



UNIVERSITY OF CALCUTTA

Notification No.CSR/28/2023

It is notified for information of all concerned that in terms of the provisions of Section 54 of the Calcutta University Act, 1979, (as amended), and, in exercise of her powers under 9(6) of the said Act, the Vice-Chancellor has, by an order dated 14.08.2023 approved the syllabus of the under mentioned subjects semester wise Four-year (Honours & Honours with Research) /Three-year (Multidisciplinary) programme of U.G. courses of studies, as applicable under CCF,2022, under this University, as laid down in the accompanying pamphlet.

Name of Subject

- ✓1. Physical Education (After incorporating some amendments, in the syllabus published in CSR/22/23, Dt. 02.08.2023)
2. Film Studies (Syllabus for IDC & SEC Paper)

The above shall take effect from the academic session 2023-2024.

SENATE HOUSE

Kolkata-700073

The 22nd August , 2023

Prof.(Dr.) Debasis Das

Registrar

Course Structure of Physical Education - MDC (Calcutta University)

	CC1	CC2	Minor	IDC	AEC	SEC	CVAC	Semester Internship	Total Credit
Semester	8x4=32	8x4 = 32	6x4 = 24	3x3 = 9	4x2 = 8	3x4 = 12	4x2 = 8	1x3 = 3	128
1	1x4 = 4 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)		1x3 = 3 (2TH+ 1P/TU)	1x2 = 2 (2TH+ 0P/TU)	1x4 = 4	2x2 = 4		21
2	1x4 = 4 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)		1x3 = 3 (2TH+ 1P/TU)	1x2 = 2 (2TH+ 0P/TU)	1x4 = 4	2x2 = 4		21
3	1x4 = 4 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)	1x3 = 3 (2TH+ 1P/TU)	1x2 = 2 (2TH+ 0P/TU)	1x4 = 4			21
4	2x4 = 8 (3TH+ 1P/TU)	2x4 = 8 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)		1x2 = 2 (2TH+ 0P/TU)				22
5	2x4 = 8 (3TH+ 1P/TU)	1x4 = 4 (3TH+ 1P/TU)	2x4 = 8 2x(3TH+ 1P/TU)						20
6	1x4 = 4 (3TH+ 1P/TU)	2x4 = 8 (3TH+ 1P/TU)	2x4 = 8 (3TH+ 1P/TU)						20
Credits	8x4 = 32	8x4 = 32	6x4 = 24	3x3 = 9	4x2 = 8	3x4 =12	4x2 = 8	1x3 = 3	128
Marks	8x100 = 800	8x100 = 800	6x100 = 600	3x75 = 225	4x50 = 200	3x100 = 300	4x50 = 200	3x25=75	Total Marks = 3200
* Marks = 25 marks per credit									
** Total credit = 125+3 (for summer internship) = 128									
*** Summer Internship: As in (G)									

Structure of Core Courses in Physical Education for MDC

Semester	Paper	Course	Name of the Paper	Code (Th)	Code (P)
1	CC1/CC2	MDC 1	Foundations of Physical Education	PE-MD-CC1-1-Th	PE-MD-CC1-1-P
2	CC1/CC2	MDC 2	Health Education	PE-MD-CC2-2-Th	PE-MD-CC2-2-P
3	CC1/CC2	MDC 3	Physiology of Exercise	PE-MD-CC3-3-Th	PE-MD-CC3-3-P
4	CC1/CC2	MDC 4	Yoga Education	PE-MD-CC4-4-Th	PE-MD-CC4-4-P
	CC1/CC2	MDC 5	Sports Management	PE-MD-CC5-4-Th	PE-MD-CC5-4-P
5	CC1/CC2	MDC 6	Psychology in Physical Education and Sports	PE-MD-CC6-5-Th	PE-MD-CC6-5-P
5 OR 6	CC 1 OR CC 2	MDC 7	Kinesiology	PE-MD-CC7-5-Th	PE-MD-CC7-5-P
				PE-MD-CC7-6-Th	PE-MD-CC7-6-P
6	CC1/CC2	MDC 8	Sports Training	PE-MD-CC8-6-Th	PE-MD-CC8-6-P

Structure of Minor Courses in Physical Education for MDC

Semester	Course	Name of the Paper	Code (Th)	Code (P)
3	MDC-m1	Foundations of Physical Education	PE-MD-MC1-3-Th	PE-MD-MC1-3-P
4	MDC-m2	Health Education	PE-MD-MC2-4-Th	PE-MD-MC2-4-P
5	MDC-m3	Physiology of Exercise	PE-MD-MC3-5-Th	PE-MD-MC3-5-P
	MDC-m4	Yoga Education	PE-MD-MC4-5-Th	PE-MD-MC4-5-P
6	MDC-m5	Sports Management	PE-MD-MC5-6-Th	PE-MD-MC5-6-P
	MDC-m6	Psychology in Physical Education and Sports	PE-MD-MC6-6-Th	PE-MD-MC6-6-P

Structure of Skill Enhancement Courses in Physical Education for MDC

Semester	Name of the Paper	Code (Th)	Code (P)
1/2/3	Officiating and Coaching	PE-MD-SEC1-1-Th	PE-MD-SEC1-1-P
		PE-MD-SEC2-2-Th	PE-MD-SEC2-2-P
		PE-MD-SEC3-3-Th	PE-MD-SEC3-3-P

Structure of Interdisciplinary Courses in Physical Education for MDC

Semester	Name of the Paper	Code (Th)	Code (P)
1/2/3	Yoga and Weight Management	PE-MD-IDC1-1-Th	PE-MD-IDC1-1-P
		PE-MD-IDC2-2-Th	PE-MD-IDC2-2-P
		PE-MD-IDC3-3-Th	PE-MD-IDC3-3-P

Syllabus of Physical Education Subject-MDC

(According to COURSE STRUCTURE - MDC of Calcutta University)

Semester-I

**Paper-CC1/CC2; Course-MDC-1; Code: PE-MD-CC1-1-Th
(Marks=75; Credit-3)**

PAPER: FOUNDATIONS OF PHYSICAL EDUCATION

UNIT-I : Introduction to Physical Education

- 1.1 Meaning, Definition and Scope of Physical Education
- 1.2 Aim and objectives of Physical Education
- 1.3 Traditional concept about Physical Education
- 1.4 Need and importance of Physical Education in modern day living.

UNIT-II: Historical Development of Physical Education

- 2.1 Development of Physical Education in India during Pre-independence period
- 2.2 Development of Physical Education in India during Post- independence period
- 2.3 Contribution of Akhras, Vyayamshalas and YMCA. National Sports Awards in India: Major Dhyanchand, Khelratna, Arjuna award.
- 2.4 Brief concept of Olympic Movement.

UNIT-III: Biological Foundation of Physical Education

- 3.1 Meaning and Principles of Growth and Development
- 3.2 Factors affecting Growth and Development
- 3.3 Importance of physical education activities in different developmental stage; Age and Sex differences in relation to physical activities and sports
- 3.4 Concept of Body Type and Sheldon's classification of body type.

UNIT- IV: Sociological Foundation of Physical Education

- 4.1 Meaning and concept of socialization
- 4.2 Socialization through Physical Education and Sports
- 4.3 Roll of games and sports in National and International integration
- 4.4 Theories of Play; Emergence of Sport as social phenomena.

Reference

1. A. K. Bhattacharyya & S. Bhowmick. Sarirsiksha. Paschimbanga Rajya Pustak Parsad.
2. J.F. Williams, Principles of Physical Education, Lakshya
3. A. K. Bhattacharyya. Dimension of Physical Education: Principles, Foundations & Interpretations; Classique Books, Kolkata.
4. Kamlesh, M.L. & Singh, M.K. Physical Education. Naveen Publication.
5. Singh, A. et al. Essentials of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
6. Wuest, D.A. & Bucher, C.A. Foundation of Physical Education, Exercise Science and Sports, McGraw Hill Co. Inc., New York.
7. Chatterjee, H & Sen Barman, A. Sharirsikshar Vitti O Itihas; Classique Books, Kolkata
8. Saha Roy, G. Paul, A. & Sen Barman, A. Snatokstore Sharirsiksha, Classique Books, Kolkata
9. Kayal, R. Sharirsiksha Buniyad O Itihas, Classique Books, Kolkata
10. Ronojay Sen, Nation at Play: A History of Sport in India, Penguin Viking.
11. John Nauright & Chirls Perrish, Sports Around the World: History, Culture, and Practice, ABC-CLIO

Syllabus of Physical Education Subject-MDC

Semester-2

**Paper-CC1/CC2; Course-MDC-2; Code: PE-MD-CC2-2-Th
(Marks=75; Credit-3)**

PAPER: HEALTH EDUCATION

UNIT-1: Introduction to Health Education

- 1.1 Meaning and Concept of Health and Health Education.
- 1.2 Aims, objectives and principles of Health Education
- 1.3 Concept of Dimensions and Determinants of Health
- 1.4 Benefits of exercise and sports participation on health & wellbeing.

UNIT II – Health and Hygiene

- 2.1 Meaning and types of Hygiene.
- 2.2 Personal Hygiene: Care of eye, ear, skin and hair.
- 2.3 Meaning of Health Services, Health Instruction and Health Supervision.
- 2.4 Adverse effect of alcohol, tobacco and smoking on health & hygiene.

UNIT-III: Common Health Problems & its Prevention and Control

- 3.1 Meaning of Communicable disease, Causes & Prevention of Communicable diseases: Cough and cold, Malaria, Dengue.
- 3.2 Meaning of Non-Communicable disease, Causes & Prevention of Non-Communicable diseases: Diabetes, Cardio Vascular Diseases
- 3.3 Meaning of Postural Deformities, Causes and Correction: Knock Knee, Bow Legs, Flat Foot.
- 3.4 Management of Lifestyle diseases: Obesity, High Blood Pressure and Stress

UNIT-IV: First-Aid and emergency care.

- 4.1 Meaning of First-Aid, Golden rules of First Aid
- 4.2 Importance of first-aid on & off the field for emergency care of injuries:
- 4.3 First-Aid for Contusion, Bleeding, Sprain, Dislocation, Fracture;
- 4.4 Concept of CPR.

References:

1. Paul, A. & Saha Roy, G. (2018), Swasthya Siksha O Poribeshbidya; Classique Books, Kolkata
2. Shahu, DP. Sarirshiksha O Swasthya Siksha, Classique Books, Kolkata
3. Bandopadhyay, K. & Dutta, B. (2016), Prakcorcha, Classique Books, Kolkata
4. Frank, H. & Walter, H., (1976). Turners school health education. Saint Louis: The C.V. Mosby Company.
5. Nemir, A. (n.d.). The school health education. New York:Harber and Brothers. Odum, E.P. (1971). Fundamental of ecology. U.S.A.: W.B. Saunders Co.

Syllabus of Physical Education Subject-MDC

Semester-3

Paper-CC1/CC2; Course-MDC-3; Code: PE-MD-CC3-3-Th
(Marks=75; Credit-3)

PAPER: PHYSIOLOGY OF EXERCISE

UNIT-I: Introduction of the Human Body

- 1.1 Meaning, Definition and Importance of Anatomy, Physiology & Exercise Physiology in Physical Education and Sports.
- 1.2 Organization of the human body: Cells, tissues, organs and body systems.
- 1.3 Classification and functions of bone and joints of human body.
- 1.4 Concept and Types of Exercises.

UNIT-II: Muscular System and Respiratory system

- 2.1 Muscular system- Characteristics of muscular tissue; Types of muscle and muscular contraction,
- 2.2 Structure of skeletal muscles. Effect of exercises on muscular system
- 2.3 Respiratory system: Different organs of respiratory system & its function, Mechanism of breathing; 2.4 Effect of exercise on respiratory system; VO_2 max, Second Wind, Oxygen debt or EPOC.

UNIT-III: Cardio-Vascular System:

- 3.1 Composition and function of blood, Pulmonary circulation & Systemic circulation.
- 3.2 The Heart- location, structure and function.
- 3.3 Cardiac cycle, Blood pressure. Stroke volume, Cardiac output, Athletic heart.
- 3.2 Effect of exercise on cardiovascular system.

UNIT-IV: Energy metabolism and Exercise

- 4.1 Concept & types of Energy Metabolism.
- 4.1 Aerobic system and Anaerobic systems of energy production.
- 4.3 Fuel for muscular work: Role of Carbohydrate and Fat
- 4.2 Concept of energy supply during performance of different types of athletic events.

References:

1. Sil. P. Sarirshiksay Sharirvidya; Classique Books, Kolkata
2. Basu, TK. Manob Sorir Vvigyan, Classique Books, Kolkata
3. Banarjee, A. & Kar. S. Angasansthan, Sarirvidya and Vayam Sarirvidya, Classique Books, Kolkata
4. Gupta, A. P. (2010). Anatomy and physiology. Agra: Sumit Prakashan.
5. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.
6. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B.
7. Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surjeet Publication.
8. Moorthy, A.M. (2014). Anatomy physiology and health education. Karaikudi: MadalayamPub.
9. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co. Pearce,
10. E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd.
11. Singh, S. (1979). Anatomy of physiology and health education. Ropar: Jeet Publications.

Syllabus of Physical Education Subject-MDC

Semester-4

Paper-CC1/CC2; Course-MDC-4; Code: PE-MD-CC4-4-Th
(Marks=75; Credit-3)

PAPER: YOGA EDUCATION

UNIT-I: Introduction of Yoga

- 1.1 Meaning and concept of Yoga. Aim and Objectives of Yoga Education
- 1.2 Brief History on origin of Yoga
- 1.3 Different schools of yoga.
- 1.4 Life of Yoga Gurus: *Mohorshi Palanjali; Mahabotar Babaji Moharaj, Jogiraj Shyamacharan Lahiri, Swami Vivekananda, Yukteswar Giri, Paramhansa Yogananda.*

UNIT-II: Methods of Yoga and its effects

- 2.1 Concept of *Astanga Yoga*, Steps and importance of practicing *Astanga Yoga*.
- 2.2 Meaning and types of *Asana*. Effects of performing Asanas on body and mind
- 2.3 Meaning and types of *Pranayama*; Effects of practicing Pranayama on body and mind.
- 2.4 Concept of *Pratyahara* of Astanga Yoga; Importance of practicing *Pratyahara* on mental health.

UNIT-III: Effects of Yogic Practices on health and wellbeing

- 3.1 Meaning and types of Kriya.
- 3.2 Effects of Kriya on various systems of human body and mind.
- 3.3 Concept and meaning of *Dhyana* (Meditation); Different techniques of *Dhyana* (Meditation).
- 3.4 Effects of *Dhyana* (Meditation) on various systems of human body and mind.

UNIT-IV: Applied Aspect of Yoga

- 4.1 Importance of practicing Yoga for health and Wellness.
- 4.2 Yoga as means of Relaxation of body and mind.
- 4.3 Therapeutic use of Yoga for Injury management.
- 4.4 Importance of Yoga for Sports performance.

Reference:

1. Kayal, R. (2020), Yoga Siksha, Classique Books, Kolkata.
2. Chanchani, S. and Chanchani, R. (1998), Yoga for Children: A Complete Guide to Yoga; UBS Publishers' Distributors Ltd. New Delhi.
3. Karbelkar N.V. (1993) Patanjali Yoga sutra Bhashya (Marathi Edition) Amravati: Hanuman VyayamPrasarakMandal.
4. Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. NewDelhi: Govt. of India, Central Health Education and Bureau.
5. MoorthyA.M. &Alagesan.S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
6. Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
7. Swami SatyananadaSarasvati (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
8. Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
9. Tiwari O.P. (1998), Asanas- Why and How. Lonavala: Kaivalyadham.
10. Yogananda, P. (2014), Autobiography of a Yogi; The Science of Kriya Yoga; Prakash Books India Pvt Ltd, New Delhi.
11. K Roy & S Mitra; Ethics & Value Education: Different Perspective; Bethun college & Mohota Publishing House

Syllabus of Physical Education Subject-MDC

Semester-4

Paper-CC1/CC2; Course-MDC-5; Code: PE-MD-CC5-4-Th
(Marks=75; Credit-3)

PAPER: SPORTS MANAGEMENT

UNIT-1: Introduction to Sports Management

- 1.1 Meaning and definition of Sports Management.
- 1.2 Importance of Sports Management in Physical Education.
- 1.3 Basic Principles of Sports Management.
- 1.4 Concept of Event Management in Sports; Duties of an event manager.

UNIT-II: Development of Leadership Qualities

- 2.1 Meaning and Definition of Leadership
- 2.2 Forms of Leadership in sports management
- 2.3 Qualities of administrative Leader
- 2.4 Competency require for a good sports Manager

UNIT-III: Planning of Sports Event Management

- 3.1 Meaning and concept of Planning; Principles of planning
- 3.2 Steps for planning a sports programme in locality.
- 3.3 Factors to be consider for planning of sports events.
- 3.4 Budget-Meaning and Importance of Budget for sports event management.

UNIT-IV: Management and Planning of Sports Tournament

- 4.1 Importance of Tournament
- 4.2 Types of Tournament; Knockout and League format of tournament -its Merits & Demerits.
- 4.3 Organizational structure of Sports Meet.
- 4.4 Importance of care and maintenance of Sports Equipment.

Reference Books:

1. Bhattacharyya, AK. and Bhowmick, S. (2009), Sharirshiksha, Paschimbanga Rajya Pustak Porshad, Kolkata.
2. Roy Barma, S. (2016), Sarirshiksay Sangathan O Prashason; Classique Books, Kolkata
3. Ashton, D. (1968). Administration of physical education for women. New York: The Ronal Press Cl.
4. Bucher, C.A. Administration of physical education and athletic programme; 7th Edition, St.Louis: The C.V. Mosby Co.
5. Daughtrey, G. & Woods, J.B. (1976). Physical education and intramural programmes, organisation and administration. Philadelphia U.S.A.: W.B. Saunders Cp.
6. Earl, F. Z, & Gary, W. B. (1963). Management competency development in sports and physical education. Philadelphia: W. Lea and Febiger.

Syllabus of Physical Education Subject-MDC

Semester-5

Paper-CC1/CC2; Course-MDC-6; Code: PE-MD-CC6-5-Th
(Marks=75; Credit-3)

PAPER: PSYCHOLOGY IN PHYSICAL EDUCATION AND SPORTS

UNIT-1: Introduction to Psychology in Physical Education and Sports

- 1.1 Definition and Importance of Psychology in Physical Education & Sports .
- 1.2 Scope of Psychology in Physical Education & Sports.
- 1.3 Definition of Behaviour, Physiological basis of human behaviours
- 1.4 Meaning of Individual Difference; Role of Heredity and Environment in individual differences.

UNIT-II: Learning, Motor learning and Transfer of learning

- 2.1 Learning-Definition and Types of learning.
- 2.2 Skill Learning- Meaning and Factors affecting Skill Learning.
- 2.3 Laws of Learning and its application in skill learning,
- 2.4 Transfer of Learning-meaning and types; Transfer of learning during acquisition of new skill.

UNIT-III: Personality development through Sports

- 3.1 Personality - Meaning and definition of personality
- 3.2 Traits and Dimension of personality.
- 3.3 Development of personality through Sports and Physical Education activities.
- 3.4 Personality and Sports performance.

UNIT-IV: Psychological factors and Sports Performance

- 4.1 Interest and attention-meaning and its role on sports skill acquisition.
- 4.2 Motivation-Meaning and types, Influence of Motivation on sports performance.
- 4.3 Emotion - meaning and its role on competitive sports.
- 4.4 Anxiety - meaning and its influence on Sports performance.

Reference Books:

1. Roy, S. (2020), Siksha Monobidya, Soma Publication, Kolkata
2. Ghosh, SK. (2021), Adhunik Sikshar Monostwattik Vitti, Classique Books, Kolkata
3. Bhattacharyya, AK. and Bhowmick, S. (2009), Sharirshiksha, Paschimbanga Rajya Pustak Porshad, Kolkata.
4. B. J. Cratty. Psychology of Contemporary sports Champaign: Human Kinetics Publishers,
5. John M. Silva & Roberts. Psychological Foundations of Sport. Champaign: Human KineticsPublishers.
6. Diane Gills, Psychological Dynamics of sports. Champaign: Human Kinetics.
7. Cox, Sports Psychology: Human Kinetics.
8. Richard M. Sumin, "Psychology in Sports, Methods & Application. New Delhi: Surjeet Publication.

Syllabus of Physical Education Subject-MDC

Semester-5 / 6

Paper-CC1/CC2; Course-MDC-7; Code: PE-MD-CC7-5-Th / PE-MD-CC7-6-Th
(Marks=75; Credit-3)

PAPER: KINESIOLOGY

UNIT-1: Introduction to Kinesiology

- 1.1 Meaning and definition of Kinesiology
- 1.2 Aim and Objectives of Kinesiology
- 1.3 Importance of Kinesiology in the field of Physical Education and Sports
- 1.4 Basic concept of fundamental movements of human body.

UNIT-II: Kinesiological aspects of human body movements

- 2.1 Skeletal System- Bones of Axial and appendicular skeleton. Synovial Joints - Classifications and movements around each synovial joint.
- 2.2 Meaning of muscle, Role of muscles on bodily movements, Major muscles involved with the movements of Shoulder joint, Hip joint and Knee joint.
- 2.3 Types of Muscle contraction, Reciprocal Innervations-Agonist and Antagonist muscles.
- 2.4 Fundamental concept of following terms: Axis and Plane; Center of Gravity; Equilibrium

UNIT-III: Mechanical principles related with body movements

- 3.1 Lever –meaning, principles; Body lever
- 3.2 Basic concept of Work, Power and Energy
- 3.3 Motion: Concept of Motion, Newton’s Laws of Motion
- 3.4 Force-meaning and definition, Frictional force - Concept and application in exercise and sports.

UNIT-IV: Kinesiology of posture & muscles injury

- 4.1 Posture: concept of good posture and its importance
- 4.2 Postural Deformities-causes & correction: Kyphosis, Lordosis, Scoliosis,
- 4.3 Common muscle injuries and its management: Strain; Sprain; Fracture, Tennis elbow;
- 4.4 Recovery from muscle injury: Use of Passive and active exercises, Resisted exercises.

Reference Books:

1. Ghosh, S. (2016), Twatik Jibbolobidya, Classique Books, Kolkata
2. Bhattacharyya, AK. and Bhowmick, S. (2009), Sharirshiksha, Paschimanga Rajya Pustak Porshad, Kolkata.
3. Sil, P. (2022), Sarirshikshay Sharirvidya, Classique Books, Kolkata
4. Ghosh, S. (2016), Gothongoto Manob Gati Bidya, Classique Books, Kolkata
5. Sil. P. (2021), Sports Medicine, Physiotherapy and Rehabilitation, Classique Books, Kolkata
6. Bunn, J. W. (1972).*Scientific principles of coaching*.Englewood Cliffs, N.J. Prentice HallInc.
7. Hay, J. G. & Reid, J. G.(1982).*The anatomical and mechanical basis of human motion*.Englewood Cliffs, N.J.:prentice Hall Inc.

Syllabus of Physical Education Subject-MDC

Semester-6

Paper-CC1/CC2; Course-MDC-8; Code: PE-MD-CC8-6-Th
(Marks=75; Credit-3)

PAPER: SPORTS TRAINING

UNIT-I: Introduction to Sports Training

- 1.1 Meaning and Definition of Sports Training
- 1.2 Aim and Objectives of Sports Training
- 1.3 Principles of Sports Training
- 1.4 Qualification and Duties of sports trainer.

UNIT-II: Process of development of motor fitness component

- 2.1 Meaning of Motor Fitness and components of motor fitness.
- 2.2 Strength training- Meaning and methods of strength development
- 2.3 Endurance training - Meaning and methods of endurance development
- 2.4 Flexibility and Body Composition- Meaning and methods of development.

UNIT -III: Training load, load dynamics and Training processes

- 3.1 Concept and types of Training load.
- 3.2 Components of training load.
- 3.3 Concept of load dynamics; Principles of overload.
- 3.4 Over training and its adverse effects on sports performance.

UNIT-IV: Periodization planning and system of sports training

- 4.1 Periodization- Meaning, definition and types
- 4.2 Aim & Objectives of Periodization
- 4.3 Importance of Preparatory, Competition and Transition phases of Periodization
- 4.2 Planning of Training session: Micro cycle, Meso cycle and Macro cycles.

Reference Books:

1. Singh, H. (1984). Sports training, general theory and methods. Patials: NSNIS.
2. Uppal, A.K., (1999).Sports Training.New Delhi: Friends Publication.
3. Dick, W. F. (1980).Sports training principles. London: Lepus Books.
4. Harre, D.(1982).Principles of sports training. Berlin: Sporulated.
5. Jensen, R. C.& Fisher, A.G. (1979). Scientific basis of athletic conditioning. Philadelphia: Lea and Fibiger, 2ndEdn.
6. Matvyew, L.P. (1981).Fundamental of sports training. Moscow: Progress Publishers.

Syllabus of Physical Education Subject-MDC

Syllabus of Skill Enhancement Courses (SEC) in Physical Education for MDC (Theory)

Semester-1/2/3

Course-SEC

Paper Code: PE-MD-SEC1-1-Th / PE-MD-SEC2-2-Th/ PE-MD-SEC3-3-Th

(Marks=50; Credit-2)

PAPER: OFFICIATING AND COACHING

UNIT – I: Introduction of Officiating and Coaching

- 1.1 Concept of Officiating and Coaching
- 1.2 Importance and principles of Officiating
- 1.3 Ethics of Officiating in sports
- 1.4 Ethics of Coaching in sports

UNIT-II: Methods of Officiating

- 2.1 Qualities and Qualification of officials
- 2.2 Duties of official in general, pre, during and post-game.
- 2.3 Relation of Officials with players and spectators
- 2.4 Relation of Coach with management and players.

UNIT - III: Introduction of Coaching

- 3.1 Philosophy of coaching
- 3.2 Good qualities of a Coach
- 3.3 Qualification of a Coach; Need of sports coaching degrees;
- 3.3 Responsibilities of a Coach on and off the field

UNIT-IV: Planning & application of Coaching in Sports

- 4.1 Importance of psychological training of athletes for competition
- 4.2 Meaning and importance of Coaching Plan
- 4.3 Factors for preparation of a coaching plan
- 4.3 Concept of Periodization and its importance in coaching plan.

Reference Books:

1. Kar, S. (2016), Sharirsiksha O Krirar Poricalon Baboystha, Classique Books, Kolkata
2. Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs N.J. Prentice Hall.
3. Bunn, J. W. (1972). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.
4. Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd.
5. Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
6. Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.
7. Bhattacharyya, AK. & Bhowmick, S. (2009) Sarirsiksha. Paschimbanga Rajya Pustak Parsad.
8. Saha, A. K. (2008), Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
9. Bandopadhyay, K. (2028), Sarir Siksha Parichay, Classique Books, Kolkata.

Syllabus of Physical Education Subject-MDC

Syllabus of Interdisciplinary Courses (IDC) in Physical Education for MDC (Theory)

Semester-1/2/3

Course-IDC; Paper Code: PE-MD-IDC1-1-Th / PE-MD-IDC2-2-Th/ PE-MD-IDC3-3-Th
(Marks-50; Credit-2)

PAPER: YOGA AND WEIGHT MANAGEMENT

UNIT -1: Introduction of Yoga

- 1.1 Meaning and Concept of Yoga
- 1.2 Aim and objectives of Yoga
- 1.3 History and origin of Yoga
- 1.4 Need and Importance of Yoga in daily life.

UNIT -II: Methods of Yoga

- 2.1 Concept of Astanga Yoga and its steps
- 2.2 Asana, Pranayam, and Meditation
- 2.3 Dos and Don'ts on Yoga practice
- 2.4 Effects of Yoga on body and mind.

UNIT-III: Introduction of Weight Management

- 3.1 Meaning and concept of weight management.
- 3.2 Factors affecting weight management programme.
- 3.3 Concept of B.M.I.(Body Mass Index) and assessment of weight status from BMI.
- 3.4 Obesity-meaning, causes and solution. Health risks associated with Obesity.

UNIT-IV: Steps of Planning of Weight Management

- 4.1 Concept of Nutrition and healthy diet.
- 4.2 Role of diet and exercise in weight management programme.
- 4.3 Concept of daily calorie intake and expenditure for weight management.
- 4.4 Planning of weight management programme for Overweight and Obese persons.

Reference Books:

1. Sil, P. (2023), Sports Nutrition and Weight Management; Classique Books. Kolkata.
2. Brown, F.Y. (2000). How to use yoga. Delhi: Sports Publication.
3. Gharote, M.L. & Ganguly, H, (1988). Teaching methods for yogic practices. Lonawala: Kaixydahmoe.
4. Kayal, R. (2020), Yoga Siksha, Classique Books, Kolkata
5. Shankar, G. (1998). Holistic approach of yoga. New Delhi: Aditya Publishers. Shekar, K.C. (2003)
6. Yoga for health. Delhi: KhelSahitya Kendra.
7. K Roy & S Mitra; Ethics & Values Different Perspectives; Bethun college & Mohota Publishing House, Kolkata
8. Butryn, M.L., Phelan, S., & Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful Weight loss maintenance, Obesity (Silver Spring). 15(12),3091- 3096.
9. Fink, HH. Burgoon, LA. And Mikesky, AE. Practical application in Sports Nutrition; Jones and Bartlett Publishers, Boston, USA.

Details of Practical Syllabus Physical Education-MDC

Sem-1: CC1/CC2_MDC-1 (PE-MD-CC1-1-P)

(i) Athletics: Running events (10 Marks):

- a) Sprint: Starting Techniques: Crouch start (with variations); Use of Starting block, Acceleration with proper running techniques. Maintenance of speed in different phase, Finishing Technique: Run Through, Forward Lunging and Shoulder Shrug.
- b) Distance Run: Standing start technique, Maintenance of speed in different phase
- c) Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in changing zone, and Finishing.
- d) Hurdles: Clearing techniques of Hurdles.

(ii) Marching / Drill (10 Marks):

The Basics of Marching (Marks-7.5): Objectives of Marching, Command, Stand-at-Ease, Stand Easy, Turning (Right Turn, Left Turn, About Turn, Half-Right/ Left-Turn), Fall-in a Single Line, By the Right Number Count, Fall-in Three Lines, Right Dress

Marching Fundamentals: Mark Time, Open Order March, Close Order March, Forward march, Quick March, Right Turn at the March, Left Turn at the March, About Turn at the March, Mark Time from Quick March, Changing Step, Right or Left Wheel, Slow March, Right or Left Close March, Fall Out, Dismiss, Saluting to the Front, Saluting to the Right, Eyes Right and Eyes Front, Ceremonial Parade.

(iii) Formal Activities in Physical Education (Any one; Marks-5):

Calisthenics: Four Tables should be prepared for practice. Each Table must have at least four free hand exercises which include upper and lower body muscles, The exercise should be included all fundamental movements of upper and lower joints and vertebral joints. These must be practice with 16 beats count/music and may use as warming up before any workout.

Dumbbell Drill: Four Tables should be prepared for practice. Each Table must have at least four exercises with light weight dumbbells in both hands. The exercise should be included all fundamental body movements of upper and lower joints and vertebral joints with variations. These must be practice with 16 beats count.

Lezium Drill: Four Tables should be prepared for practice. Each Table must have at least four exercises with Lezium in hands. The exercise should be included all fundamental body movements of upper and lower joints and vertebral joints with variations. These must be practice with 16 beats counting using the variation of 4 *Thoks* & 8 *Thoks*.

Details of Practical Syllabus Physical Education-MDC

Sem-2: CC1/CC2_MDC-2 (PE-MD-CC2-2-P)

(i) **Athletics:** Throwing Events (Shot put, Discus, Javelin) (10 marks)

- a) **Shot Put** : Technique-Parry-O'Brain Style; Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery.
- b) **Discus Throw** - (Rotation method): Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery
- c) **Javelin Throw** - Grip, Carry, Release and Recovery (3/5 Impulse stride).

ii) **Games: Kho-Kho, Badminton/Table Tennis, Volleyball** (anyone, 10 marks)

- a) **Kho-Kho:** Rules of the game, Court measurement & marking, Attacking Skills- Correct Sitting Technique; Technique of execute correct 'Kho', Execution of Early Kho and Let Kho; Pole drive; Defensive techniques: Single Chain and Double Chain, Ring formation;
- b) **Badminton:** Rules of the game, Service-Short & Long service, Forehand and Backhand shots, Clear shot, Net shot, Smash. Singles & Doubles Play-Game practice.
- c) **Table Tennis:** Rules of the game, Service-Back hand & Forehand; Push and Counter-Forehand and Backhand; Attacking shots- Topspin and Smash; Singles & Doubles Play, Game practice;
- d) **Volleyball:** Rules of the game; Service-Underarm, Sidearm and Overhead, Defensive Shot-Underarm, Setting by Overhead shot, Attacking shot-Spiking & placing, Blocking techniques, Libero. Rotation rules, Game practices.

iii) **Practical on Health Status & First Aid (5 Marks)**

- a) **Health Status:** Measurement of height and weight; Calculation of BMI & assessment of weight status. Periodical assessment of weight status & BMI;
- b) **First Aid for Bleeding, Fracture, Dislocation, Sprain.** Use of Roller Bandage and Triangular Bandage.

Details of Practical Syllabus Physical Education-MDC

Sem-3: CC1/CC2_MDC-3 (PE-MD-CC3-3-P)

(i) Athletics: Jumping Events (High jump, Long Jump, Triple Jump) (10 marks)

- a) **Long Jump:** Hang Style/ Hitch Kick technique)- Approach Run, Take-off, Flight in the air and Landing.
- b) **Triple Jump** - Approach Run, Take-off, Flight in the air and Landing.
- c) **High Jump** – Straddle Roll / Fosbury Flop technique: Approach Run, Take-off, Clearance of Bar, and Landing.

(ii) Games: Kabaddi, Football, Basketball (anyone 10 marks)

- a) **Kabaddi:** Rules of the Game; Court measurements; Concept of Cant, Lona & Bonus point, Defensive skills- Ankle holds, Knee holds techniques; Blocking; Attacking skills-Hands touch, Ankle touch, Game practice.
- b) **Football:** Rules of the Game; Field measurement, Push-pass; Kicks-Long & short; Chip and Volley, Dribbles, Receiving the ball by instep & thigh, Penalty Kick. Direct and Indirect free kick; Throwing; Tackles, Goal keeping; Game practice.
- c) **Basketball:** Basic Rules of the Game; Court measurements; Passing skills-Chest pass, Bounce pass, Overhead pass, Shoulder pass; Dribbling-High dribble, medium & low dribble; Pivoting, Shooting-Set shot, Jump shot, Lay-up shot. Game practice.

(iii) Practical of Physiology of Exercise (5 Marks)

- a) Measurement of Heart Rate –Resting Heart Rate (RHR) and Exercise Heart Rate (EHR).
- b) Breathing frequency at rest and after exercise.

Details of Practical Syllabus Physical Education-MDC

Sem-4: CC1/CC2_MDC-4 (PE-MD-CC4-4-P)

(i) Gymnastics/Swimming (10 Marks)

Gymnastics: Different types of events for Boys and Girls; Basic skills Forward Roll, T-balance, V-balance, Knee Balance, Backward Roll, legs split, Tuck jump, Split jump.

Swimming: Basic technique of floating and breathing on water ; Techniques diving on water; Swimming techniques - Free style, Brest Stroke, Back Stroke.

(ii) Yoga (15 Marks: Asana-5, Pranayama/Meditation-5 & Kriya-5 marks)

a) Asana (5 marks):

- (i) Sitting & Twisting Poses: Padmasana, Gomukhasana, Bojrasana, Parvatasana, Ardha-Motysendrasana,
- (ii) Forward bending poses: Janusirasana, Pashcimottanasana, Chaturanga Dandasana,
- (iii) Backward bending poses: Salavasana, Vugongasana, Ustrasana, Setubondanasana, Matsyasana, Dhanurasana
- (iv) Standing & Balancing Poses: Brikshasana, Birvadrana. Podahastasana, Uttana-asana
- (v) Inverted Pose: Sarvangasana, Halasana, Shirshasana,
- (vi) Suryanamaskara

b) Pranayama & Meditation (5 marks):

Pranayama: Anulom & Bilom; Vamri, Silolie, Shitkari.

Meditation: Deep breath meditation, Mindful meditation, Visualization meditation.

c) Kriya (5 marks):

- (i) Neti,
- (ii) Kapalvati and
- (iii) Tratak.

Details of Practical Syllabus Physical Education-MDC

Sem-4: CC1/CC2_MDC-5 (PE-MD-CC5-4-P)

(i) Weight Training (10 Marks)

- a) Introduction to weight training: Basic Grips; Stance;
- b) **Skills-** Shoulder Press (Front & Back), Bench Press (Flat, Inclined, Declined), Biceps Curl, Triceps Extension, Wrist Curl, Lat Pull Down, Plank, Squat, Hamstring Curl, Calf Raise etc

(ii) Games: Volleyball, Cricket, Hockey (any one, Marks-10)

- a) **Volleyball:** Measurement & Court Marking; Service- Tennis serve, Jump & serve, Defensive Shot-Dig, Advanced Attacking skills, Advance Blocking techniques, Rotation rules, Competitive Match Practice.
- b) **Cricket:** Rules of the Game; Batting- Forward (front foot) and backward (back foot) defensive; Drives, Cover Drive, Square Cut; Bowling- Simple bowling techniques, Fast bowling, Medium pace. Fielding – Different fielding Positions and Basic technique of fielding – Orthodox fielding & Long Barrier (defensive); Basic Throwing Techniques to the wicket keeper. Competitive Match Practice.
- c) **Hockey:** Rules of the Game; Receiving the ball with stick, Pass & Shots: Push, Flick, Hit & Scope, Dribbling, Rolling, Game Practice.

(iii) Practical on Sports Management (Marks-5)

- a) Preparation of Fixture of Knockout & League Tournament
- b) Preparation of budget for a sports event.

Details of Practical Syllabus Physical Education-MDC

Sem-5: CC1/CC2_MDC-6 (PE-MD-CC6-5-P)

i) Gymnastics/Swimming (10 Marks)

Gymnastics: Cart-Wheel; Cartwheel, legs split, Tuck jump, Split jump, Hand Stand. Hand Spring, Head Spring; Floor Exercises in competitive format.

Swimming: Swimming Skills: Butterfly; Medley relay; Basic concept of a Swimming Pool; Practice of all techniques of swimming in competitive format.

ii) Football, Kabaddi, Handball (anyone-10 Marks)

- a) **Football:** Chip and Volley, Advance Dribble techniques, Receiving the ball by chest, Heading the ball, Direct and Indirect free kick; Advanced Tackles, Corner Kicks, Advance Goal keeping; Tie Break, Competitive match practice.
- b) **Kabaddi:** Advance Defensive skills-Chain system, Thigh & Waist Hold techniques; Advance Blocking; Advance Attacking skills- Kicks, Back kick, Dubki & Jumping, Competitive match practice.
- c) **Handball:** Rules of the Game, Court Measurement & Marking, Pass-Chest pass, Over head Pass, Shoulder Pass, Hook pass, Dribble, Goal shooting. Game Practice.

iii) Practical on Psychology in physical education and Sports (any one, Marks-5)

- a) Measurement of Reaction Time
- b) Preparation of list of Extrinsic & Intrinsic Motivation used in sports.

Details of Practical Syllabus Physical Education-MDC

Sem-5/6: CC1/CC2_MDC-7 (PE-MD-CC7-5-P / PE-MD-CC7-6-P)

i) Self defense activity-Karate (10 Marks)

- a) **Soji, Seiretsu, Seiza, Maimoku** (with close eyes), **Maimoku-Yama** (open eyes), **Shinzen-Ni- Rei**,
- b) **Junbi Taiso** (Warming up exercises)
- c) **DACHI (Basic stances-Heisoko Dachi, Musubi Dachi, Heko Dachi)**
- d) **ZUKI or TSUKI** (PUNCH-Chudan Zuki, Jodan Zuki & Gedan Zuki; Practice all skill 10 times each),
- e) **GERI or KERI** (KICK-Mai Geri, Mawashi Geri & Yoko Sukoto Geri; Practice all skill 10 times each),
- f) **UKE** (BLOCK-Chudan Uke, Jodan Uke & Gedan Uke; Practice all skill 10 times each)

ii) Kho-Kho, Badminton/Table Tennis, Basketball (anyone-10 Marks)

- a) **Kho-Kho:** Court measurement & marking, Advance attacking skills- False Kho; Monkey style, Field Drive, Pole Drive; Advance defensive techniques: Formation of Ring; Use of Pole to douse. Competitive match practice.
- b) **Badminton:** Measurement & Marking of Court; Concept of Lets; Advance Forehand and Backhand shots, Net shot, Drop shot, Slice Shot, Kill shot. Competitive match practice (singles & doubles).
- c) **Table Tennis:** Service with top spin, Chop shot, block, defensive stroke; Competitive match practice (singles & doubles).
- d) **Basketball:** Body faint; Speed dribbling, Shooting-Dunk shot, shooting shot for 3 point score. Competitive match practice.

iii) Practical on Kinesiology (Any one, 5 Marks)

- a) Determination of Centre of Gravity of an object.
- b) Determination of average Velocity of a runner.
- c) Drawing Velocity-Time (VT) Carve

Details of Practical Syllabus Physical Education-MDC

Sem-6: CC1/CC2_MDC-8 (PE-MD-C-8-6-P)

i) Aerobics (10 Marks) :

Aerobics: The basic aerobic routine lies on performing the combination of seven aerobic movements involving by both the arms and legs. Minimum 16 counts the basic steps sequence must be contained within the content of the routine. Each of these moves has a number of variation which helps to build a routine. Such as: March, Jog, Skip, Knee lift, Kick, Jumping jack, Step up/ Step down, V step, Lift step, Turn step.

ii) Cricket, Handball, Hockey (anyone-10 Marks)

- a) **Cricket:** Measurements of Cricket Ground; Batting- Cover Drive, Square Cut, Flick, Glance, Pool & Hook; Bowling- Spin Bowling (Leg-spin & Off-spin). Fielding – Different fielding Positions of the field, High Catch and Low catch; Throwing Techniques (offensive) for run out & Stamping. Wicket keeping technique - Stance, Position, Collection of Ball
- b) **Handball:** Advance skills: Long Pass, Body faint, Speed Dribble, Goal shooting-Jump shot, Jump & Fall shot. Goal Keeping Techniques; Competitive Match Practice.
- c) **Hockey:** Ground hit, Scope, Drag and Flick, Penalty Corner, Penalty Stroke, Goal keeping Skills; Competitive Game Practice.

iii) Practical on Sports Training (5 Marks)

- a) Prepare Coaching Plan to develop motor fitness components.
- b) Preparation of Coaching Plan for athletic or sports events.

(SEC)

Syllabus of Skill Enhancement Courses in Physical Education for MDC (Practical)

(Marks-50; Credit-2)

Semester	Code (P)	Name of the Paper	Syllabus
1/2/3	PE-MD-SEC1-1-P/ PE-MD-SEC2-2-P/ PE-MD-SEC3-3-P	Officiating and Coaching	<p>A. Rules and Regulations, Use of Signals (hand & whistle) for conducting games/activities, Use of Cards, Scoring and preparation of match report/final result etc. on following sports events and games: Marks 40 (1 from each category)</p> <ul style="list-style-type: none">(i) Athletics (Track & Field events)(ii) Gymnastics/Swimming(iii) Kho-Kho / Kabaddi(iv) Ball Games: Football, Volleyball, Cricket, Handball, Basketball, Hockey, Badminton/Table Tennis (any one) <p>B. Preparation of a short coaching plan/ programme on any sports event/activity (10 Marks)</p>

(IDC)

Syllabus of Interdisciplinary Courses in Physical Education for MDC (Practical)

(Marks-25; Credit-1)

Semester	Code (P)	Name of the Paper	Syllabus
1/2/3	PE-MD-IDC1-1-P/ PE-MD-IDC2-2-P/ PE-MD-IDC3-3-P	Yoga and Weight Management	<p>(A) Practice of Asanas, Pranayam and Meditation (Marks-15)</p> <p>(a) Asanas (5 marks) (i) Sitting & Twisting Poses: Padmasana, Gomukhasana, Bojrasana, Ardha-Motysendrasana, (ii) Forward bending poses: Janusirasana, Pashcimottanasana, (iii) Backword bending poses: Salavasana, Vugongasana, Ustrasana, Setubondanasana, (iv) Balance Poses: Brikshasana, Birvaderasana.</p> <p>(b) Practice of Pranayama (5 marks): Anulom & Bilom; Vamri, Silolie, Shitkari.</p> <p>(c) Meditation techniques (5 marks): Deep breath meditation, Mindful meditation, Visualization meditation.</p> <p>(B) (a) Calculation of BMI and assessment weight status (Marks-5)</p> <p>(b) Preparation of healthy Diet Chart according to the needs of the weight management programme. (Marks-5)</p>