



UNIVERSITY OF CALCUTTA

Notification No. CSR/ 12 /18

It is notified for information of all concerned that the Syndicate in its meeting held on 28.05.2018 (vide Item No.14) approved the Syllabi of different subjects in Undergraduate Honours / General / Major courses of studies (CBCS) under this University, as laid down in the accompanying pamphlet:

List of the subjects

<u>Sl. No.</u>	<u>Subject</u>	<u>Sl. No.</u>	<u>Subject</u>
1	Anthropology (Honours / General)	29	Mathematics (Honours / General)
2	Arabic (Honours / General)	30	Microbiology (Honours / General)
3	Persian (Honours / General)	31	Mol. Biology (General)
4	Bengali (Honours / General /LCC2 /AECC1)	32	Philosophy (Honours / General)
5	Bio-Chemistry (Honours / General)	33	Physical Education (General)
6	Botany (Honours / General)	34	Physics (Honours / General)
7	Chemistry (Honours / General)	35	Physiology (Honours / General)
8	Computer Science (Honours / General)	36	Political Science (Honours / General)
9	Defence Studies (General)	37	Psychology (Honours / General)
10	Economics (Honours / General)	38	Sanskrit (Honours / General)
11	Education (Honours / General)	39	Social Science (General)
12	Electronics (Honours / General)	40	Sociology (Honours / General)
13	English ((Honours / General/ LCC1/ LCC2/AECC1)	41	Statistics (Honours / General)
14	Environmental Science (Honours / General)	42	Urdu (Honours / General /LCC2 /AECC1)
15	Environmental Studies (AECC2)	43	Women Studies (General)
16	Film Studies (General)	44	Zoology (Honours / General)
17	Food Nutrition (Honours / General)	45	Industrial Fish and Fisheries – IFFV (Major)
18	French (General)	46	Sericulture – SRTV (Major)
19	Geography (Honours / General)	47	Computer Applications – CMAV (Major)
20	Geology (Honours / General)	48	Tourism and Travel Management – TTMV (Major)
21	Hindi (Honours / General /LCC2 /AECC1)	49	Advertising Sales Promotion and Sales Management –ASPV (Major)
22	History (Honours / General)	50	Communicative English –CMEV (Major)
23	Islamic History Culture (Honours / General)	51	Clinical Nutrition and Dietetics CNDV (Major)
24	Home Science Extension Education (General)	52	Bachelor of Business Administration (BBA) (Honours)
25	House Hold Art (General)	53	Bachelor of Fashion and Apparel Design – (B.F.A.D.) (Honours)
26	Human Development (Honours / General)	54	Bachelor of Fine Art (B.F.A.) (Honours)
27	Human Rights (General)	55	B. Music (Honours / General) and Music (General)
28	Journalism and Mass Communication (Honours / General)		

The above shall be effective from the academic session 2018-2019.

SENATE HOUSE
KOLKATA-700073
The 4th June, 2018

Paul
4/6/18
(Dr. Santanu Paul)
Deputy Registrar

UNIVERSITY OF CALCUTTA

SYLLABUS

Subject: Physical Education (General)

**According to
CBCS
w.e.f. 2018-19 Session**

Syllabus Structure

Course Nature	Subject Code	Subject	Marks	Credit	Evaluation
Core Course (CC)	PEDN-G-CC-1-1-TH	Foundation and History of Physical Education	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Project Evaluation- 30 Marks Internal Evaluation -10 Marks
	PEDN-G-CC-2-2-TH	Health Education, Physical Fitness and Wellness	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Project Evaluation- 30 Marks Internal Evaluation -10 Marks
	PEDN-G-CC-3-3-TH-P	Anatomy, Physiology and Exercise Physiology	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-CC-4-4-TH-P	Psychology and Sociology in Physical Education & Sports	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
Discipline Specific Elective (DSE)	PEDN-G-DSE-A-5-1-TH-P	Management in Physical Education and Sports	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-DSE-A-5-2-TH-P	Modern Trends in Physical Education & Exercise Science	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-DSE-B-6-1-TH-P	Sports Training	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-DSE-B-6-2-TH-P	Test, Measurement and Evaluation in Physical Education	100	4+2 (6)	Term-end Theory Examination - 50 Marks Term-end Lab Practical & Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
Skill Enhancement Course (SEC)	PEDN-G-SEC-A-3-1-P	Track and Field	100	4+2 (6)	Term-end Practical Examination - 50 Marks Term-end Project & Practical Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-SEC-B-4-1-P	Gymnastics and Yoga	100	4+2 (6)	Term-end Practical Examination - 50 Marks Term-end Project & Practical Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-SEC-A-5-2-P	Ball Games (Any Two)	100	4+2 (6)	Term-end Practical Examination - 50 Marks Term-end Project & Practical Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks
	PEDN-G-SEC-B-6-2-P	Indian Games (Any One) and Racket Sports (Any One)	100	4+2 (6)	Term-end Practical Examination - 50 Marks Term-end Project & Practical Record Book - 30 Marks Internal Evaluation -10 Marks Attendance -10 Marks

- N.B.:**
1. Term-end Field, Lab Practical & Project Work examination to be evaluated as per CU Examination procedure.
 2. A student is to take one DSE subject from Group-A in the fifth semester and one DSE subject from Group-B in the sixth semester.
 3. A student is to take one SEC subject from Group-A in the third/fifth semester and one SEC subject from Group-B in the fourth/sixth semester.

Semester-1

Subject Code: PEDN-G-CC-1-1-TH

Subject: Foundation and History of Physical Education

Marks & Evaluation: 100 Marks - (50 Marks: Term-end Theory Examination & 30 Marks Term-end Project Work & Record Book at Term-end Evaluation jointly by Internal & External Examiner, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Meaning and Definition of Physical Education.
- 1.2. Aim and Objectives of Physical Education.
- 1.3. Misconceptions and Modern Concept of Physical Education.
- 1.4. Physical Education in Ancient and Modern Society.

Unit- II: Foundations of Physical Education

Lecture Hour-12

- 2.1. Growth and Development: Meaning, Definition, Factors, Principles and Difference.
- 2.2. Age Characteristics: Chronological Age, Anatomical Age, Physiological Age and Mental Age.
- 2.3. Play, Game and Sports: Meaning, Definition and Characteristics; Play Theories; Play, Games and Sports for Human Development.
- 2.4. Society - Meaning and Definition; Social Groups, Sports as a Social Institution, Sports for National and International Harmony.

Unit- III: History of Physical Education

Lecture Hour-13

- 3.1 History of Physical Education and Sports in India: Pre-Independence and Post-Independence Period.
- 3.2 Olympic Movement: Ancient and Modern Olympic Games.
- 3.3 Asian Games, Commonwealth Games and SAF Games.
- 3.4 National Sports Awards: Arjuna, Dhyanchand, Dronacharya, Rajiv Gandhi Khel Ratna

Unit- IV: Yoga Education

Lecture Hour-13

- 4.1 Yoga: Meaning, Definition, Aim, Objectives and Importance of Yoga for Health.
- 4.2 History of Yoga: Ancient Period, Vedic Period, Pre-Classical Period, Classical Period, Post-Classical Period, Contemporary Period.
- 4.3 Astanga Yoga: Meaning, Steps, Methods and Objectives.
- 4.4 Yogic Concept of Personality and Diet, Yoga for Health and Wellness

Project Work

Lecture Hour-30

1. One from Unit-I to be selected by internal teacher.
2. One from Unit-II to be selected by internal teacher.
3. One from Unit-III to be selected by internal teacher.
4. One from Unit-IV to be selected by internal teacher.

Reference Book

1. Bhattacharyya, A.K. & Bhowmick. S. Sarir Siksha. Paschimbanga Rajya Pustak Parsad
2. Graham, G. Teaching Children Physical Education: Becoming a Master Teacher. Human Kinetics, Champaign, Illinois.
3. Kamlesh, M.L. & Singh, M.K. Physical Education. Naveen Publication.
4. Lumpkin, A. (2007) Introduction to Physical Education, Exercise Science and Sports Studies, McGraw Hill, New York.
5. Siedentop, D. (2004) Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York.
6. Shaffer, D.R. Developmental Psychology: Childhood and Adolescence, Thomson, Sydney
7. Singh, A. et al. Essentials of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
8. Wuest, D.A. & Bucher, C.A. Foundation of Physical Education, Exercise Science and Sports, McGraw Hill Co. Inc., New York.

Semester- 2

Subject Code: PEDN-G-CC-2-2-TH

Subject: Health Education, Physical Fitness and Wellness

Marks & Evaluation: 100 Marks - (50 Marks: Term-end Theory Examination, 30 Marks Project Work & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-13

- 1.1. Health: Meaning, Definition, Dimensions and Factors.
- 1.2. Health Education: Meaning, Definition, Aim, Objectives and Principles.
- 1.3. School Health Program: Health Service, Health Instruction, Health Supervision; Personal Hygiene and Health Record; Care of Eyes, Ear, Nose, Skin, Mouth and Teeth.
- 1.4. Aim, Objectives and Functions: National Institute of Health & Family Welfare (NIHFW), World Health Organization (WHO), United Nations Educational Scientific & Cultural Organization (UNESCO), United Nations International Children's Emergency Fund (UNICEF).

Unit- II: Health Problems in India - Prevention and Control

Lecture Hour-13

- 2.1. Communicable Disease: Meaning, Definition and Types; Causes, Prevention and Control of Malaria, Dengue, Chicken Pox and Diarrhea.
- 2.2. Hypokinetic Disorders: Meaning, Definition and Causes; Management of Obesity, Diabetes, Asthma and Cardiovascular disorders.
- 2.3. Nutrition: Nutrients and their Functions and Daily Requirements. Balanced Diet. Balanced Diet principles for Growing ups, Adults, Elderly and Athletes of both Genders and Mothers. Health disorders for deficiency of Protein, Vitamins and Minerals.
- 2.4. Posture: Meaning and Definition. Types of Postural Deformities; Causes and Corrective Exercise for Kyphosis, Lordosis, Scoliosis, Bow-Legs, Knock Knees and Flat Foot. Importance of Good Posture.

Unit- III: Physical Fitness and Wellness

Lecture Hour-12

- 3.1 Physical Fitness: Meaning and Definition, Need and Importance of Physical Fitness.
- 3.2 Physical Fitness Components: Meaning, Definition and Usefulness of Health-related and Sports Performance-related Physical Fitness.
- 3.3 Concept of Wellness. Meaning, Definition and Components of Wellness; Relationship between Physical Activities and Wellness.
- 3.4 Ageing: Meaning and Definition; Aging Phenomenon; Role of Exercise in Aging.

Unit- IV: Health and First-aid Management

Lecture Hour-12

- 4.1 First-aid: Meaning, Definition, Need and Importance; Golden Rules of First-aid.
- 4.2 Sports Injuries: Meaning, Definition and Types; Management of Sprain, Strain, Wound, Fracture and Dislocation.
- 4.3 Therapeutic Modalities: Therapy - Meaning and Definition; Principles and Sports Injury Management Procedure of Cryo-therapy and Thermo-therapy.
- 4.4 Sports Injury Management: Types of Massage. Principles and methods of Sports Injury Management through Exercise and Massage.

Project Work

Lecture Hour-30

1. One from Unit-I to be selected by internal teacher.
2. One from Unit-II to be selected by internal teacher.
3. One from Unit-III to be selected by internal teacher.
4. One from Unit-IV to be selected by internal teacher.

Reference Book

1. Bucher, C. A. Administration of Health and Physical Education, C. V. Mosby Co. USA.
2. Ghosh, B.N. A Treatise of Hygiene and Public Health, Scientific Publishing Co., Kolkata.
3. Turner, C.E. et al. School Health and Health Education, National Library of Australia.
4. Nemir A. The School Health Education. Harber and Brothers, New York.
5. Bandopadhyay, K. and Dutta, B.K. Prakcharjar Abhimukh, Classic Publishers, Kolkata.
6. Thakur, S. Kirita Chikitsa, Paschimbanga Rajya Pustak Parsad.

Semester- 3

Subject Code: PEDN-G-CC-3-3-TH-P

Subject: Anatomy, Physiology and Exercise Physiology

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Anatomy, Physiology and Exercise Physiology: Meaning, Definition, Scope and Importance.
- 1.2. Cell: Definition, Structure and Function of Human Cell.
- 1.3. Tissue: Definition, Types and Functions.
- 1.4. System: Definition, Types and Functions in Human Body.

Unit-II: Musculo-skeletal System

Lecture Hour-13

- 2.1 Skeletal System: Structure of Skeletal System; Classification of Bones and Joints; Anatomical Differences between Male and Female.
- 2.2 Muscular System: Types, Location, Structure and Function of Skeletal Muscle.
- 2.3. Muscular Contraction: Meaning, Types, Definition and Characteristics.
- 2.4. Effect of Exercise and Training on Muscular System.

Unit- III: Circulatory System

Lecture Hour-13

- 3.1 Blood: Definition, Composition and Functions.
- 3.2 Heart: Definition, Structure and Functions. Blood Circulation Mechanism within Heart.
- 3.3 Meaning and Definition of Term: Heart Rate, Pulse Rate, Stroke Volume, Cardiac Output Blood Pressure – Systolic and Diastolic, Athletic Heart and Bradycardia.
- 3.4 Effect of Exercise and Training on Circulatory System.

Unit- IV: Respiratory System

Lecture Hour-12

- 4.1 Structure and Functions of Human Respiratory Organs.
- 4.2 Respiration Mechanism.
- 4.3 Meaning and Definition of Term: Respiratory Rate, Tidal Volume, Residual Volume, Vital Capacity, O₂ Debt and Second Wind.
- 4.4 Effect of Exercise and Training on Respiratory System.

Lab & Field Practical

Lecture Hour-60

1. Assessments of BMI and WHR (Waist-to-hip ratio).
2. Assessment of Resting Heart Rate and Exercise Heart Rate.
3. Assessment of Blood Pressure, Respiratory Rate and Pick Flow Rate.

Reference Book

1. Amrit Kumar, & Moses, R. Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
2. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
3. Fox, E.L. & Mathews, D.K. The Physiological Basis of Physical Education & Athletics. Philadelphia: Sanders College Pub.
4. Shaver, L. G. Essentials of Exercise Physiology. New Delhi: Subject Publications.
5. William, D. McAradle. Exercise Physiology, Energy, Nutrition and Human Performance, Philadelphia: Lippincott Williams & Wilkins Co.

Subject Code: PEDN-G-SEC-A-3-1-P

Subject: Track and Field

Marks & Evaluation: 100 Marks (50 Marks: Term-end Practical Examination, 30 Marks: Practical Work Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

1. Track Events

Lecture Hour-50

- 1.1. Starting Techniques: Standing start and Crouch start (its variations) use of Starting Block.
- 1.2. Acceleration with proper running techniques.
- 1.3. Finishing Technique: Run Through, Forward Lunging and Shoulder Shrug.
- 1.4. Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in between zone, and Finishing.

2. Field Events (Any three; Students' choice)

Lecture Hour-50

- 2.1. Long Jump: Approach Run, Take-off, Flight in the air (Hang Style/Hitch Kick) and Landing.
- 2.2. High jump: Approach Run, Take-off, Bar Clearance/Flight (Straddle Roll) and Landing.
- 2.3. Shot put: Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery (Perry O'Brien Technique).
- 2.4. Discus Throw: Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery (Rotation in the circle).
- 2.5. Javelin Throw: Grip, Carry, Release and Recovery (3/5 Impulse stride).

Project-cum-Practical Record Book

1. Introduction of the Sport, History of Development
2. Performance status of India and renowned personalities – Indian & International
3. Fundamental Skills
4. Rules & regulations with Field/Court diagram
5. Tournaments & Sports Federations (National & International).

Reference Book

1. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
2. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.
3. Petipus, et al. Athlete's Guide to Career Planning, Human Kinetics.
4. Dharma, P.N. Fundamentals of Track and Field, Khel Sahitya Kendra, New Delhi.

Semester- 4

Subject Code: PEDN-G-CC-4-4-TH-P

Subject: Psychology and Sociology in Physical Education and Sports

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Psychology: Meaning, Definition and Scope of Psychology.
- 1.2. Nature of Psychology; Branches, Need and Importance of Psychology.
- 1.3. Sports Psychology: Meaning, Definition, Scope and Role of Sports Psychology.
- 1.4. Need for Psychology in Physical Education and Sports.

Unit- II: Learning

Lecture Hour-12

- 2.1. Learning: Meaning, Definition and Characteristics.
- 2.2. Learning Phenomenon: Basic Theories and Laws of Learning. Learning Phenomena and Physical Education and Sports.
- 2.3. Learning Process: Learning Curve - Meaning, Stages and Features; Learning Motor Skills.
- 2.4. Transfer of Learning: Meaning, Definition and Types. Factors of Transfer of Learning/Training.

Unit- III: Psychological Factors

Lecture Hour-13

- 3.1 Motivation: Meaning, Definition, Types and Role of Motivation in Life.
- 3.2 Instinct and Emotion: Meaning, Definition and Types; Physical Education and Sports for Emotional Development.
- 3.3 Stress: Meaning, Definition, Types and Causes; Physical Education and Sports for Students' Stress Relaxation.
- 3.4 Personality: Meaning, Definition, Types and Traits; Physical Education and Sports for Personality Development.

Unit- IV: Sociological Aspects

Lecture Hour-13

- 4.1 Sociology: Meaning and Definition, Society and Social Group – Primary, Secondary and Remote Groups.
- 4.2 Culture: Features, Importance, Cultural Values of Games and Sports.
- 4.3 Leadership: Meaning, Definition and Types. Leadership and Sports Performance; Leadership and Physical Education and Sports.
- 4.4 Sports Related Social Issues: Empowerment, Gender Discrimination, Women and Sport, Socio-economic Status and Sports Participation, Sports in Modern Society.

Lab & Field Practical

Lecture Hour-60

1. Assessment of Simple and Choice Reaction Time
2. Assessment of Group-cohesion and Social Development.
3. Assessment of Personality.

Reference Book

1. Authors Guide. National Library of Educational and Psychological Test Catalogue, New Delhi: NCERT Publication.
2. Jay Coakley, Sports in Society – Issues and Controversies, McGraw Hill.
3. Richard, J. Crisp, Essentials of Social Psychology, Sage Publications.
4. Robert N. Singer, Motor Learning and Human Performance, New York: The Macmillan Co.
5. Thelma Horn, Advances in Sports Psychology. Human Kinetic.
6. Whiting, H.T.A. et al. Personality and Performance in Physical Education and Sports. London: Henry Kimpton Publishers.

Subject Code: PEDN-G-SEC-B-4-1-P

Subject: Gymnastics and Yoga

Marks & Evaluation: 100 Marks (50 Marks: Term-end Practical Examination, 30 Marks: Practical Work Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

GYMNASTICS

Lecture Hour-50

1. Compulsory

- 1.1. Forward Roll
- 1.2. T-Balance
- 1.3. Forward Roll with Split leg
- 1.4. Backward Roll
- 1.5. Cart-Wheel

[Note: Student perform any three of the above skills compulsorily in the same sequence]

2. Optional (any three)

- 2.1. Dive and Forward Roll
- 2.2. Hand Spring
- 2.3. Head Spring
- 2.4. Neck Spring
- 2.5. Hand Stand and Forward Roll
- 2.6. Summersault

YOGA

3. Asana

3.1. Standing Posture

- 3.1.1. Ardhashandrasana
- 3.1.2. Brikshasana
- 3.1.3. Padahasthasana

3.2. Sitting Posture

- 3.2.1. Ardhakurmasana
- 3.2.2. Paschimottanasana
- 3.2.3. Gomukhasana

3.3. Supine Posture

- 3.3.1. Setubandhasana
- 3.3.2. Halasana
- 3.3.3. Matsyasana

3.4 Prone Posture

- 3.4.1 Bhujangasana
- 3.4.2 Salvasana
- 3.4.3 Dhanurasana

3.5 Inverted Posture

- 3.5.1 Sarbhangasana
- 3.5.2 Shirsasana
- 3.5.3 Bhagrasana

[Note: One Asana from each Posture; Student's Choice]

Lecture Hour-30

4. Suryanamaskara and Pranayama

Lecture Hour-20

- 4.1. Suryanamaskara
- 4.2 Kapalbhati
- 4.3 Pranayama - Bhramari and Anulam Vilom.

Project-cum-Practical Record Book

1. Introduction of the Sport, History of Development
2. Performance status of India and renowned personalities – Indian & International
3. Fundamental Skills
4. Rules & regulations with Field/Court diagram
5. Tournaments & Sports Federations (National & International).

Reference Book

1. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.
2. Tyagi Arun Kumar, Gymnastics: Skills and Rules, Khel Sahitya Kendra, New Delhi.
3. Dubey, H.C. Gymnastics, Discovery Publishing House, New Delhi.
4. Swami Satyananda Saraswati, Asana Pranayama Mudra Bandha, Yoga Publications Trust, Munger.
5. Swami Satyananda Saraswati, Suryanamaskara, Yoga Publications Trust, Munger.
6. Yoga – The Science of Holistic Living, Vivekananda Kendra Prakashan Trust, Chennai.

Semester-5

Subject Code: PEDN-G-DSE-A-5-1-TH-P

Subject: Management in Physical Education and Sports

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Sports Management: Meaning, Definition Nature and Scope.
- 1.2. Emergence: History and Importance of Sports Management.
- 1.3. Basics: Principles and Practices of Sports Management.
- 1.4. Application: Qualities, Duties and Responsibilities of Sports Manager.

Unit- II: Tournaments

Lecture Hour-13

- 2.1. Tournaments: Meaning, Definition and Types; Tournaments - Knock-out, League, Combination, Challenge.
- 2.2. Organisation: Fixture Drawing Procedure of Knock-out, League, Combination Tournaments.
- 2.3. Annual Program: Athletic Meet and Play Day Organisation and Management.
- 2.4. Year-round Programme: Intramural and Extramural Competition Organisation and Management.

Unit- III: Facilities and Equipment

Lecture Hour-12

- 3.1 Lay-out: Characteristics, Principles and Lay-out of Standard Athletic Track and Football Field.
- 3.2 Care and Maintenance: Meaning, Methods, Need and Importance of Sports Equipment Playground and Gymnasium.
- 3.3 Documentation: Meaning, Methods, Need and Importance.
- 3.4 Time Table: Meaning, Definition, Importance and Factors.

Unit- IV: Financial Management

Lecture Hour-13

- 4.1. Financial Management: Meaning, Definition, Need and Importance.
- 4.2. Budget: Meaning, Definition, Criteria, Principles; Steps for Preparing a Good Budget.
- 4.3. Sponsorship: Meaning, Trends, Process, Aim and Objectives.
- 4.4. Sports Promotion: Meaning, Means and Methods; Funding Agencies –Types, Procedure of Communication with the Agencies.

Lab & Field Practical

Lecture Hour-60

1. Lay out of a Standard Track and any two sport field/court
2. Fixture of Different type Tournaments
3. Preparation of a Model Budget and ideal Time Table.

Reference Book

1. Broyles, F. J. & Robert, H. D. Administration of Sports, Athletic Programme: A Managerial Approach. New York: Prentice Hall Inc.
2. Bucher, C. A. Administration of Physical Education and Athletic Programme. St. Louis: The C.V. Mosby Co.
3. Thomas, J. P. Organization & Administration of Physical Education. Madras: Gyanodayal Press.
4. Nanda, S.M. Sports Management, Friend Publications, New Delhi.
5. Paul, A. Saririkshay Management, Classic Publishers, Kolkata.

Subject Code: PEDN-G-DSE-A-5-2-TH-P

Subject: Modern Trends in Physical Education and Exercise Science

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Orientation: Need and Importance of Physical Education and Sports in the Modern Era.
- 1.2. Function: Compatibility of Physical Education and Sports in Modern Lifestyle.
- 1.3. Scope: Types of Sports and their Usefulness in Health and Fitness.
- 1.4. The Concepts: Physical Fitness and Motor Fitness; Movement Literacy – Meaning Definition and Development; Physical Fitness Components.

Unit – II: Foundations

Lecture Hour-13

- 2.1. Biological Foundation: Meaning, Definition and Factors of Growth and Development. Differences of growth and development. Principles of Growth and Development.
- 2.2. Psychological Foundation: Drives and Needs; Motivation; Attention, Interest and Emotion; Learning and Motor Learning; Heredity, Environment and Psychological Factors for Health and Sports.
- 2.3. Sociological Foundation- Meaning and definition of Sociology. Social values and their Importance. Socialization through Sports
- 2.4. Role of games and sports in National Integration and International Understanding.

Unit- III: History of Physical Education

Lecture Hour-13

- 3.1 History of Physical Education and Sports Science in India: Pre-Independence Period and Post-Independence Period; Sports Science and Sports Performance.
- 3.2 Olympic: Olympic Movement; Para Olympics; Sports and Politics.
- 3.3 Rights about Physical Education: In India; UNESCO
- 3.4 Promotion of Physical Education and Sports: Role and Responsibilities of National and International Associations in Physical Education and Sports.

Unit- IV: Exercise Sciences

Lecture Hour-12

- 4.1 Exercise and Exercise Physiology: Meaning, Definition, Scope and Importance.
- 4.2 Sports Bio-mechanics: Meaning, Definition, Scope and Importance.
- 4.3 Sports Psychology: Meaning, Definition, Scope and Importance.
- 4.4 Sports Sociology: Meaning, Definition, Scope and Importance.

Lab & Field Practical

Lecture Hour-60

1. Health and Physical Fitness Dimensions with Functions.
2. Assessment of Movement Literacy Components with Development.
3. UNESCO Charter with interpretation.

Reference Book

1. Kamlesh, M.L. & Singh, M.K. Physical Education, Naveen Publication.
2. Siedentop, D. Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York, USA.
3. Shukla, Mother on Education, National Council of Teacher Education, New Delhi.
4. Singh, A. et al. Essentials of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
5. Wuest, D.A. & C.A. Bucher, Foundation of Physical Education, Exercise Science, and Sports. McGraw Hill Companies Inc.; New York, USA.
6. Kansal, D.K. A Practical Approach to Test Measurement and Evaluation, Sports and Spiritual Science Publication, New Delhi.
7. David, L Costill, Physiology of Sports and Exercise, Human Kinetics.

Subject Code: PEDN-G-SEC-A-5-2-P

Subject: Ball Games (Any Two)

Marks & Evaluation: 100 Marks (50 Marks: Term-end Practical Examination, 30 Marks: Practical Work Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Project-cum-Practical Record Book

1. Introduction of the Sport, History of Development
2. Performance status of India and renowned personalities – Indian & International
3. Fundamental Skills
4. Rules & regulations with Field/Court diagram
5. Tournaments & Sports Federations (National & International).

FOOTBALL

A. Fundamental Skills

Lecture Hour-44

1. Kicking: Kicking the ball with inside of the foot, Kicking the ball with Full Instep of the foot, Kicking the ball with Inner Instep of the foot, Kicking the ball with Outer Instep of the foot and Lofted Kick.
2. Trapping: Trapping- the Rolling ball, and the Bouncing ball with Sole of the foot, Thigh and Chest Trapping.
3. Dribbling: Dribbling the ball with Instep of the foot, Dribbling the ball with Inner and Outer Instep of the foot.
4. Heading: In standing, running and jumping condition.
5. Throw-in: Standing throw-in and Running throw-in.
6. Feinting: With the lower limb and upper part of the body.
7. Tackling: Simple Tackling, Slide Tackling.
8. Goal Keeping: Collection of Ball, Ball clearance- kicking, throwing and deflecting.

B. Rules and their interpretation and duties of officials.

Lecture Hour-06

Reference Book

1. Saha, A. K. Sarir Siksher Ritinitij, Rana Publishing House, Kalyani.
2. Bandopadhyay, K. Sarir Siksha Parichay, Classiq Publishers, Kolkata.
3. Dave Smith, Football Skills and Tactics, Chancellor Press.
4. Norman Barrett, Super Soccer Skills, Dragon Grand Publishers, Glasgow.

CRICKET

Lecture Hour-44

A. Fundamental Skills

1. Batting - Forward Defence Stroke, Backward Defence Stroke, Off Drive, On Drive, Straight Drive, Cover Drive, Square Cut.
2. Bowling -Out-swing, In-swing, Off Break, Leg Break and Googly.
3. Fielding: Catching - The High Catch, The Skim Catch, The Close Catch and throwing at the stumps from different angles. Long Barrier and Throw, Short Throw, Long Throw, Throwing on the Turn.
4. Wicket Keeping

B. Rules and their interpretation and duties of officials.

Lecture Hour-06

Reference Book

1. Jain, R. Play and Learn Cricket, Khel Sahitya Kendra, New Delhi.
2. Vivek Thani, Coaching Cricket, Khel Sahitya Kendra, New Delhi.
3. Saha, A. K. Sarir Siksher Ritinitij, Rana Publishing House, Kalyani.
4. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.

BASKETBALL

A. Fundamental Skills

Lecture Hour-44

1. Passing: Two hand Chest Pass, Two-hand Bounce Pass, One hand Baseball Pass, Side arm Pass, Overhead Pass, Hook Pass.
2. Receiving: Two hand receiving, One hand receiving, Receiving in stationary position, Receiving while Jumping and Receiving while Running.
3. Dribbling: How to start dribble, drop dribble, High Dribble, Low Dribble, Reverse Dribble, Rolling Dribble.
4. Shooting: Lay-up shot and its variations, One hand set shot, Two hands jump shot, Hook shot, Free Throw.
5. Rebounding: Defensive rebound and Offensive rebound.
6. Individual Defence: Guarding the player with the ball and without the ball, Pivoting.
7. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

Lecture Hour-06

Reference Book

1. Naveen Jain, Play and Learn Basketball, Khel Sahitya Kendra, New Delhi.
2. Dubey, H. C. Basketball, Discovery Publishing House, New Delhi.
3. Rachana Jain, Teach Yourself Basketball, Sports Publication.
4. Jack Nagle, Power Pattern Offences for Winning Basketball, Parker Publishing Co., New York.

VOLLEYBALL

A. Fundamental skills

Lecture Hour-44

1. Serve: Under hand serve and Side arm serve; Over-head serve, Floating service standing and jumping.
2. Passing: Fore arm passing, Over-head passing.
3. Setting: Front set, Back set and Long set.
4. Spiking: Short ball, Medium ball and High ball (approach, arm and foot movement, and landing).
5. Blocking: Offensive and Defensive with one or more than one blockers (approach, arm and foot movement, and landing).
6. Service reception and Court coverage.
7. Rotation and front court and back court players.

B. Rules and their interpretation and duties of officials.

Lecture Hour-06

Reference Book

1. Renu Jain, Play and Learn Basketball, Khel Sahitya Kendra, New Delhi.
2. Sally Kus, Coaching Volleyball Successfully, Human Kinetics.
3. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
4. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.

Semester-6

Subject Code: PEDN-G-DSE-B-6-1-TH-P

Subject: Sports Training

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Sports Training: Meaning, Definition and Scope.
- 1.2. Aim, Objectives and Characteristics of Sports Training.
- 1.3. Principles of Sports Training.
- 1.4. Need and Importance of Sports Training.

Unit- II: Methods of Training and Conditioning in Sports

Lecture Hour-13

- 2.1. Warming-up and Cooling-down: Meaning, Definition and Methods.
- 2.2. Conditioning: Meaning, Definition and Principles.
- 2.3. Training Methods: Principles and Characteristics of Circuit Training, Interval Training and Weight Training.
- 2.4. Periodisation: Meaning, Definition, Types, Aim and Contents of Different Periods.

Unit- III: Training Load and Adaptation

Lecture Hour-13

- 3.1 Training Load: Meaning, Definition, Types and Factors.
- 3.2 Training Load Components: Volume, Intensity, Repetition and Duration.
- 3.3 Over Load: Meaning, Causes, Symptoms and Overcoming Over-load.
- 3.4 Load Adaptation: Meaning and Conditions of Adaptation; Super-compensation.

Unit- IV: Training Techniques

Lecture Hour-12

- 4.1 Strength: Means and Methods Development.
- 4.2 Speed: Means and Methods Development.
- 4.3 Endurance: Means and Methods Development.
- 4.4 Flexibility: Means and Methods Development.

Lab & Field Practical

Lecture Hour-60

1. Weight Training – Practice with Principles.
2. Measurement of Speed, Strength, Endurance and Flexibility.
3. Circuit Training - Practice with Principles and Periodisation Chart.

Reference Book

1. Uppal, A.K. Principles of Sports Training, Friends Publications, New Delhi.
2. Singh, H. Science of Sports Training, New Delhi, DVS Publications.
3. Bunn, J.N. Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
4. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosby Company.
5. David R. Mottram, Drugs in Sport, School of Pharmacy, Liverpool: John Moore University.
6. Gary, T. Moran, Cross Training for Sports, Canada : Human Kinetics.
7. Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia.

Subject Code: PEDN-G-DSE-B-6-2-TH-P

Subject: Tests, Measurement and Evaluation in Physical Education

Marks & Evaluation: 100 Marks (50 Marks: Term-end Theory Examination, 30 Marks: Lab Practical & Record Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Unit- I: Introduction

Lecture Hour-12

- 1.1. Meaning and Definition Test, Measurement and Evaluation.
- 1.2. Criteria of a Good Test.
- 1.3. Principles of Evaluation.
- 1.4. Importance of Test, Measurement and Evaluation in Physical Education and Sports.

Unit – II: Body Composition and Somatotype

Lecture Hour-13

- 2.1. Body Mass Index (BMI): Concept and Method of Measurement; Significance.
- 2.2. Body Fat: Meaning, Types Body Fat Percentage (BF%).
- 2.3. Lean Body Mass (LBM), Meaning, Importance and Prediction Process.
- 2.4. Somatotype: Meaning, History and Measuring Methods.

Unit- III: Fitness Test

Lecture Hour-13

- 3.1 Kraus-Weber Muscular Strength Test
- 3.2 AAHPER Health Related Fitness Test
- 3.3 Queens College Step Test
- 3.4 J.C.R. Test

Unit- IV: Sports Skill Test

Lecture Hour-12

- 4.1 Lockhart and McPherson Badminton Skill Test
- 4.2 Johnson Basketball Test Battery
- 4.3 McDonald Soccer Test
- 4.4 Brady Volleyball Test

Lab & Field Practical

Lecture Hour-60

1. Assessment of Body Composition: LBM & % body fat.
2. Assessment of Fitness by AAHPER Health-Related Fitness Test.
3. Queens College Step Test and Brady Volleyball Test.

Reference Book

1. Authors Guide. ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications.
2. Collins, R.D., & Hodges P.B. A Comprehensive Guide to Sports Skills Tests and Measurement, Lanham: Scarecrow Press.
3. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company.
4. Kansal, D.K. (1996), Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications.
5. Krishnamurthy, Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication.
6. Yobu, A, Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications.

Subject Code: PEDN-G-SEC-B-6-2-P

Subject: Indian Games (Any One) and Racket Sports (Any One)

Marks & Evaluation: 100 Marks (50 Marks: Term-end Practical Examination, 30 Marks: Practical Work Book at Term-end Evaluation, 10 Marks: Internal Evaluation & 10 Marks: Attendance)

Project-cum-Practical Record Book

1. Introduction of the Sport, History of Development
2. Performance status of India and renowned personalities – Indian & International
3. Fundamental Skills
4. Rules & regulations with Field/Court diagram
5. Tournaments & Sports Federations (National & International).

Indian Games (Any One)

KABADDI

A. Fundamental skills

Lecture Hour-44

1. Raiding Skills: Cant, Touching with hands, Use of leg-toe touch, squat leg thrust, side kick, mule kick, arrow flying kick, roll back; crossing of baulk line; Crossing of Bonus line.
2. Holding skills: Ankle, Knee, Thigh, Wrist, Crocodile and Washer man hold.
3. Formation during holding: Various formations, catching from particular position.
4. Additional Raiding skills: Escaping from various holds, techniques of escaping from chain formation, offense and defence.
5. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

Lecture Hour-06

Reference Book

1. Biswas, Abhay, Kabaddi K Jante Holay, Sobha prokasani, Chakdah, Nadia.
2. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
3. Bandopadhyay, K. Sarir Siksha Parichay, Classiq Publishers, Kolkata.

OR

KHO-KHO

A. Fundamental skills

Lecture Hour-44

1. Chasing Skills: Sitting on the box - Parallel and Bullet toe method; Getting up from the box - Proximal and Distal foot method; Giving Kho - Simple, Early, Late and Judgment Kho; Pole Turn, Pole Diving, Tapping, Hammering, Rectification of foul.
2. Running Skills: Chain Play, Ring play and Chain, Ring mixed play, running zigzag, avoiding and dodging.
3. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

Lecture Hour-06

Reference Book

1. Roy Pranab, Bharatiyo Khela Kho-Kho, Classic Books, Kolkata.
2. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
3. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.

Racket Sports (Any One)

BADMINTON

A. Fundamental skills

Lecture Hour-44

1. Basic Knowledge: Various parts of the Racket and Grip – hand-shake grip, figure pointing grip.
2. Basic foot work and court coverage.
3. Basic Stance: Defensive, attacking, net stance.
4. Service: Short service, Long service, Long-high service.
5. Shots: fore hand, back hand, clearing, lobbing, over-head shot, defensive clear shot, attacking clear shot, drop shot, net shot, smash.
6. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

Lecture Hour-06

Reference Book

1. Ashok Kumar, Badminton, Discovery Publishing House, New Delhi.
2. Narang, P. Play and Learn Badminton, Khel Sahitya Kendra, New Delhi.
3. Bandopadhyay, K. Sarir Siksha Parichay, Classic Publishers, Kolkata.

OR

TABLE TENNIS

A. Fundamental skills

Lecture Hour-44

1. Basic Knowledge: Various parts of the racket and grip (shake hand & pen hold grip), back hand and fore hand grip.
2. Stance: Alternate and Parallel.
3. Service: Backhand and Forehand high toss service, spin, top spin, back spin, side spin.
4. Chop: Backhand and Forehand.
5. Receive return and receiving: Push, Chop, drive loop and flick with both Backhand & Forehand.
6. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

Lecture Hour-06

Reference Book

1. Ashok Kumar, Table Tennis, Discovery Publishing House, New Delhi.
2. Narang, P. Play and Learn Table Tennis, Khel Sahitya Kendra, New Delhi.
3. David Fairholm, The Pocket Guide to Table Tennis Tactics, Bell & Heyman, London.