

**The University of Burdwan**  
**Syllabus for 3 - Year Degree Course in**  
**PHYSICAL EDUCATION (General)**  
**with effect from 2006 – 2007 onwards**

**PART- I**

**First Paper – 100 Marks**

**GROUP – A: PRINCIPLES AND HISTORY OF PHYSICAL EDUCATION**

**Full Marks: 15**

1. Nature and scope of Physical Education. Definition of the terms:  
(a) Education            (b) Physical Education (c) Physical training (d)  
Sports, Yogic exercises in sports training.
2. Aims and objectives of Physical Education, Changing concepts of  
Physical Education.

**GROUP – B: MANAGEMENT OF PHYSICAL EDUCATION AND SPORTS.**

**Full Marks: 30**

3. Management of Sports and Games in Schools, Colleges and  
Universities.
4. Types of Tournaments: (a) Knock-out system, (b) League System (c)  
Combination system.
5. Lay-out of play-fields and basic rules:  
(a) Kabaddi (b) Kho-Kho (c) Volleyball (d) Badminton (e) Football (f)  
Hockey (g) Cricket (h) Track and field events.
6. Care and maintenance of Sports equipments.

**GROUP – C: PSYCHO-SOCIAL ASPECTS OF SPORTS.**

**Full Marks: 10**

7. Physical Education activities as a socializing force.

8. Social values of Sports.

**GROUP-D: GROUP TRAINING AND MECHANICS.**

**Full Marks: 10**

9. Meaning of Sports Training, Conditioning, Warming-up and Cooling down.
10. Components of Physical Fitness, Speed, Strength, Endurance, Agility and Flexibility.
11. Mechanical principles Applied to Sports: Laws of Motion, Lever and its types, Equilibrium, its types and Laws, Centre of Gravity, Force and its types.

**GROUP – E: ANATOMY AND PHYSIOLOGY.**

**Full Marks : 20**

12. Cell-Structure and Function
13. Skeletal System and Skeletal Deformities – Type of Bones, Names of Various Bones of the Body, Types of Joints, Postural Defects, - Flat Foot, Lordosis, Scoliosis, Kyphosis etc. Nature, Causes and Correction.
14. Muscular system – Various types of Muscles, Structure, Effect of Exercises, Muscular Contraction Eccentric, Concentric, Static, Motor Unit, Isometric, Isotonic, Isokinetic Exercises.
15. Circulatory system – Heart and its structure, Mechanism of Blood Circulation, Types of Blood Vessels, Blood Pressure, Effect of Exercises.

**GROUP-F: HEALTH EDUCATION AND FIRST-AID:**

**Full Marks : 15**

16. Meaning of Health Education.
17. Safety Education – Safety at Home, School, College, Playground, Streets, Prevention and Control of Communicable Diseases – Malaria, Cholera, Common cold-cough etc.
18. First-aid, Sprain, Muscle Pull, Dislocation, Fracture, Cramps, Shock, Minor Injuries, Bleeding, Artificial Respiration, Snake bites, Drowning, Electric Shock and Burns.

**Part-II**

**SECOND PAPER – 100 MARKS**

**GROUP – A: ANATOMY – PHYSIOLOGY & EXERCISE PHYSIOLOGY.**

**Full Marks: 20**

1. Respiratory system – organs of the system, Vital capacity, Oxygen debt, Endurance, Effect of Exercises.
2. Nervous system – Parts of the brain and their structure, Spinal Cord,

- Reflex Action, Reciprocal Innervations (Inhibition) . All or None Law.
3. Endocrine system – Meaning of Endocrine Glands, Functions, Locations, of Pituitary, Thyroid and Adrenal Glands.
  4. Principles of Exercise – Strength – Endurance, Flexibility.

**GROUP-B: HEALTH EDUCATION AND FIRST-AID**

**Full Marks: 15**

5. Major Areas of Health Education:
  - a) Health Service – Daily health inspection, medical inspection follow-up, medical examination from, medical clinic.
  - b) Healthy environment – Healthful environment in educational institutions, offices, factories, playground, auditorium etc.
  - c) Environmental hygiene – lighting, ventilation, water-supply, waste-disposal.
6. Drugs, Alcohol and Tobacco – Adverse effect on health and performance.
7. Mental health: Problems of mal adjustment, Minor Mental Disorders – their causes and precautions.
8. Environment Pollution: Air, water etc., Remedical measures.

**GROUP-C: DIETETICS AND HYGIENE.**

**Full Marks: 30**

9. Basic Nutrients – Protein, Carbo-hydrates, Fats, Minerals, Vitamins.
10. Head of Nutrients: (a) Growth and Repair (b) Vitality and Fitness (c) Production of Calories for Energy and Warmth.
11. Quality of Food – how and when to eat, Diets for different age groups : Food performance, Sources of Food.
12. Balanced Diets, Athletic Diet, Standard Diet.
13. Midday-meal and Milk Programmes, Malnutritions, Causes and Effects.
14. Drinks – Water, Tea, Coffee, Liquor etc., their effects.
15. Importance of Hygienic Living – personal hygiene, care of skin, Hair, Ear, Throat, Teeth, Eyes, Nose, Feet etc., Fatigue, Habits.

**GROUP-D: PRINCIPLES AND HISTORY OF PHYSICAL EDUCATION.**

**Full Marks: 15**

16. Olympic Movement: (a) Ancient Olympic Games.  
(b) Modern Olympic Games.
17. Sport Schemes in India.
18. Development of Physical Education and Sports in India:  
(a) Pre-Independence (b) Post-Independence.

**GROUP - E: PSYCHO-SOCIAL ASPECT OF SPORTS.**

**Full Marks: 10**

19. Introduction – Psycho-physical unity of man.
20. Heredity and Environment.
21. Instinct, Emotion, Interest and Motivation – Role in Sports.

**GROUP – F: SPORTS TRAINING AND MECHANICS.**

**Full Marks: 10**

22. Training Methods: Circuit Training, Interval Training. Fartlek, Cross-country, Weight Training.
23. Normal Load, Crest Load, Overload, Principles of Overloading.

**THIRD PAPER (PRACTICAL)**

**Full Marks: 100**

1. Athletics: 100mt. Run, 200mt. Run, 400mt. Run, 800mt. Run, Shot-put, Discus Throw, Javelin Throw, High-jump, Long-Jump, Triple-Jump (Boys).  
(20 marks for one track event, one throwing event, one jumping event)
2. Gymnastics: Forward Roll, Backward Roll, Dive Roll, Cart Wheel, Hand-stand, Hand-spring, Neck-spring, Head-spring, Somersault, Skill and knowledge.  
(20 Marks)
3. Indian Games: Kabaddi, Kho-Kho (5+5 = 10 Marks)
4. Ball Games: Volleyball, Football, Cricket, Hockey, Badminton (Girls) – Fundamental skills, Rules and Regulation.  
(For any two Ball games 10+ 10 = 20 Marks)
5. Yogasanas: Swastikasana, Virasana, Maulkasanas, Padhastasana, Paschimytasana, Kukkutasana. (10 Marks)
6. First-Aid, Practical. (10 Marks)
7. Record Book. (10 Marks)

**Part – III**

**Fourth Paper**

**Full Marks : 100**

**(Theory: 65 + Practical = 35)**

**A – 25, B – 25, C – 15,**

**Group – A (25 Marks)**

Therapeutic Aspects of Physical Activities

1. Exercise Therapy – Corrective, Isotonic, Isometric, resistance exercises, Yoga sanas as a therapy, Massage therapy.
2. Physiotherapy (Electrotherapy, Cryotheraphy, Thermo therapy) – basic

- Principles.
3. Basic principles of rehabilitation – modalities, relaxation techniques.
  4. Recreation for different age groups and its therapeutic values.

**GROUP – B (25 MARKS)**  
**Physical Activities and Life Style**

1. Health and fitness – active life style, modern concepts.
2. Physical activity for childhood and adolescence – growth and development.
3. Physical activity for aged and disabled persons.

**GROUP – C (15 MARKS)**

Specific development exercises for: Neck, arm, trunk (lateral, dorsal, abdominal), knee and ankle, with and without apparatus.

**GROUP – D PRACTICAL (35 MARKS)**

1. The following items will be evaluated by external examiner on the basis of record books and in consultation with concerned teacher/officer, if necessary.
  - a) Participation in Physical Education Programme (5 Marks)
  - b) Visit to at least one standard tournament. (5 Marks)
2. Officiating: -
  - a) Athletics – Running, Jumping, throwing.
  - b) Indian Games: Kabadi, Kho-Kho.
  - c) Ball Games: Football, Cricket, Volley-ball, Badminton (any three)  
(Examination on one item in each group – 5 X 3 = 15)
  - d) Yogasana (5 Marks)