof. D.G. Wakharkar, Dr. M. Robson, Prof. Ajmer Singh, Prof. M.L. Kamlesh, and Dr. N.N.Mall

UNIT-IV BIOLOGICAL FOUNDATIONS

- a) Need for studying principles – Meaning and Sources.
- b) Heredity, environment and its importance ,
- c) Stages of growth and development
- d) Biological basis of life and biological weakness.
- e) Principles governing physical and motor growth and development.
- f) Chronological age, Anatomical age, Physiological age and Mental ages of individuals- their implications in developing and implementing Programming of Physical Education.

UNIT-V PSYCHOLOGICAL, SOCIOLOGICAL, PHILOSOPHICAL AND PHYSIOLOGICAL FOUNDATIONS

- a) Importance and implication of Psychological elements in Physical Education.
- b) Notions about mind and body and psycho-physical unity of man.
- c) Idealism and Physical Education.
- d) Pragmatism and Physical Education.
- e) Naturalism and Physical Education.
- f) Existentialism and Physical Education.
- g) Effect of exercise to the various systems.
- h) Physical Educations & Sports as a need of the society.

REFERENCE:-

- Bucher, Charles A. "**Foundations of Physical Education**" St. Louis: The C.V. Mosby Company 1986.
- Khan, Eraj Ahmed: "**History of Physical Education in India**" PATNA; Scientific boo Co.
- Leonard, Fred Eugen and G.B. Affleck. "**Guide to the History of Physical Education**", Philadelphia: Lea and Febiger 1962.
- Mazumdar, D.C. "**Encyclopedia of Indian Physical Culture**", Baroda: Good Companions, 1950.
- Rajagopalan, K.A. "**Brief History of Physical Education in India**", Delhi, Army Publishers-1962.
- Rice, Emmett. A., J.L. Hutchinson, and M Lee "**A Brief History of Physical Education**", New York, the Ronald Press Company 1960.
- Sharma, Jackson R, "**Introduction to Physical Education**" New York; A. S. Barnes and Company, 1964.

B.P. Ed. (1st Sem.)
PAPER-II
MANAGEMENT OF PHYSICAL EDUCATION AND SPORTS
Code PHY T 02

UNIT-I INTRODUCTION:

- a) Meaning and Definition of Planning, Organization, Administrations and Management.
- b) Nature and scope of Management.
- c) Importance of Planning and Management in Educational Institutions.
- d) Principles of Planning and Management.
- e) Working out an effective scheme of Organization.
- f) Schemes of Organization in School, college and university.
- g) Schemes of organization in the district and State Education.

UNIT-II FACILITIES AND EQUIPMENTS:

- a) Lay out of the school buildings and other facilities.
- b) Types of buildings, laboratories, other built-up facilities.
- c) Lay out of Physical Education facilities- common and special.
- d) Need and Importance of equipments for Physical Education and recreation.
- e) An Ideal list of equipments for Physical Education and recreational activities.
- f) Realistic approach in purchase procedures.
- g) Development of improvised equipments.
- h) Stocks and Store-keeping.
- i) Care, maintenance, repairs and disposal of equipments

UNIT-III STAFF AND LEADERSHIP:

- a) Head of the Institute, his role in imbibing the spirit of discipline in sports and students,
- b) Importance of qualified teachers of Physical Education and recreational leaders.
- c) Qualities of good teachers/teachers of Physical Education.
- d) Development of voluntary services of other teachers.
- e) Student leadership, its importance and limitations,
- f) Staff cooperation.
- g) Selection of training of student leaders.
- h) Recognition of staff and student leaders.

UNIT-IV INTRAMURALS, EXTRAMURALS AND PUBLIC RELATIONS;

A. Intramurals:

- a. Its importance and planning.
- b. Events of competition Time and Facility factors.
- c. Point systems, awards, recognition.

B. Extramurals:

- a. Outcomes of participations in educational institutions,
- b. Limitations of participations.
- c. Selection and Training of teams.
- d. Participations, fitness and other aspects.

C. Public Relations:

- a. Definition and need of Public Relations.
- b. Principles of Public relations in Physical education.
- c. Techniques of Public relations and how to use various media.
- d. Relations with parents, public and other bodies.
- e. Demonstrations, displays on special occasions.

UNIT-V OFFICE MANAGEMENT AND BUDGET:

- a. Physical Education budget and its preparation.
- b. Income and expenditure.
- c. Maintenance of Accounts and records
- d. Office correspondence, billing and reports.

REFERENCE:-

- Allen, LA. "**Management and Organization**", London: Mc Graw Hill Book Company Inc. 1958.
- Bucher, C.A. "**Administrations of Physical Education and Athletic Programmes**" London The C.V. Mosby Company 1983.
- Huges, W.L et al "**Administrations of Physical Education**", New York: The Ronald Press Company, 1962.
- Joseph, P.M. "**Organization of Physical Education**", TIPE Kandivli (Bombay), the Old Students Association, 1963.
- Maheshwai, B.L. "**Management by objectives**" New Delhi; Tata McGraw-Hill Publishing Company Ltd., 1982.

B.P. Ed. (1st Sem.)
PAPER-III
ANATOMY AND PHYSIOLOGY
Code PHY T 03

UNIT-I **CONCEPT OF ANATOMY, PHYSIOLOGY AND SKELETAL SYSTEM:**

- a) Meaning and concept of Anatomy and Physiology.
- b) Need and Importance of anatomy for the students of Physical Education.
- c) Definition of Cell, tissues, organ and system.
- d) Microscopic structure of cell.
- e) Tissues: classification, structure and function of various types of tissues.
- f) Bones: Composition, Microscopic structure of bones, function of bones, general features of scapula, radius, ulna, humerus, hip bone, femur, Tibia, Typical Rib and Typical Vertebra, Brief introduction about the skull bones.
- g) Joints: Definitions and classification of joints: Anatomical structure of synovial joints. Terminology of movement around a joint.

UNIT-II **MUSCLES**

- a) Structural and functional classification of muscles.
- b) Microscopic structure of muscles skeletal, cardiac and smooth; and their significance.
- c) General characteristics (Properties) of muscles (Elasticity, contractibility and Irritability).
- d) Attachments and action of the important Muscles in relation to following parts of body; Shoulder joint, Elbow joint, Hip joint and Ankle joint.

UNIT-III

- A. Concept of Physiology, cardiovascular, blood, lymph and excretory systems:

- a. Concept of Physiology.
 - b. Essential properties of living matter.
 - c. Elementary constituents of Protoplasm.
- B. 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 regulation.
- C. Blood And Lymph:
- a. Composition and functions of blood and lymph.
 - b. Clotting of blood.
- D. The Excretory Systems:
- a. Excretion of water from body.
 - b. Function of kidney, skin and G.T. Tract

UNIT-IV

- A. Respiratory system;
- a. Mechanism of respiration.
 - b. Pulmonary ventilation and its regulation.
 - c. Second wind, Oxygen debt.
- B. Gastro intestinal system ;
- a. Gastro intestinal movements,
 - b. Secretion and function of the digestive juices.
 - c. Functions of Liver.
 - d. Absorption of food.
- C. Metabolism And Temperature Regulation
- a. General metabolism.
 - b. Elementary idea about metabolism of proteins, Carbohydrates and fats.

D. Nervous system:

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

E. Sensory system:

- a. General sensation like coetaneous and kinesthetic sensation.
- b. Special sensations.
- c. Vision, distance and peripheral vision, Hearing, and Sense of balance and rotation, smell taste.

UNIT-V

A. Endocrine System:

- a. Secretion of endocrine glands and their role in growth & development and regulation of body functions,
- b. Pituitary, Thyroid, Para thyroid, Adrenal Glands

B. 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,
- d. Simple ideas of transmission of heredity characteristics.

REFERENCE:-

- Anderson .T. Mc. Clerg, "**Human Kinetics and Analyzing Body Movements**", London: William Heinman Medical Books Ltd. 1961.
- Davis, D.V. "**Gray's Anatomy**" London ; Longmans Green & Co. Ltd.
- Pearce, Evelyn B. "**Anatomy and physiology for Nurses**", London; Faber and Faber Ltd.
- Prarce, J.W. "**Anatomy for students and Teachers of Physical Education**", Edward Arnold & Co. London.

B.P. Ed. (1st Sem.)
PAPER-IV
HEALTH EDUCATION, PREVENTION & TREATMENT OF INJURIES
Code PHY T 04

UNIT-I HEALTH AND HEALTH EDUCATION

A. Health:

- (i) Meaning and Definition of Health.
- (ii) Dimensions of Health.
- (iii) Positive Health.
- (iv) Concept of Health.
- (v) Ecology of Health.
- (vi) Spectrum of Health.
- (vii) Determinants of Health.

B. Health Education

- (i) Concept, objectives & Scope of Health Education.
- (ii) Principles of Health Education.
- (iii) Communication in Health Education.
- (iv) Public Health Education & Attainment of Health Goals.

UNIT-II

A. Health Problems.

- a. Communicable diseases.
- b. Nutrition
- c. Environmental sanitation.
- d. Medical care of Maternal and Child Health.
- e. Population.

B. Organization and Administration set up of Health System in India.

- a. Central Level,
- b. State Level,
- c. District Level.

UNIT-III

A. Hygiene:

- a. The concept of Care of skin, mouth, nails, clothing, bathing etc.
- b. Importance of rest, sleep and exercise.

B. Community Health:

- a. Brief account of Housing, water supply,
- b. Sewage and refuse disposal.

C. School Health Service:

- a. History and Health problems.
- b. Objectives of school health services.

D. Aspects of School Health Service:

- a. Health Appraisal.
- b. Remedial measures and follow up.
- c. Prevention of communicable diseases.
- d. Healthful School environment.
- e. Nutritional services.
- f. First-aid and Emergency Care.
- g. Mental Health.
- h. Dental Health.
- i. Eye-health service.
- j. Health Education.
- k. Education of Handicapped children
- l. School Health records.

UNIT-IV

A. Food and Nutrition:

- a. Classification of foods,
- b. Proximate principles and role of various nutrients.

B. Balanced Diet:

- a. Definition, Principles of preparing the balanced diet.
- b. Balanced diet for Indian Players/School children.
- c. Malnutrition and Adulteration of food.

UNIT-V PREVENTION AND TREATMENT OF SPORTS INJURIES:

- A. Principles Pertaining to the Prevention of Sports Injuries
 - a. Relating to the maintenance of balance and prevention of falls.
 - b. Relating to the range of movement.
 - c. Relating to the intensity and quality of muscular exercise.
 - d. Relating to the reception of an object and weight bearing joints.
 - e. Relating to the reception of one's own height (landing),
 - f. Relating to lifting and a carrying of external weights.
 - g. Relating to receiving the impact of external force.

- B. Common Athletic Injuries and their Treatment
 - a. Sprains,
 - b. Strains,
 - c. Contusions.
 - d. Abrasions,
 - e. Principles of applying Heat and Cold, Massage,
 - f. Physiotherapy and Electrotherapy.

REFERENCE:-

- Anderson, C.L. and W.H. Cheell, "**School Health Practice**", St Louis: The C.V. Mosby Company, 1986.
- Bedi, Yashpah "**Social and Preventive Medicine**", New Delhi; Atmaram and sons. 1985.
- Gosh, B.N. "**Hygiene & Public Health**", Calcutta; Scientific Pub. Co. 1989.
- Hanlon, John L "**Principal of Public Health Administration**" St Louis; the C.V. Mosby Company 1969.
- O'Donogh D. "**Treatment of Injuries to Athletes**" Philadelphia: W.B. Saunders & Company.
- Pande P.K. and LC. Gupta. : "**Outline of Sports Medicine**" New Delhi; Jaypee Brothers, 1987.
- Park, J.E. & K. Park. "**Preventive & Social Medicine**", Jabalpur; M/S Banarsidas Bhanot Publication 1993.
- Reilly, Thomas; "**Sports Fitness and Sports Injuries**" London: Faber and Faber Ltd. , 1981.

B.P. Ed. (2nd Sem.)
PAPER-V
METHOD IN PHYSICAL EDUCATION
Code PHY T 05

UNIT-I TEACHING METHODS

- A. Term “Teaching Methods”
- a. Meaning of term “Teaching Methods”.
 - b. Scope and Importance of Teaching Methods
 - c. Factor to be Determining the methods of teaching
 - d. Factor effect Teaching Methodology.
- B. Types of Teaching Methods
- a. Part-Whole-Part Method.
 - b. Whole-part-whole method.
 - c. Discussion Method.
 - d. Project Method, Demonstration and Imitation Methods.
- C. Principles of Teaching
- D. Presentation Techniques.
- a. Personal Preparation.
 - b. Technical Preparation.
 - c. Steps of Presentation.
 - d. Commands & their technique.
 - e. Situation which require different words of command.
 - f. Types of formations.
 - g. Principles of class management.
- E. LESSON PLANNING
- Types of lesson and their values
- a. Objectives of different lesson plans & parts of the lessons plan,
 - b. Skill practice group work.
 - c. Class activity/Recreation part (Reassembly, Revision & Dismissal).

UNIT-II

- A. Organization and Conduct of competitions;
 - a. Track and field.
 - b. Gymnastic.
 - c. Weight Lifting, Body building & best Physique contests.
 - d. Wrestling and Combative.
 - e. Swimming , Diving and Water polo, and others

- B. Tournaments; Organization, meaning and their types;
 - a. Knock-out type
 - 1) Single elimination,
 - 2) Double elimination tournaments,
 - b. League- (Single- Double) or Round Robin type,
 - c. Combination type of tournaments.
 - d. Challenge or perennial type (Ladder-Pyramid type)
 - e. Miscellaneous type for small area games.

UNIT-III

- A. Audio-Visual aids and Teaching gadgets:-
 - a. Values and uses of audio visual aids.
 - b. Criteria for selecting the aids.
 - c. Steps to be followed in using teaching aids.

- B. Publicity – Meaning and Methods of preparation,
 - a. Demonstration,
 - b. Play days,
 - c. Exhibitions.
 - d. Sports for all.

UNIT-IV

- A. Marking of Track and Field's:
 - (a) Track and field-standard Track 400 Meters, and 200 meter.

- (b) Play-field-football, Volley ball, Basketball, Badminton, Kabaddi, Kho-Kho, Cricket, Softball, as per International regulations.

B. IMPROVISATION WAYS AND MENS OF MPROVISATION:

- (a) Area.
- (b) Apparatus.
- (c) Equipments.
- (d) Leadership.

C. Evaluation

- (a) Need
- (b) Importance
- (c) Basic methods of evaluation.
 - 1. Observation.
 - 2. Interview.
 - 3. Corporative evaluation by pupil & teacher.

UNIT-V

A.

- a. Meaning of Tests, Measurement and Evaluation.
- b. Need and Importance of Tests, Measurements and Evaluations in the field of Physical Education and Sports.

B. Selection and Construction of Tests:

- a. Criteria of test Selection- Scientific Authenticity (Reliability, Validity, Objectivity, Norms;
- b. Administrative Feasibility and educational implication.

C. CLASSIFICATION OF TEST

- a. Standard Test.
- b. Teacher made tests(Objective and Subjective Test)

D. Construction of Test;

- a. Knowledge tests (Written tests)
- b. Skill Tests.

E. Suggestion for administering the tests:

- a. Medical Examination.
- b. Testing Personal Time and testing.
- c. Economy of testing.
- d. Test records.
- e. Preparations of reports.

F. MEASUREMENT OF ORGANIC FUNCTION, MOTOR FITNESS AND GENERAL MOTOR ABILITY:

Organic functions Test:

- a. Cardiovascular respiratory function.
 1. Cooper's 12 Minutes continuous Run/Walk Test
 2. Tuttle Pulse Ratio test.
 3. Harvard step test and its modifications(High School and College level men and women)

Motor Fitness Test:

- 1) JCR Test
- 2) Canada Fitness Test
- 3) AAHPER Youth Fitness Tests.

G. TESTS FOR STRENGTH, SPORTS SKILLS AND PLAYING ABILITY;

- 1) Roger's Physical Fitness Index and Suggested Changes in the P.F.L Test
- 2) Kraus Weber Muscular test.

H. Skill Test

- 1) Volleyball: Brady skill test, Russell and Lange test.
- 2) Basketball: Johnson test, Knox test
- 3) Soccer-Mc Donald test, Johnson test
- 4) Fields Hockey : Harbans Singh Field Hockey Test
- 5) Badminton: Miller volley Test, Lockhart McPherson Test
- 6) Tennis-Borer Miller Test, Dyer Tennis Test.

REFERENCE:-

- Clarke H.H. "**Application of Measurement to Health and Physical Education**", Englewood Clifts, N.J.; Prentice Hall Inc.
- Knapp. Clyde and E.P. Hagman. "**Teaching Methods for Physical Education**". New York: Mc Graw Hill Book Co., 1948.
- Kozman, B. Classidy, Rosalind and CO. Jackson, "**Methods in Physical Education**", London; W.B. Saunders Company. 1960.
- Mathews, Donald K, "**Measurement in Physical Education**", London. W.B. Saunders Company, 1973.
- Tirunaryanan, C. and S. Hariharan "**Methods in Physical Education**", Karaikudi South India Press, 1962.

B.P. Ed. (2nd Sem.)
PAPER-VI
SPORTS PSYCHOLOGY
Code PHY T 06

UNIT-I

A. MEASURING AND NATURE OF PSYCHOLOGY:

1. Sources of Psychology.
2. Definition of Psychology.
3. Branches of Psychology.

B. MEANING AND NATURE OF SPORTS PSYCHOLOGY:

1. Relationship of Sports Psychology with other Sports Sciences.
2. Importance of Sports Psy. For Phy. Edu. Teachers and Coaches.

UNIT-II

A. MOTOR LEARNING:

- a) Meaning of Motor Learning.
- b) Factor affecting motor development in various periods of childhood and adolescence.

B. PERSONALITY:

- a) Meaning of Personality,
- b) Personality traits of sports person,
- c) Relationship of Personality to sport performance,
- d) Personality differences among various sports groups.

UNIT-III

A. MOTIVATION:

- a. Meaning of motive, Need, and Drive.
- b. Role of Motives,
- c. Attitude and interest in Physical activities.

- d. Meaning of Motivation,
- e. Types of Motivation,
- f. Relationship between extrinsic and intrinsic motivation.

B. EMOTIONS:

- a. Meaning of different types of emotions.
- b. Influence of emotions, (and failure)
- c. Level of aspiration and achievement
- d. Anxiety, Fear, Frustration, Conflict and its effect on Sports Performance.

UNIT-IV PSYCHOLOGICAL ASPECTS OF COMPETITION:

- a) Defining Competition,
- b) Determinants of competitive behavior,
- c) Psychological characteristics of Pre-competitions, Competition and Post competition, selected psycho-regulative techniques for Relaxation and Activation.
- d) Psychological aspects of long term and short term preparation for competition, Psychological care of Injured sports person,
- e) Typical response to injuries, Prevention and caring techniques.

UNIT-V SOCIOLOGY OF SPORTS:

- A) Meaning, Nature, Scope and Importance of Sports for Physical Education Teachers & Coaches.
- B) Audience and their effect on sports performance.
- C) Sports and Aggression, Violence in Sports.
- D) Methods of investigation in sports psychology and sports sociology.

REFERENCE:-

- Alderman, R.S. "**Psychological behavior in Sports**". Philadelphia: Saunders Company 1974.
- Butt, Doras Susan, "**Psychology of Sports**", New York: Van. Nostrand Reinhold Co.
- Cratty, Bryant, J. "**Movement Behaviour and Motor Learning**". Philadelphia: Lea & Fogger, 1975.
- Cratty, Bryant, J. "**Psychology of Contemporary Sports**" Englewood Cliffs, N.J, prentice Hall Inc. 1975.
- Cratty- B.J. "**Social Dimensions of Physical Activity**". Englewood Cliffs. N.J.; Prentice Hall Inc.

B.P. Ed. (2nd Sem.)
PAPER-VII
KINESIOLOGY
Code PHY T 07

UNIT-I INTRODUCTION:

- a) Definitions, Meaning, Nature, and Scope of Kinesiology
- b) Aims and Objectives of Kinesiology,
- c) Role of Kinesiology in Physical Education & Sports,
- d) Definition & Brief explanation of the following terms and their applications to the human body.
 - 1) Axis and Planes
 - 2) Centre of Gravity,
 - 3) Line of Gravity,
 - 4) Base,
 - 5) Starting Positions.

UNIT-II ANATOMICAL CONCEPTS;

- a) Classification of Joints and Muscles, Terminology of fundamental movements.
- b) Types of Muscle- contraction (Isometric and Isotonic-Concentric, Eccentrics)
- c) Muscle's Angle of Pull,
- d) Two Joint Muscles,
- e) Reversal of Muscle's customary function.
- f) Strength of muscle contraction in terms of motor units.
- g) All or None Law,
- h) Reciprocal innervations and Inhibition Group action of muscles and Muscular coordination.
- i) Upper Extremity;
 - 1. Major Characteristics Location and action of Major Joints i.e. Shoulder, Hip, Knee, Elbow, Fore Arm and Wrist Joint.
 - 2. Location and actions of Majors Muscles at these joints.

UNIT-III MECHANICAL CONCEPTS;

- a) Concept of mechanical basis of kinesiology to Physical Education and Sports,
- b) Definitions and brief explanations of the following basic terms:
 - a. Mass, Weight, Force, Motion, Equilibrium, Friction, Speed, Velocity and Momentum.

UNIT-IV KINESIOLOGICAL FUNDAMENTALS OF MECHANICS:

- a) Simple Mechanics found in the Musculo-Skeletal system (Leverage and its application to human body).
- b) Laws of motions and their application to sports activities.
- c) Forces:
 - 1. Moving one's own body.
 - 2. Giving impetus to External objects.
 - 3. Receiving impetus
- d) Equilibrium in sports and Role of Equilibrium in Sports Performance.

UNIT-V APPLICATION OF SCIENTIFIC PRINCIPALS:-

- a) Application of basic mechanical principles to Walking, Running and Jumping.
- b) Motor Skills of daily living.
- c) Application of mechanics in prevention of injuries.

REFERENCE:-

- Brower, Marion R. "**Efficiency of Human Movement**" Philadelphia; W.B. Saunders Co., 1966.
- Bunn, John W. "**Scientific Principles of Coaching**" Englewood Cliffs, N.J.; Prentice Hall Inc. 1966.
- Cooper, John M and R.B. Glasgow, "**Kinesiology**". St. Louis: C.V. Mosby Company, 1963.
- Duvally, Elien Neal. "**Kinesiology**", Englewood Cliffs, N.J.; Prentice Hall Inc. 1956.
- James G. Hay, I. Gavin Reid. "**The Anatomical and Mechanical Basis of Human Motion**" New Jersey; Prentice Hall Inc.
- Rasch, Phillip J and P.K, Burke, "**Kinesiology and Applied anatomy**". Philadelphia: Lea and Febiger, 1967.
- Scott, M. Gladys, "**Analysis of Human Motion**", New York; Meridith Publishing Co.
- Wells, Katherine P. "**Kinesiology**", Philadelphia: W.B. Saunders Co. 1966.

B.P. Ed. (2nd Sem.)
PAPER-VIII
SPORTS TRAINING METHODS
Code PHY T 08

UNIT-I

A. Sports Training.

- a. Definition of terms conditioning, Training & Coaching.
- b. Aim, tasks and characteristic of Sports Training.
- c. Principles of Sports Training & Training Load.

B. Training Load:

- a. Importance Features of Load, i.e. Intensity, Density, Duration and Frequency.
- b. Adaptation Process and Conditions of Adaptation.
- c. Overload- Causes and Symptoms – tackling of over load.

UNIT-II TRAINING FOR MOTOR COMPONENTS;

- a. **Strength:** - Forms of strength, characteristics of strength, Principles of strength, strength training means and methods, strength training for children and women.
- b. **Endurance:** - Forms of endurance, characteristics of endurance, Principles of endurance, endurance training means and methods.
- c. **Speed:** - Forms of speed, characteristics of speed, Principles of speed, basics of speed, speed training means and methods.
- d. **Flexibility:** - Forms of flexibility, characteristics of flexibility, Principles of flexibility, basics of flexibility, flexibility training means and methods.
- e. **Coordination Abilities:** - characteristics of Coordination, Principles of Coordination, basics of Coordination, Coordination training means and methods.

UNIT-III TECHNIQUE, TACTICS AND STRATEGY

Technique:

- a) Definition of Skill and Style.
- b) Characteristics of Technique.
- c) Factor affecting Technique.
- d) Phases of skill acquisition.
- e) Methods of Technical Training.
- f) Causes and correction of faults.

Tactics and Strategy:-

- a) Definition of tactics and strategy.
- b) Basic tactical concept-offensive, Defensive and high performance.
- c) Methods of tactical Training.
- d) Control of tactical Training.

UNIT-IV PLANNING AND COMPETITION

A. Planning and Organization of training;

1. Importance of Planning.
2. Principles of Planning.
3. Systems of Planning.
4. Periodisation and its Types.
5. Contents for various periods of training.

B. Competition – Planning and Preparation;

1. Importance of competitions,
2. Competition Frequency,
3. Main and Build-up competition.
4. Direct Preparation for an important competition.

UNIT-V EVALUATION OF TRAINING

1. Items to be included in Evaluation Programme.
2. Use of graph and Principles of graphical representation.
3. Forms of diagrams used for evaluation. Checking progress.
4. Rules governing performance checks and motor test.

REFERENCE:-

- Cratty,S. "**Perceptual & Motor Development in infants and children**" Prentice Hall 1979.
- Dick, F.T. "**Sports training Principles**" Lepus, London, 1980.
- Jenson, C.R. Fisher A.G. "**Scientific basis of Athletic conditioning**" Lea & Febire, Philadelphia: 1972.
- Matveyew, L.P. "**Fundamentals of Sports Training**" (Translation from Russian) Mr. Publisher, Moscow, 1981.
- Singh, H. "**Sport Training, General Theory and Methods**" N.I.S.Patiala, 1984.
- Singh Hardyal "**Science of Sports Training**" New Delhi: DVS Publication, 1985.
- Wilmore, U.M. "**Athletic Training and Physical Fitness**" Allynand Bacon, Inc. Sydney, 1977.

PART-B (PRACTICAL)
B.P. Ed. (1st Sem.)
Practical Subjects Paper-I
ATHLETICS
Code PHY P 01

1. Introduction of the sport and historical development with special reference to India.
2. Important tournaments of Athletics held at National and International levels.
3. FUNDAMENTAL SKILLS.

3.1 Track event-

- | | | |
|-------|----------------------|--|
| 3.1.1 | Starting techniques | - Standing start, Crouch start and its variations. Proper use of Blocks. |
| 3.1.2 | Finishing techniques | - Run through, Forward Lunging, Shoulder Shrug. |
| 3.1.3 | Relays | - Various patterns of Batton Exchange and understanding of Relay Zones. |

3.2 Field events-

Jumps

3.2.1 Long Jump

(Sail Style) – Approach run, take off, flight in the air and landing.

(Hang Style) – Approach run, take off, flight in the air and landing.

3.2.2 Triple Jump

- Approach run, take off (Hop, Step, and Jump), flight in the air and landing.

3.2.3 High Jump

(Western roll) - Approach run, take off, clearance over the Bar and landing.

(Straddle roll) - Approach run, take off, clearance over the Bar and landing.

3.2.4 Shot put

(O'Brien technique) – Grip, Stance Glide, Release and Reserve.

(Disco-put technique) – Grip, Stance Glide, Release and Reserve.

3.2.5 Discus throw

– Grip, Stance, Release and Reserve.

3.2.6 Javelin Throw

– Grip, carrying the Javelin, Approach, Delivery, Release and Reserve.

4. Rules and their interpretations and duties of officials.

BOOKS RECOMMENDED FOR STUDY

1. Dybon, Geoffrey, G.H., "**The Mechanics of Athletic**", (London: University of London Press Ltd.)1962.
2. Doderty, J. Memmeth, "**Modern Track and Field**" (Englewood Cliffs: N.J. Prentice Hall, Inc.)
3. Hooks, Gene. "**Application of Weight Training to Athletics**" (Englewood Cliffs: N.J. Prentice Hall, Inc.) 1962.
4. Mohan, V.M. "**Athletics for Beginners**" (New Delhi: Metropolitan Books Ltd.)
5. Robinson, Johnson James and Hirschni, "**Modern Techniques of Track and Field**" (London: Henry Kimpton Publishers) 1974.
6. Bosen, K.O., "**Track and Field Fundamental Technique**" (Patiala: N.I.S. Publication)
7. Martin D, Col N. "**Traning distance runners**" (Illinois Leisure Press Champaign) 1991.
8. Brar T.S., "**Track and Field**" (New Delhi: Friends Publications) 2004.
9. Govindarajula, Gupta R "**Layout and marking in Track and Field**" (New Delhi: Friends Publications) 2004.
10. Daniel, Arnhiem, William and Frentice "**Athletic training**" (Boston: Mc Graw Hill) 2000.
11. Hillman S.K. "**Introduction to Athletic Training**" (USA: Human Kinetics) 2000.
12. Jacoby & Fralley "**Complete book of Jumps**" (Human Kinetics) 1995.

B.P. Ed. (1st Sem.)
Practical Subjects Paper-II
VOLLEY-BALL
Code PHY P 02

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. **FUNDAMENTAL SKILLS.**
 - 3.1 **Player's stance** - Receiving the ball & passing to the team mates.
 - 3.1.1 The Volley (Over head pass)
 - 3.1.2 The Dig (Under head pass)
 - 3.2 **Service-**
 - 3.2.1 Under Arm Service.
 - 3.2.2 Side Arm Service.
 - 3.2.3 Tennis Service.
 - 3.2.4 Round Arm Service.
 - 3.3 **Lead up Games-**
 - 3.3.1 Three Volleys (These can be combined with service)
 - 3.3.2 Three Digs (Receiving service using dig and setting and placing using volleying action)
 - 3.4 **Spike-**
 - 3.4.1 Straight Arm Spike.
 - 3.4.2 Round Arm Spike.
 - 3.5 **Block-**
 - 3.5.1 Single Block.
4. **Advance Skills-**
 - 4.1 **Pass-**
 - 4.1.1 Back Pass.
 - 4.1.2 Back Roll Volley.
 - 4.1.3 Back Roll Dig.
 - 4.1.4 Jump and Pass.
 - 4.1.5 Side Roll Dig.

- 4.2 **Service-**
 - 4.2.1 Side Arm Floater.
 - 4.2.2 Over head Floater.
- 4.3 **Spike-**
 - 4.3.1 Spiking cross court.
 - 4.3.2 Spiking down the line.
- 4.4 **Block-**
 - 4.4.1 Double Block.
 - 4.4.2 Triple Block.
- 4.5 **Dive and Rolls**
 - 4.5.1 Dive combined with dig (Two handed).
 - 4.5.2 Dive combined with dig (One handed).
- 5. Rules and their interpretations and duties of officials.

BOOKS RECOMMENDED FOR STUDY

1. Anthony, Don. "**Success in Volleyball**", London: John Murrary Publishers Ltd. 1978.
2. Leveag, Robert E. "**How to Improve your Volleyball**" Chicago: The Athletic Institute, 1968.
3. Sandhu, G.S. "**Volleyball, Basic & Advanced**". The Sports. People, Chandigarh.
4. William J.N. "**Coaching Volleyball Successfully**", (Human Kinetics, 1990)
5. Ranganaathan P.P. "**Volleyball**" (Friends Publications Delhi) 2000.
6. Sagar S.K. "**Play Better Volleyball**" (Delhi: Lokesh Thani Sports Publication) 1994.
7. Marv Dumphy & Rod Wilde, "**Volleyball Today**". (Thomson Asia Pt. Ltd. Singapor) 2001.
8. Cox RH, "**Teaching Volleyball**" (Surjeet ;Publication)
9. Rrohner, "**Skills in Volleyball training**"
10. Painer Martens, "**Successful Coaching**" Lesuire Press- 1990.
11. Mary Wise, "**Volleyball Drills for Champions**", 1999
12. Kach Kirales & Byron Shewman, "**Beach Volleyball**", Human Kinetics-1999.

B.P. Ed. (1st Sem.)
Practical Subjects Paper-II
BASKETBALL
Code PHY P 03

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 sport.
3. Rules and their Interpretations.
4. Duties of official.
5. Fundamental Skills.

5.1 Player's stance and ball handling.

5.2 Passing and Receiving Techniques.

5.2.1 Two hand chest pass.

5.2.2 Two hand Bounce pass.

5.2.3 One hand Base ball pass.

5.2.4 Side arms pass.

5.2.5 Over head pass.

5.2.6 Hook pass.

5.3 Receiving-

5.3.1 Two hand receiving.

5.3.2 One hand receiving.

5.3.3 Receiving in stationary position.

5.3.4 Receiving while running.

5.3.5 Receiving while jumping.

5.4 Dribbling-

5.4.1 High dribble.

5.4.2 Low dribble.

5.4.3 Reverse dribble.

5.4.4 Rolling dribble.

5.5 Shooting-

5.5.1 Lay-up shot and its variations.

5.5.2 One hand set Shot.

5.5.3 One hand jump Shot.

- 5.5.4 Hook Shot.
- 5.5.5 Free throw.
- 5.6 **Rebounding-**
 - 5.6.1 Defensive rebound.
 - 5.6.2 Offensive rebound.
 - 5.6.3 Knock out.
 - 5.6.4 Rebound organization.
- 5.7 **Individual Defense -**
 - 5.7.1 Guarding the man with the ball.
 - 5.7.2 Guarding the man without the ball.
- 5.8 **Pivoting.**

BOOKS RECOMMENDED FOR STUDY

1. Moontasir, Abbas. "**Principles of Basket ball**" Bombay Skanda Publication, 1379.
2. Boe, Clair and Nortan, Kon, "**Men to Men Defence and Attack**". New York: the Ronald Press Company, 1959.
3. Boe, Clair and Nortan, Kon, "**Zone Defence and Attackce and Attack**". New York: the Ronald Press Company, 1959.
4. Abrahm 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., 1960.
6. Colberk A.L. "**Modern Basketball-A Fundamental Analysis of Skills and Tactics**". London: Nicholas Kaya, 1966.
7. Srivatsan, S. "**Basketball**", NIS, Publication, Patiala.
8. Jerry V. Krasue, Ed D, "**Nivia Basketball Skills & Drills**", The Marine Sports Publishing Division 2000.
9. Total Basketball, "**The Ultimate Basketball Encyclopedia**", 2003, Sports Media Publishing Inc.
10. John R. Wooden, "**Practical Modern Basketball**" Allyn & Bacon -1998 (Third Edition)
11. Bob Spear & Bob Knnigh, "**Basketball multiple offense on defense**" by Dean Smith Mark Vancil, NBA Basketball Offense Basics 1966 by NBA Properties, Inc.

B.P. Ed. (1st Sem.)
Practical Subjects Paper-IV
FOOTBALL
Code PHY P 04

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. Fundamental Skills.
 - 3.1 **Kicks-**
 - 3.1.1 Kicking with the inside of the foot.
 - 3.1.2 Kicking with the instep of the foot.
 - 3.1.3 Kicking with the outer instep of the foot.
 - 3.1.4 Lofted Kick.
 - 3.2 **Trapping-**
 - 3.2.1 Trapping rolling ball- with the inside, sole and instep of the foot.
 - 3.2.2 Trapping bouncing ball with the sole.
 - 3.3 **Dribbling-**
 - 3.3.1 With the instep of the foot.
 - 3.3.2 With the inside of the foot.
 - 3.3.3 With the outer instep of the foot.
 - 3.4 **Heading-**
 - 3.4.1 From Standing.
 - 3.4.2 From running.
 - 3.4.3 From Jumping.
 - 3.5 **Throw-in**
 - 3.6 **Feinting-**
 - 3.6.1 With the lower limb.
 - 3.6.2 With the upper part of the body.
 - 3.7 **Tackling-**
 - 3.7.1 Simple tackling.
 - 3.7.2 Slide tackling.

3.8 **Goal Keeping-**

3.8.1 Collection of balls.

3.8.2 Ball clearance- Kicking, throwing and deflecting.

4. ADVANCE SKILLS

4.1 **Kicking-**

4.1.1 Chip.

4.1.2 In-swing and out-swing.

4.1.3 Volley (low drive, back volley and scissors volley).

4.1.4 Half Volley.

4.2 **Ball reception and control-**

4.2.1 Receiving rolling ball with inside and outside of the foot and changing direction.

4.2.2 Trapping the bowling ball with the abdomen.

4.2.3 Trapping the bowling ball with the lower leg.

4.2.4 Receiving the bowling ball with inside and outside of the foot and changing direction.

4.2.5 Receiving a flying ball with the inside, instep thigh, chest and Head.

4.3 **Dribbling-**

4.3.1 Controlled dribbling.

4.3.2 Fast dribbling.

4.3.3 Straight dribbling.

4.3.4 Zig-zag dribbling.

4.3.5 Dribbling around/between obstacle.

4.4 **Heading-**

4.4.1 From running and jumping.

4.4.2 Heading for long clearance.

4.4.3 Downward heading.

5. Rules and their interpretations and duties of officials.

BOOKS RECOMMENDED FOR STUDY

1. Larche, Harry E. "**Techniques of Football Coaching**". London: A.S. Barners 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 Geaegow, 1972.
4. Singh, Gian. "**Football Quiz**". Delhi: Services Publishing House, 1977.
5. Batty Cris, "**Soccer Coaching the Modern Way**". London: Faber and Faber, 1969.
6. Hedler and Stranghton "**Play Football with Pale**". London: Toronto, Sydney.
7. Wiel Coerver, "**Soccer excellence**" London: Sidgwick & Jackson.
8. Richard Widdows "**Football Chancellor**" Press, London 1992.
9. Adam Warel & Trevor Levin "**Junior Football**" (Bounty Book k London 2003)
10. Biru Mal & Kapri, "**A to Z Soccer**" Friend Publication (India) New Delhi – 2005.
11. Thomas Reilly, "**Science and Soccer**", Sports Press-2003.

B.P. Ed. (2nd Sem.)
Practical Subjects Paper-V
HOCKEY
Code PHY P 05

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. Fundamental Skills.
 - 3.1 Grip.
 - 3.2 Skills-
 - 3.2.1 Rolling the ball.
 - 3.2.2 Dribbling.
 - 3.2.3 Push.
 - 3.2.4 Stopping.
 - 3.2.5 Hit.
 - 3.2.6 Flick.
 - 3.2.7 Scoop.
 - 3.3 Passing- Forward pass, square pass, triangular pass.
 - 3.4 Drills and lead up game related with skill taught.
4. Advance Skill-
 - 4.1 Reverse hit, hitting on the wrong foot.
 - 4.2 Stopping the ball on the right, left side and stopping the ball in the air.
 - 4.3 Pushing on the wrong foot.
 - 4.4 Reverse Flick.
 - 4.5 Dodging (through the legs, right and left).
 - 4.6 Tackling-Front, right, left.
 - 4.7 Passing- Through pass, diagonal pass, return pass.
 - 4.8 Common bully.
5. Positional play in attack and defense.
6. Drills and lead up games.
7. Rules and their interpretations and duties of officials.

BOOKS RECOMMENDED FOR STUDY

1. Flint, Rachael, H. "**Woman's Hockey**" London: Pelham Books Ltd. 1976.
2. Milford, D.S. Hockey "**Practice and Tactics**" London: Edward Arnold and Company, 1949.
3. Singh, Gian and wallia Kuku "**Learn Hockey this way**". New Delhi International Hockey Institutes, 1975.
4. Wein, Horts, "**The Science of Hockey**". London: Pelham Books Ltd. 1979.
5. Ahmed Khan, Eraj, "**Hockey for Boys and Girls**", Scientific Book Company, Patna, 1976.
6. Thani, Yograj, "**Hockey**", 1976.
7. Durairaj, "**Techniques of Hockey**".
8. Kapur, "**Rules of Hockey with Interpretation**" (Boys and Girls) 1975.
9. Singh, Gian and wallia Kuku "**Learn Hockey this way**". Commercial publication Bureau, New Delhi-1979.
10. P. Narang, "**Play and learn Hockey**", Khel Sahitya Kendra-2003.
11. Dilip K. Dureha & Akhil Mehrotra, "**Teaching and Coaching Hockey**", Janvani Prakashan(P) Ltd. 2003.
12. Ian Taylor with David Vera, "**Taylor on Hockey**", Macdonald Queen Annepress-1988.
13. D. Jain, "**Hockey Skills & Rules**" Khel Sahitya Kendra-2003.

B.P. Ed. (2nd Sem.)
Practical Subjects Paper-VI
CRICKET
Code PHY P 06

1. Introduction of the game and historical development with special reference to India.
2. Important tournaments held at National and International levels and distinguished personalities related to the game.
3. Fundamental Skills.
 - 3.1 **Batting-**
 - 3.1.1 Forward defensive stroke.
 - 3.1.2 Backward defensive stroke.
 - 3.2 **Bowling-**
 - 3.2.1 Simple bowling techniques.
 - 3.3 **Fielding-**
 - 3.3.1 Defensive Fielding – Orthodox, Unorthodox.
 - 3.3.2 Offensive Fielding.
 - 3.4 **Catching-**
 - 3.4.1 High Catching.
 - 3.4.2 Slip Catching.
 - 3.5 Stopping and throwing techniques.
 - 3.6 Wicket keeping technique.
4. ADVANCE SKILLS
 - 4.1 **Batting-**
 - 4.1.1 Forward defensive stroke.
 - 4.1.2 Backward defensive stroke.
 - 4.1.3 Forward off drive.
 - 4.1.4 Forward on drive.
 - 4.2 **Bowling-**
 - 4.2.1 Simple bowling techniques.
 - 4.2.2 Difference between pace.
 - 4.3 Bowling and Spin Bowling. Off and leg spin bowling.
 - 4.4 **Fielding:** Different techniques of fielding and its importance.
 - 4.5 **Catching:** Different types of catching, its techniques and importance.

- 4.6 **Stopping and throwing-**
Different techniques and its importance.
- 4.7 **Wicket keeping-**
Different techniques and their implications.
5. Rules and their interpretations and duties of officials.

BOOKS RECOMMENDED FOR STUDY

1. Micharda, Barry, Barry Richard "**Cricket**". London Pelhon Books, 1979.
2. Mankar, Vinno, "**How to play Cricket**". Rupa and Company, 1976.
3. Greig, Tony, "**Greig on Cricket**" Mombay, S. Publication, 1975.
4. N.I.S. "**Cricket**": Pub. Inc.
5. Goei G.R. "**Cricket Sports Officer**", Stadium Sigm.
6. M.S. Mushtaq: "**How Play Cricket**". Vikash Publication House, New Delhi, 1981.
7. Monica Arora, "**Cricket Coaching Manual**", Sports Publication New Delhi 2005.
8. Michal Rundell, "**The Dictionary of Cricket**", (II edition), Oxford University press-1955.
9. Venkat Sundram, "**Cricket Coaching handbook**", Sun Protects Private Ltd. New Delhi-2003.
10. Simon Hughes, Jargon busting- "**The Analyst's Guide to Test Cricket**", Simon Hughes-2001.
11. V. Thani, "**Cricket Skills & Rules**", Khel Sahitya Kendra, New Delhi-2003.
12. Frank Tyson, "**Learn Cricket with Frank Tyson**", Rupa & Co.-2002.

B.P. Ed. (2nd Sem.)
Practical Subjects Paper-VII
KHO-KHO and KABADDI
Code PHY P 07

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:** General Skills of the game-running, chasing dodging, faking etc.
 - 3.1 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, judgment in giving kho, rectification of foul.
 - 3.2 Skills in running Zig-zag running, single and double chain, ring play, rolling in the sides, dodging while facing and on the back fakes on the pole fake- legs, body arm etc., combination of different skills.
4. Fundamental Skills in Kabaddi.
 - 4.1 **Skills in raiding-**
 - 4.1.1 Touching with hand.
 - 4.1.2 Various kicks.
 - 4.1.3 Crossing of Baulk line.
 - 4.1.4 Crossing of Bonus line.
 - 4.1.5 Luring the opponent to Catch.
 - 4.1.6 Pursuing.
 - 4.2 **Skills of holding the raider-**
 - 4.2.1 Various formations.
 - 4.2.2 Catching from particular position.
 - 4.2.3 Different catches.
 - 4.2.4 Luring the raider to take particular position so as to facilitate catching.
 - 4.2.5 Chain formation and techniques.
 - 4.3 **Additional skills in raiding-**
 - 4.3.1 Bringing the Antis in to particular position.

- 4.3.2 Escaping from various holds.
 - 4.3.3 Techniques of escaping from chain formation.
 - 4.3.4 Combined formations in offence.
 - 4.3.5 Combined formations in defense.
 - 4.4 **Various Lead up games.**
5. Rules and their interpretations and duties of officials in Kho-Kho and Kabaddi.

BOOKS RECOMMENDED FOR STUDY

1. Rao, C.V. "**Kabaddi**", Patials, N.I.S. Publications, 1971.
2. Reddy, B.A. "**Scientific Kabaddi**", Madrad; Raman's Printing Press, 1974.
3. Meenu Syal, "**Teach yourself Kabaddi**", Prema Prakashan-2004.
4. E. Prasad Rao, "**Modern Coaches in Kabaddi**", D.V.S Publications (New Delhi) - 1994.
5. Kho-Kho, "**The game of chase and Trill**", Bombay Maharashtra Kho-kho Association.
6. Yogesh Yadav. "**Kho-Kho**", Maharashtra Kho-kho Association.
7. "**Gouric Kho-Kho Avalokan**" (New Delhi Khel Sahitya Kendra) 2005.

PART-C (TEACHING ABILITY)
B.P. Ed. (1st Sem.)
Practical Subjects Paper-III
TEACHING ABILITY
Code PHYTA 01

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

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

COURSE CONTENTS:

1. DRILL

- 1.1 Attention/Stand-at-ease/Left turn/Right turn/About Turn/Mar Time.
- 1.2 March.
- 1.3 Quick March and Halt.
- 1.4 Marching with About Turn.
- 1.5 Marching with Salute.

2. Free hand exercise (Calisthenics)

- 2.1 Two count
 - 2.2 Four count
 - 2.3 Eight count
- } with verbal command, drum and music.

3. LIGHT APPARATUS

- 3.1 Exercise with apparatus with verbal command.
- 3.2 Exercise with apparatus (with music and drum).

3.3 Exercise with apparatus (with music and formations)- BHARTIYAM

NOTE:

1. Students are to be allotted various schools in the vicinity to prepare Mass-Demonstration items. These groups will have march-past and mass demonstration competition after three weeks of training.
2. Each student takes ten lessons in the academic year.
3. Each student will be given sessional marks out of 40. The distribution of 40 marks in as follows:
 1. Internal Lessons : 40 marks
 2. Two lessons of squad drill, three lessons of calisthenics five lessons of light apparatus.