

THE UNIVERSITY OF BURDWAN



**SYLLABUS FOR 2-YEAR
BACHELOR OF PHYSICAL EDUCATION (B.P.Ed.)
PROGRAMME
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
With effect from 2022-2023**

Giopa Saha Roy.

SEMESTER- 1

	Course Code		Course Title	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Part- A Theoretical Course	Core Course	CC-101	History, Principle and Foundation of Physical Education & Olympic Movement.	4	4	30	70	100
		CC -102	Anatomy and Physiology	4	4	30	70	100
		CC-103	Health Education and Environmental Studies	4	4	30	70	100
	Elective Course (Any one)	EC-101	Physical Literacy through Movement Education	4	4	30	70	100
		EC-102	Officiating and Coaching					
Part-B Practical Course		PC-101	Track and Field: All Running Event-60 Running Broad Jump & Triple Jump-40	6	4	30	70	100
		PC-102	Swimming (Free Style & Back Stroke) or Gymnastics (100) Floor	6	4	30	70	100
		PC-103	March Past-20 Mass Demonstration Activities: Dumbbllles/Wands/Hoop/Um brella/Tipri/Bratachari/Malkh amb/Lezium/Callisthenics (Any two)- 10+10=20 Indigenous Sports Kabaddi, Kho-Kho and Archery (any two) (30+30= 60 Marks)	6	4	30	70	100
		PC-104	Yoga-40, Weight Training-30 Aerobics-30	6	4	30	70	100
Total				40	32	240	560	800

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SEMESTER- 2

	Course Code	Course Title	Total Hours	Credit	Internal Marks	External Marks	Total Marks	
Part- A Theoretical Course	Core Course	CC-201	Yoga Education	4	4	30	70	100
		CC -202	Educational Technology and Methods of Teaching in Physical Education	4	4	30	70	100
		CC-203	Organization and Administration	4	4	30	70	100
	Elective Course (Any one)	EC-201	Contemporary issues in physical education, fitness and wellness	4	4	30	70	100
		EC-202	Sports Nutrition and Weight Management					
Part- B Practical Course		PC-201	Track and Field (40) Jumping Events-High Jump and Throwing Events (60), Shot Put, Discus and Javelin- (any two)	6	4	30	70	100
		PC-202	Gymnastics- for men-Parallel bar & Vaulting horse/Box women-Balancing Beam& Vaulting horse/box OR Swimming- Breast stroke & Butterfly stroke	6	4	30	70	100
		PC-203	Team Games: Football, Netball, Volleyball, Handball (any two) (2x30=60) Racket Sports: Badminton/Table Tennis/Squash/Tennis(any one) (1x40=40)	6	4	30	70	100
Part- C Teaching Practices		TP-204	Class Room Teaching Practices (04 lessons within own College and 04 lessons in School situation. Evaluation will be done within own College or School situation as per suitability.)	6	4	30	70	100
Total			40	32	240	560	800	

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SEMESTER- 3

	Course Code		Course Title	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Part- A Theoretical Course	Core Course	CC-301	Sports Training	4	4	30	70	100
		CC -302	Computer Application in Physical Education and Sports Science.	4	4	30	70	100
		CC-303	Sports Psychology and Sociology in Physical Education and Sports.	4	4	30	70	100
	Elective Course (Any one)	EC-301	Sports Medicine, Physiotherapy and Rehabilitation	4	4	30	70	100
		EC-302	Curriculum Design					
Part-B Practical Course		PC-301	Combative Sports: Karate/Judo/Fencing/Boxing /Taekwondo/Wrestling/Lathi (Any two out of these)(50+50)	6	4	30	70	100
Part- C Teaching Practices		TP-302	Teaching Practice: General 10 lessons within college-5(Mock Teaching) School Situation-5 Specific 10 lessons within college-5(Mock Teaching) School Situation-5 Evaluation will be done by internal examiner or external examiner as per suitability of administration.	6	4	30	70	100
		TP-303	Sports Specialization- Coaching lesson plan within college-5(Mock Teaching) School Situation-5 Evaluation will be done by internal examiner or external examiner as per suitability of administration.	6	4	30	70	100
		TP-304	Teaching Practice: Yoga or Aerobics within college-5 (Mock Teaching) School Situation-5 Evaluation will be done by internal examiner or external examiner as per suitability of administration.	6	4	30	70	100
		Total		40	32	240	560	800

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SEMESTER- 4

	Course Code	Course Title	Total Hours	Credit	Internal Marks	External Marks	Total Marks	
Part- A Theoretical Course	Core Course	CC-401	Measurement and Evaluation in Physical Education	4	4	30	70	100
		CC -402	Kinesiology and Biomechanics	4	4	30	70	100
		CC-403	Research and Statistics Physical Education	4	4	30	70	100
	Elective Course (Any one)	EC-401	Theory of Sports and Games	4	4	30	70	100
		EC-402	Sports Management					
Part-B Practical Course		PC-401	Games Specialization: Evaluation Performance Ability (To select one activity except Track and Field/Gymnastics/Swimming)	6	4	30	70	100
		PC-402	Adventure activity/Outdoor activity: Camping/Trekking/Hiking/Rock-Climbing/Artificial Climbing / Educational Tour etc. (50 marks). Evaluation by Internal examiner (within college) Lab-based Practical on Physical and Physiological/Psychological/Biomechanical measures-50marks. Evaluation by External examiner(within college)	6	4	30	70	100
		PC-403	Team Games: Cricket, Basketball, Hockey, Softball, Baseball, Throw ball and Tennikoit (Any Two) 50 marks for each activity.	6	4	30	70	100
		PC-404	AAHPERD Youth Fitness Test (50 marks Evaluation on any two items) Standardized Skill Test (50 marks any one)	6	4	30	70	100
		Total		40	32	240	560	800
Grand Total (SEM 1+2+3+4)				160	128	960	2240	3200

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SEMESTER- 1

Course Code: CC-101

COURSE TITLE: HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION & OLYMPIC MOVEMENT

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction to the Concept of Physical Education

- 1.1 Meaning, Definition, Misconceptions and Scope of Physical Education.
- 1.2 Aim and Objectives of Physical Education.
- 1.3 Relationship of Physical Education with General Education. Need for Physical Education in Modern society.
- 1.4 Physical Education as an Arts and Science.

UNIT- 2: Historical Development of Physical Education

- 2.1 History of the development of Physical Education during pre-independence period
- 2.2 Post-Independence period - Physical Education in India with reference to development of Physical Education in West Bengal.
- 2.3 Contribution of Akhras, Vyayamshalas & YMCA
- 2.4 Contribution of Eminent Physical Educationists: J.B. Basedow, J.F. Gustmuth, F.L. Jahn, Franz Natchtegall, Niles Bukh, P.H. Ling, H.C. Buck, James Buchanan, P.M. Joshep, Rabindranath Tagore, Swami Vivekananda, Rishi Aurobindo.

UNIT- 3: Foundation & Principles of Physical Education

- 3.1 Philosophical Foundation: Idealism, Realism, Pragmatism and Naturalism in Physical Education.
- 3.2 Biological Principles: Change of Locomotion from Quadruped to Biped position-advantages and disadvantage. Age & Gender Characteristics, Body type, Fitness and wellness movement in the contemporary perspectives.
- 3.3 Psychological Principles: Psychological Factors affecting sports performance, Growth and Development- meaning, difference between growth and development, Principles of growth and development.
- 3.4 Sociological Principles: Socialization through Physical Education, social integration and cohesiveness, National & International integration through sports.

UNIT- 4: Olympic Movement

- 4.1 The history of ancient Olympic movement.
- 4.2 The significant stages in the development of the modern Olympic movement. Philosophy of Olympic movement.
- 4.3 Significance of Olympic Ideals, Olympic Flag, Olympic Oath.
- 4.4 International Olympic Committee- Structure and Functions, National Olympic committees and their role in Olympic movement, Types of Olympic Games.

References:

1. Bucher, C.A.(n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co. Deshpande, S.H. (2014), Physical Education in Ancient India. Amravati: Degree college of physical education.
2. Mohan, V.M. (1969), Principle of physical education Delhi: Metropolitan Book Dep. Nixon, E.E. & Cozen, F.W. (1969). An introduction to physical education: Philadelphia: W.B. Saunders Co.
3. Obertuffer, (1970). Delbert physical education. New York: Harper & Brothers Publisher, Sharman, J.R. (1964). Introduction to physical education. New York: A.S. Barnes & Co.
4. William, L.F. (1964). The principles of physical education. Philadelphia: W.B. Saunders Co.

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SEMESTER- 1

Course Code: CC-102

COURSE TITLE: Anatomy and Physiology

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction of the Human Body

- 1.1 Introduction of the human body and brief introduction of Anatomy Physiology in the field of Physical Education and sports.
- 1.2 Cell-structure and function.
- 1.3 Tissue- Types of tissues and their functions.
- 1.4 Skeletal System- Bones of the human body –axial and appendicular skeleton. Classification and functions of bones, anatomical & sex difference. Brief description of joints.

UNIT- 2: System- I

- 2.1 Muscular system- Types of muscle and function- Structure of skeletal muscle, Major muscles of shoulder, hip and knee joint.
- 2.2 Digestive System: The alimentary canal, G.I. tract, Accessory glands and digestive juices- process of carbohydrate, fat and protein digestion.
- 2.3 Respiratory system: Organs of respiration, Internal and External respiration. Mechanism of respiration.
- 2.4 Energy metabolism: Process of energy metabolism. Fuel for muscular work.

UNIT- 3: System- II

- 3.1 Circulatory System: Function of circulatory system, Composition and function of blood. Heart- location and structure, pulmonary circulation, Systemic circulation, Cardiac cycle, Blood pressure, Blood coagulation, Blood and immunity.
- 3.2 Excretory system: Structure and function of Kidney, Urine formation, Sweating.
- 3.3 Endocrine system: Location, secretion and functions of different endocrine glands.
- 3.4 Nervous system: Central nervous system- Brain, spinal cord, Automatic nervous system, Concept of nerve-muscle physiology: Neuromuscular junction and transmission.

UNIT- 4: Effect of Exercise on Different System

- 4.1 Exercise- Concept and type.
- 4.2 Types of muscular contraction. Effect of exercise on muscular system.
- 4.3 Effect of exercise on circulatory system- Heart rate. Stroke volume, cardiac output, athletic heart.
- 4.4 Effect of exercise on respiratory system- Total volume, respiratory rate, pulmonary ventilation, oxygen uptake, oxygen debt, EPOC (Excess post exercise oxygen consumption).

References:

1. Gupta. A.P. (2010). Anatomy and physiology. Agra Sumit. Prakashan.
2. Gupta. M and Gupta. M.C. (1980). Body and anatomical science. Delhi. Swaran Printing Press.
3. Guyton.A.C. (1996). Textbook of Medical Physiology, 9th edition, Philadelphia: W.B.
4. 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.
5. Moorthy, A.M. (2014). Anatomy and physiology and health education. Karakudi. MadalayamPub.
6. Morehouse, L.E.& Miller, J. (1967). Physiology of exercise. St. Louis. The C.V. Mosby Co. Pearce,
7. E.C(1962) Anatomy and Physiology for nurses, London Faber & Faber Ltd.
8. Sharma R.D.(1979). Health and physical education, Gupta Prakashan.
9. Singh, S.(1979). Anatomy of Physiology and health education. Ropar: Jeet Publication

Gopa Saha Ray. 7

SEMESTER- 1

Course Code: CC-103

COURSE TITLE: Health Education and Environmental Studies

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Health Education

- 1.1 Concept, Dimensions and Definition of Health.
- 1.2 Definition of Health Education, Aims, objectives and principles of Health Education.
- 1.3 Personal Hygiene: Care of eye, ear, skin and hair.
- 1.4 School Health Program: Health service, Health instruction, Health supervision, Health appraisal and Health record.

UNIT-2: Health Problems in India- Prevention and Control

- 2.1 Communicable diseases: Malaria, Dengue, COVID-19, Conjunctivitis, Chicken pox, Chikungunya.
- 2.2 Life Style / Hypokinetic diseases: Obesity, Diabetes, Hyper Tension, Cancer.
- 2.3 Nutritional Disorder, Mother-child Health Care, Population Explosive, Food Adulteration, First-Aid and emergency care.
- 2.4 Postural: Good and bad posture, Postural Deformities: Types, Nature, Causes, Corrective Exercises.

UNIT- 3: Environmental Studies

- 3.1 Historical background and concept of Environmental Studies.
- 3.2 Definition, scope, need and importance of Environmental Studies.
- 3.3 Recycling of wastes and plastic; prohibition of plastic bag/cover.
- 3.4 Role of school in environmental conservation and sustainable development.

UNIT- 4: Natural Resources and Related Environmental Issues

- 4.1 Water resources, food resources and land resources.
- 4.2 Definition, effects and control measures of air pollution, water pollution, soil pollution, noise pollution and thermal pollution.
- 4.3 Deserter Management; management of environment and Govt. Policies: role of Pollution Control Board
- 4.4 Celebration of various days in relation with environment.

References:

1. Agrawal R.C. (2001) Environmental biology Bikaner, Nidhi publishers Ltd.
2. Frank, H. & Walter, H. (1976), Turner school health education. Saint Louis. The C.V. Mosby Company.
3. 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.

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SEMESTER- 1

Course Code: EC-101

COURSE TITLE: Physical Literacy through Movement Education (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1 Introduction to Movement Education and Physical Literacy

- 1.1 Definition, meaning & importance of movement education.
- 1.2 Definition meaning and importance of physical literacy.
- 1.3 Concept of developmentally appropriate physical activities
- 1.4 Standards based physical education curriculum (NASPE Standards).

UNIT- 2: Motor Skill & Movement Pattern

- 2.1 Classification of motor skills, fundamental (Locomotor, Nonlocomotor, Body management skill), specialized (Manipulative, Rhythmic movement, game and sports skills).
- 2.2 Skill themes approach and development of skill themes. Traveling, chasing, fleeing, dodging, jumping, landing, transferring body weight, streaking, kicking, throwing and catching.
- 2.3 Introduction to movement concepts, development of movement concepts, space awareness, effort concepts, relationships.
- 2.4 Long term athlete development (LTAD).

UNIT- 3: Participation in Physical Activity and Personal & Social Development

- 3.1 Personal development: self concepts, cognitive functioning and motivational outcomes.
- 3.2 Social Development: altruism, controlling aggression, corporation, group development.
- 3.3 United Nations and other organizations using sport and traditional sports for social development.
- 3.4 Sport for Development: sport for education, Economic Gender, Health and Peace.

UNIT- 4: Pedagogical Models for Physical Literacy & Movement Education

- 4.1 Need for child centered teaching models.
- 4.2 Teaching games for understanding (TGFU) model: Invasion Games, Net/Wall games, striking /Fielding games, Target games.
- 4.3 Education through movement (ETM) program.
- 4.4 Coaching life skill through sport.

References:

1. Abels, K. & Bridges, J.M. (2010) Teaching Movement Education: Foundation for active lifestyles. Human Kinetics
2. Graham, G., Holt, Shirley & Parker, Melissa (1993) Children Moving . A Reflective Approach to Teaching Physical Education With Movement Analysis, Wheel 3rd Edition, Mayfield publishing Company.
3. Lund, J & Tannehill & Lund, Jacalyn (2010) Standards- Based Physical Education Curriculum Development, 2nd Edition. Jones & Barlett Learning.
4. Frank, A. M (2003) Sports and Education: A Reference Handbook (Contemporary Education Issues), ABC-CLIO.
5. Ciccomascolo, L. E. & Sullivan, E.C (2013) The Dimensions of Physical Education . Jones & Barlett Learning.
6. Pangrazi, R. P. (1998) Dynamic Physical Education for Elementary School Children, 12th Edition. Allyn & Bacon.
7. Griffin, L. & Butler, J. (2005) Teaching Game for Understanding : Theory, Research, and Practice. Human Kinetics
8. Coalter, F. (2013) Sport for Development : What game are we playing ? . Routledge.

Gopu Saha Roy. 9

SEMESTER- 1

Course Code: EC-102

COURSE TITLE: Officiating and Coaching (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction of Officiating and Coaching

- 1.1 Concept of Officiating and Coaching.
- 1.2 Importance and principles of Officiating.
- 1.3 Relation of official and coach with management, players and spectators.
- 1.4 Measures of improving the standards of Officiating and Coaching.

UNIT- 2: Coach as a Mentor

- 2.1 Duties of coach in general, pre, during and post-game.
- 2.2 Philosophy of coaching.
- 2.3 Responsibilities of a coach on and off the field.
- 2.4 Psychology of competition and coaching.

UNIT- 3: Duties of Official

- 3.1 Duties of official in general, pre, during and post-game.
- 3.2 Philosophy of officiating.
- 3.3 Mechanics of officiating.
- 3.4 Ethics of officiating.

UNIT- 4: Qualities and Qualification of Coach and Official

- 4.1 Qualities and qualification of coach and official.
- 4.2 Eligibility rules of inter-collegiate and inter-university tournaments.
- 4.3 Preparation of team, team management, responsibilities of a manager
- 4.4 Integrity and values of sports.

References:

1. Bunn, J.W.(1968). The art of officiating sports, Englewood cliffs N.J. Prentice Hall.
2. Bunn. L.W. (1972). Scientific principles of coaching, Englewood cliffs N.J. Prentice.
3. Hall. Dyson, G.H.(1963). The mechanics of athletics, London: University of London
4. Press Ltd. Dyson, G.H. (1963). The mechanics of Athletics London: University of London Press Ltd.
5. Lawther, L.D. (1965). Psychology of coaching New York: Pre Hall.
6. Singer, R.N.(1972). Coaching athletic & psychology. New York: M.C. Graw Hill.

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SEMESTER- 1

Course Code: PC-101

COURSE TITLE: Track and Field

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. **Running Events (20 Marks):**

Starting techniques: Standing start, Crouch start and its variations, Proper use of block. Finishing Techniques: Run Through, Forward lunging, Shoulder Shrug Marking, Rules and Officiating.

2. **Hurdles (20 Marks):**

Fundamental Skills-Starting. Clearance and Landing Techniques. Types of Hurdles, Marking and Officiating.

3. **Relay (20 Marks):** Baton Exchange for different distances. Understanding of Relay Zones, Marking and Interpretation of rules and officiating.

4. **Jumping- Running Broad Jump and Triple Jump (20+20 = 40 Marks):**

Approach Run, Take-off, Flight and Landing

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

SEMESTER- 1

Course Code: PC-102

COURSE TITLE: Gymnastics or Swimming

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. **Gymnastics:**

Floor Exercise, Forward Roll, Backward Roll, Hand stand, Cart Wheel, Leg Split, T-balance, Neck Spring, Dive Roll, Hand Stand with Forward Roll, Different dancing steps (Combination).

2. **Swimming:**

Floating, Gilding, Leg Action, Arm action, Breathing technique. Free style and Back Stroke.

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

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SEMESTER- 1

Course Code: PC-103

COURSE TITLE: Mass Demonstration and Indigenous Sports

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. **March Past (20 Marks):**
2. **Mass Demonstration Activities (10+10= 20 Marks):**
Dumbbell/Wands/Hoop/Umbrella/Tipri/Bratachari/Malkhamb/Lezium/Calisthenics (Any two of nine)
3. **Indigenous Sports- Kabaddi, Kho-Kho and Archery(any two) (30+30= 60 Marks):**

Kabaddi

A. Fundamental skills

1. Offensive Skills: Touching with hands, Use of leg-toe touch, squat leg thrust, side kick, mulekick, arrow fly kick, crossing of baulk line. Crossing of Bonus line.
2. Defensive Skills: Various formations, catching from particular position, different catches, catching formation and techniques.
3. Additional skills in raiding: Escaping from various holds, techniques of escaping from chainformation, offense and defense.
4. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

KHO-KHO

A. Fundamental skills

1. Offensive Skills: Sit on the box (Parallel & Bullet toe method), Get up from the box (Proximal & Distyal foot method), Give Kho (Simple, Early, Late & Judgment), Pole Turn, Pole Dive, Tapping, Hammering, Rectification of foul.
2. Defensive Skills: Chain Play, Ring play and Chain & Ring mixed play.
3. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

Archery

A. Fundamental skills

1. Stance
2. Grip
2. Arrow Drawing and Handling
3. Anchor and tighten
4. Aim
5. Hold
6. Release the String
7. Follow through

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

C. Strategically approach during competition.

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N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

SEMESTER- 1

Course Code: PC-104

COURSE TITLE: Yoga, Weight Training and Aerobics

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. Yoga (40 Marks):

Surya Namaskar and Pranayam Sitting Position: Paschimottanasana, Gomukhasana, Sarvangasana, Chakrasana, Vrikshasana, Padahastanasana, Trikonasana, Utkatasana

2. Weight Training (30 Marks):

Crouch Sitting Position, Different types of grip, Standing with weight, Dead lift Curling, Two arm dumbbell curling, Barbell curling, Front Curling, Reverse Curling Dumbbell and Barbell press, Front and back press, Bench press (Incline & Decline) Squat: Front and back squat

3. Aerobics (30 Marks):

Low impact core moves-1. March, 2. Side to side, 3. Double side to side, 4. Grapevine, 5. Knee up, 6. Leg curl, 7. Toe touch, 8. Side lunge, 9 Back lunge, 10. Kick front. 11. Kick side, 12. Heel to raft, 13. 'E' shape, 14. 'V' shape, 15. Introduction of Bench Exercise

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

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SEMESTER- 2

Course Code: CC- 201

COURSE TITLE: YOGA EDUCATION

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction of Yoga

- 1.1 Meaning and Definition of Yoga.
- 1.2 Aim and Objectives of Yoga.
- 1.3 History and Philosophical Aspects of Yoga.
- 1.4 Need and Importance of Yoga in Physical Education and sports.

UNIT- 2: Methods of Yoga

- 2.1 Karma Yoga, Jnana Yoga, Bhakti Yoga and Raja Yoga.
- 2.2 Steps of Hatha Yoga.
- 2.3 Steps of Astanga Yoga.
- 2.4 Steps of yogic teaching method.

UNIT- 3: Effects of Yogic Practices

- 3.1 Effect of Kriyas on human body and mind.
- 3.2 Effects of Asanas on human body and mind.
- 3.3 Effects of Pranayamas on human body and mind.
- 3.4 Effect of Meditation on human body and mind.

UNIT- 4: Modern Trends of Yoga

- 4.1 Mission and Vision of AYUSH
- 4.2 Status of Yoga studies in India and abroad.
- 4.3 Yoga as education.
- 4.4 Yoga a therapy.

Reference Books:

1. Brown, F.Y. (2000). Delhi: Sport Publication.
2. Gharote, M.L. &Ganguly, H. (1988). Teaching methods for yogic practices. Lonawala: Kaixydahmoe.
3. Raijan, S.M. (1985). Yoga strengthening of relexon for sportsman. New Delhi: Allied Publishers.
4. Shankar, G.(1998). Holistic approach of yoga. New Delhi: Aditya publishers, shekar, K.C.(2003). Yoga for health, Delhi, Khelsahitya Kendra.

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SEMESTER- 2

Course Code: CC- 202

COURSE TITLE: Educational Technology and Methods of Teaching in Physical Education

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction

- 1.1 Education and Education Technology- meaning and definitions.
- 1.2 Types of Education- formal and non-formal education.
- 1.3 Educative Processes.
- 1.4 Importance of device and methods of teaching and class management.

UNIT- 2: Teaching Technique

- 2.1 Teaching Methods- Types of Teaching Method: Lecture Method, Command Method, Demonstration Method, Imitation Method, Project Method etc.; Teaching procedure- Whole Method, Whole-Part-Whole Method, Part-Whole Method.
- 2.2 Presentation Technique- personal and technical preparation and presentation.
- 2.3 Verbal and Non- verbal communication technique.
- 2.4 Details of Teaching Technique- meaning, type and its uses in different situation.

UNIT- 3: Teaching Aids and Competition

- 3.1 Teaching Aids- meaning, importance and its criteria for selecting teaching aids. Community Aids, Co-curricular Aids.
- 3.2 Type of Teaching Aids- Audio Aids, Visual Aids, Audio-Visual Aids
- 3.3 Team Teaching: Meaning, Principles and Advantages.
- 3.4 Group Competition: Intramural and Extramural Competition

UNIT- 4: Learning Designing and Teaching Innovations

- 4.1 Meaning, Types and Principle of Learning designing.
- 4.2 General and Specific learning designing. Simulation Teaching- meaning, types and steps of simulation Teaching.
- 4.3 Micro and Macro Teaching: Meaning, Definition, Types and Steps.
- 4.4 Classification of students.

References:

1. Bhardwaj, A. (2003). New media of Education Planning. New Delhi: sarup of sons.
2. Bhatia & Bhatia, (1959). The Principle and Methods Teaching. New Delhi: Doaba House.
3. Kochar, S.K.(1982). Methods and Technique of Teaching. New Delhi: Sterling Publishers Pvt. Ltd.
4. Sampath, K. Pannirselvam, A. & Santhanam, S. (1981). Introduction to educational technology, New Delhi: Sterling Publishers Pvt. Ltd.
5. Wlia, J.S. (1999), Principle and Methods of Education, Jullandhar: Paul Publishers.

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SEMESTER- 2

Course Code: CC- 203

COURSE TITLE: Organizations and Administration

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Introduction to Organization and Administration

- 1.1 Meaning, Definition and Importance of Organization and Administration in Physical Education.
- 1.2 Functions of Organizations and Administration.
- 1.3 Meaning, Definition and Importance of planning.
- 1.4 Basic principles of planning.

UNIT-2: Office and Time-Table Management

- 2.1 Meaning, Definition and Functions of Office Management.
- 2.2 Kinds of Office Management.
- 2.3 Maintenance of different types of Register.
- 2.4 Time-Table Management: Meaning, Need, Importance and Factors influences Time Table.

UNIT-3: Management of Sports Facility

- 3.1 Types of facilities: Infrastructure- Indoor, Outdoor.
- 3.2 Facility Management: Equipments, Store Room, Gymnasium, Swimming Pool, Play ground.
- 3.3 Equipment: Need, Importance, Procedure of purchase, Care and Maintenance.
- 3.4 Physical efficiency record, Medical examination record.

UNIT-4: Tournament

- 4.1 Importance of Tournament, Types of Tournament, Preparation of Fixture and its organizational structure.
- 4.2 Organizational structure of athletic meet.
- 4.3 Sports Event, Intramural and Extramural Tournament and its planning.
- 4.4 Budget: Meaning, Importance and Planning of Budget

References:

1. Broyles, F.J.&Rober, H.D. (1979). Administration of sports, Athletic programme: A Managerial approach, New York: Prentice hall Inc.
2. Bucher, C.A. (1983). Administration of Physical Education and Athletic programme, St. Lolis: The C.V. Hosby Co.
3. Kozman, H.C. Cassidy, R. &Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
4. Pandy, L.K. (1977). Methods in Physical Education. Delhi: Metropolitan Book Depo.

Gopa Saha Ray.

SEMESTER- 2

Course Code: EC- 201

COURSE TITLE: Contemporary Issues in Physical Education (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Concept of Fitness

- 1.1 Meaning and definition of Fitness.
- 1.2 Type of fitness.
- 1.3 Definition and Components of Physical Fitness.
- 1.4 Changing concept of Physical Fitness.

UNIT-2: Concept of Wellness and Lifestyles

- 2.1 Concept and Dimensions of Wellness.
- 2.2 Cyber Culture and modern life style.
- 2.3 Lifestyle Diseases - Their prevention and management through physical activities.
- 2.4 Construction of Wellness profile.

UNIT-3: Principle of Exercise Programme

- 3.1 Means of fitness development- aerobic and anaerobic exercise.
- 3.2 Principle of obesity control and weight management.
- 3.3 Concept of sets, repetition, volume, intensity, density of exercise.
- 3.4 Concept of designing different fitness training programme for different age group.

UNIT-4: Safety Education and Fitness Promotion

- 4.1 Safety Education: Meaning, definition and need.
- 4.2 Determination of desirable body weight.
- 4.3 Health drinks and sports drinks: need and importance.
- 4.4 Common injuries and their management.

References:

1. Define, J. (1998). Complete guide to postnatal fitness. London: A&C Black.
2. Giam, C.K. & The. K.C.(1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
3. Meglynn. G. (1993). Dynamics of fitness Madison: W.C.B Brown. Sharkey. B.J. (1990). Physiology of fitness, Human Kinetics Book.

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SEMESTER- 2

Course Code: EC- 202

COURSE TITLE: Sports Nutrition and Weight Management (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Introduction to Nutrition

- 1.1 Meaning and definition of Nutrition and Sports Nutrition
- 1.2 Guidelines of basic Nutrition.
- 1.3 Role of Nutrition.
- 1.4 Factors for developing a nutritional plan.

UNIT-2: Nutrients

- 2.1 Macro Nutrients- Carbohydrate, Protein, Fat- Meaning, Sources and Functions.
- 2.2 Micro Nutrients- Vitamins, Minerals, Water- meaning, sources, classification and functions.
- 2.3 Role of Carbohydrate, Fat and Protein during exercise.
- 2.4 Role of hydration during exercise and water balance.

UNIT- 3: Nutrition and Weight Management

- 3.1 Meaning and concept of weight management in modern era. Factors affecting weight management and values of weight management.
- 3.2 Concept of B.M.I (Body Mass Index) and Obesity.
- 3.3 Obesity and its hazards, Myth of Spot Reduction, Dieting, versus exercise for weight control. Common Myths about weight loss.
- 3.4 Health risk associated with Obesity- Causes and solution for overcoming obesity.

UNIT-4: Steps of Planning of Weight Management

- 4.1 Nutrition- Daily calorie intake and expenditure.
- 4.2 Balance diet and athletic diet.
- 4.3 Role of diet and exercise in weight management.
- 4.4 Weight management programme for sporty child, Design diet and exercise schedule for weight gain and loss.

References:

1. Bassen, D.H.(2008). Update on obesity. J ClinEndocrinolMetab. 93(6), 2027-2034.
2. 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(2), 3091-3096
3. Chu,S.Y.&Kim, L.J. (2007). Maternal obesity and risk of stillbirth: a metanalysis. Am J ObsteeGynecol, 197(3), 223-228.
4. Demaria, E.J. (2007). Bariatric sugery for morbid obesity. N Eng J Med, 356(21), 2176-2183.
5. Dixon,J.B.O'Brien, P.E.Palyfair, J. (n.d.). Adjustable gatric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. JAMA. 299(3), 316-323.

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SEMESTER- 2

Course Code: PC- 201

COURSE TITLE: Track and Field

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. Jumping Event (40 Marks)

High Jump: Approach Run, Take-off, Bar Clearance (Straddle) and Landing.

2. Throwing Event (any two 30+30= 60 Marks)

a. **Shot Put:** Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery (Perry O'Brien and Disco-put Technique).

b. **Discus Throw:** Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery (Rotation in the circle).

c. **Javelin Throw:** Grip, Carry, Release and Recovery (3/5 Impulse stride).

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

SEMESTER- 2

Course Code: PC- 202

COURSE TITLE: Gymnastics or Swimming

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. Gymnastics :

a. **Floor Exercise:** Forward Roll, Backward Roll, Hand Stand, Cart Wheel, Leg Split, Different dancing steps (Combination)

b. **Table Vault:** Approach Run, Take off from the beat board, Cat Vault, Squat Vault.

Men: Parallel bar, Horizontal bar/Roman rings, Rhythmic Gymnastics, Pyramid

Women: Uneven bars, Balance Beam, Rhythmic Gymnastics, Pyramid

2. Swimming:

a. **Basic Skills:** Floating, Gliding, Leg Action, Arm action, Breathing technique

b. **Strokes:** Butterfly and Breast stroke

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

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SEMESTER- 2

Course Code: PC- 203

COURSE TITLE: Team Games and Racket Sports

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. Team Games- any two (30+30 = 60 Marks):

FOOTBALL

A. Fundamental Skills

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.
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.
9. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

C. Strategically approach during competition.

VOLLEYBALL

A. Fundamental skills

1. Service: Under arm service, Side arm service, Tennis service, Floating service.
2. Pass: Under arm pass, Over head pass.
3. Spiking and Blocking.
4. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

C. Strategically approach during competition.

NETBALL

A. Fundamental skills

1. Catching: one handed, two handed, with feet grounded and in flight.
2. Throwing (Different passes and their uses): One hand passes (shoulder, high shoulder, underarm, bounce, lob), two hand passes (Push, overhead and bounce).
3. Footwork: Landing on one foot, landing on two feet, Pivot, Running pass.
4. Shooting: One hand, forward step shot, and backward step shot.
5. Techniques of free dodge and sprint, sudden sprint, sprint and stop, sprinting with change at speed.
6. Defending: Marking the player, marking the ball, blocking, inside the circle, outside the circle. Defending the circle edge against the passing.
7. Intercepting: Pass and shot.
8. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

C. Strategically approach during competition.

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HANDBALL

A. Fundamental Skills

1. Catching, Throwing and Ball control,
2. Goal Throws: Jump shot, Center shot, Dive shot, Reverse shot.
3. Dribbling: High and low.
4. Attack and counter attack, simple counter attack, counter attack from two wings and center.
5. Blocking, Goal Keeping and Defensive skills.
6. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

C. Strategically approach during competition.

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

2. Racket Sports- Any one (40 Marks):

TABLE TENNIS

A. Fundamental skills

1. Basic Knowledge: Various parts of the Racket and Grip (Shake Hand & Pen Hold Grip).
2. Stance: Alternate & Parallel.
3. Push and Service: Backhand & Forehand.
4. Chop: Backhand & Forehand.
5. Receive: Push and Chop with both Backhand & Forehand.
6. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

BADMINTON

A. Fundamental skills

1. Basic Knowledge: Various parts of the Racket and Grip.
2. Service: Short service, Long service, Long-high service.
3. Shots: Over head shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot,Smash.
4. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

TENNIS

A. Fundamental skills

1. Grips- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
2. Stance and Footwork.
3. Basic Ground strokes-Forehand drive, Backhand drive.
4. Basic service.
5. Basic Volley- Over-head Volley and Chop.
6. Game practice with application of Rules and Regulations.

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

E. Strategically approach during competition.

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SQUASH

A. Fundamental skills

1. Service- Under hand and Over hand.
2. Service Reception.
3. Shot- Down the line, Cross Court, Drop, Half Volley
4. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

SEMESTER- 2

Course Code: TP- 204

COURSE TITLE: Teaching Practice

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Class room teaching (Micro Teaching):

4 lessons-2 from Physical Education field and 2 from other School Subjects-Best of 3 will be internally evaluated (50 marks)

Outdoor teaching (2 Campus and 2 Off- campus): 4 lessons-2 from Indigenous games and 2 from other games- Best of 3 will be internally evaluated and 1 final lesson will be externally evaluated (50 marks)

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SEMESTER- 3

Course Code: CC- 301

COURSE TITLE: Sports Training

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Introduction to Sports Training

- 1.1 Meaning and Definition of Sports Training and Sports Coaching.
- 1.2 Aim and Objectives of Sports Training and Sports Coaching.
- 1.3 Principles of Sports Training and Sports Coaching.
- 1.4 Components of sports training, Motor fitness components, Technique, Tactics and strategy.

UNIT-2: Process of Development of Motor Fitness Component

- 2.1 Strength: Means and method of Strength development.
- 2.2 Speed: Means and method of Speed development.
- 2.3 Endurance: Means and method of Endurance development.
- 2.4 Power and Balance: Means and method of Power and Balance development.

UNIT-3: Training Load, Load Dynamics and Training Processes

- 3.1 Training Load: Concept, definition, types and components of training load.
- 3.2 Training Methods: Continuous Method, Interval Method, Fartlek, Circuit Training, Weight Training
- 3.3 Load Dynamics: Concepts, definition and principles.
- 3.4 Technical and Tactical training: Meaning, Importance and methods.

UNIT-4: Programme, Planning and System of Sports Training

- 4.1 Periodization- Meaning, definition and types, Aims, Objectives and content of different periods- Preparatory, Competition and Transition.
- 4.2 Planning- Training session for Micro, Meso and Macro cycles.
- 4.3 Systems of Sports Training- Basic Performance, Good Performance and High Performance.
- 4.4 Talent Identification: Meaning, Process, Tests and Selection

References:

1. Dick, W.F.(1980). Sports training principles, London, Lepus Books.
2. Harro, D.(1982). Principles of sports training, Berlin: Sporulated.
3. Jensen, R.C.& Fisher, A.G.(1979). Scientific basic of athletic conditioning, Philadelphia: Lea and Fibiger, 2ndEdn.
4. Matvyew, L.P.(1981). Fundamental of sports training. Moscow: Progress Publishers.
5. Singh, H.(1984). Sports training, General theory and methods partials: NSNIS.
6. Uppal, A.K.(1999). Sports training, New Delhi: Friends Publication.
7. Bompa, T.O.& Haff, G.G.(2009). Periodization: theory and methodology of training, 5th ed. Champaign, IL: Human Kinetics.
8. Brown, L.E., & Ferrigno, V.A.(2005). Training for speed, agility and quickness, 2nd ed. Champaign, IL: Human Kinetics.
9. Carl, E.H., & Miller, J., (2005). How the training work, In: Training Speed, Agility, and quickness, Brown, L.E., & Ferrigno, V.A., eds. Champaign, IL: Human Kinetics.
10. Carl, E.K., & Daniel, D.A., (1969). Modern Principles of athletes training. St. Louis: St. Louis's Mosby Company.

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SEMESTER- 3

Course Code: CC- 302

COURSE TITLE: Computer Applications in Physical Education and Sports Science

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction to Computer Application

- 1.1 Components of computer-input and output unit, storage unit, CPU, ALU, control unit.
- 1.2 Starting & quitting windows, setting display, time & date, managing files and folders.
- 1.3 Meaning, need and importance of information and communication technology (ICT).
- 1.4 Application of computer and computer software in Physical Education and Sports.

UNIT- 2: Microsoft Office Word

- 2.1 Introduction to Microsoft Word.
- 2.2 Creating, saving and opening a document.
- 2.3 Formatting & editing features, drawing table and graphs, page setup, paragraph alignment, spelling and grammar check, bullets and numbering, page number, header and footer, footnote and endnotes, mail merge, printing option and hyperlink.
- 2.4 Preparation of word document.

UNIT- 3: Microsoft Office Excel

- 3.1 Introduction to Microsoft Excel.
- 3.2 Creating, saving and opening spreadsheet.
- 3.3 Format and editing features, adjusting columns width and row height, creating formulas, sort and filter, inserting graph and pictures, printing option.
- 3.4 Preparation of Excel worksheet.

UNIT- 4: Microsoft Office PowerPoint Presentation

- 4.1 Introduction to Microsoft PowerPoint.
- 4.2 Creating, saving and opening a PowerPoint Presentation file.
- 4.3 Format and editing features, slide show, design, inserting slide number, picture, graph, table, hyperlink and graphics.
- 4.4 Preparation of PowerPoint Presentation.

References:

1. Irtegov, D. (2004). Operating system fundamentals. Firewell Media.
2. Marilyn, M.&Roberta, B.(n.d.). Computers in your future. 2nd edition, India: Prentice Hall.
3. Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia.
4. Sinha, P.K. Sinha, P. (n.d.). computer fundamentals. 4th edition. BPB Publication.

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SEMESTER- 3

Course Code: CC- 303

COURSE TITLE: Psychology and Sociology in Physical Education and Sports

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Introduction to Psychology and Sociology

- 1.1 Meaning, Importance and scope of sports Psychology and Sociology.
- 1.2 Biological Basis of Human Behavior.
- 1.3 Individual Differences- Heredity and Environment.
- 1.4 Psycho-social aspects of Human behavior in relation to Physical Education and Sports.

UNIT-2: Learning, Maturity and Growth & Development

- 2.1 Learning: Definition, Type and Laws of Learning, Theories of Learning, Factors affecting learning, Transfer of Learning, learning Curve- Stagnation in learning.
- 2.2 Growth and Development: Stages of Development Need of Physical Activity.
- 2.3 Personality: Meaning and definition of personality, characteristics of personality, Dimension of personality, personality and sports performance.
- 2.4 Mental Aspects: Motivation, Aggression, Emotion, Anxiety and Stress

UNIT- 3: Social Science and Physical Education

- 3.1 Orthodoxy, Customs, Tradition and Physical Education.
- 3.2 Importance of festivals in Physical Education.
- 3.3 Theories of Play, Socialization through Physical Education.
- 3.4 Social Group Life Social conglomerations-Social group, Primary group and Remote group.

UNIT- 4: Culture and Physical Education

- 4.1 Features of culture, Importance of culture.
- 4.2 Importance of sports in modern society.
- 4.3 Effects of culture on people lifestyle.
- 4.4 Different methods of survey: Observation/Inspection method, Questionnaire method, Interview method.

Suggested Readings

1. B.J. Cartty, Psychology of Conporary sports champaign: Human Kinetics Publisher.
2. Jhon M. Silva & Roberts. Psychological Foundations of Sport Champaign: Human Kinetics Publisher.
3. Diane Gills, Psychological Dynamics of sports. Champaign: Human Kinetics Publisher.
4. Cox, Sports Psychology, Champaign: Human Kinetics Publisher.
5. Richard M. Sumin, "Psychology in Sports, Methods & Application. New Delhi: surjeet publication.

Gopa Saha Ray.

SEMESTER- 3

Course Code: EC- 301

COURSE TITLE: Sports Medicine, Physiotherapy and Rehabilitation (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Sports Medicine

- 1.1 Meaning and concept of sports medicine, Aim objectives of sports medicine.
- 1.2 Development of sports medicine as discipline-aspect of sports medicine.
- 1.3 Common regional injuries and their management- shoulder, elbow, wrist knee and ankle-slugs, symptoms and diagnosis of injuries.
- 1.4 Concept of Doping and doping agents banded by WADA.

UNIT- 2: Physiotherapy

- 2.1 Physiotherapy: Meaning, definition and history
- 2.2 Need and importance of Physiotherapy.
- 2.3 Therapeutic modalities: cryotherapy, superficial thermo therapy, penetrating thermotherapy, electrical stimulation.
- 2.4 Guiding principles of therapeutic modalities.

UNIT- 3: Athletic Care and Massage

- 3.1 Prevention of athletic injuries- steps of prevention, pre-participation evolution, warm up and conditioning.
- 3.2 Emergency care in athletics and First aid- Meaning and principles-First aid care for I) loss of consciousness II) control of building III) drowning and basic life support.
- 3.3 Protective and supportive equipment: Taping, Bandaging, padding and orthotics.
- 3.4 Massage: Classification-general principles, indication and contraindication.

UNIT-4: Rehabilitation

- 4.1 Concept and goal of rehabilitation.
- 4.2 Principle of therapeutic exercises- Classification, uses of therapeutic exercises.
- 4.3 Passive movement and active movement.
- 4.4 Mobility exercise.

References:

1. Christine, M.D.,(1999). Physiology of sports and exercise. USA: Human Kinetics.
2. Conley, M. (2000). Bioenergetics of exercise training. In T.R.Bechle, &R.W.Earle, (Eds.), Essentials of Strength Training and Conditioning (pp. 73-90). Champaign, IL: Human Kinetics.
3. David, R.M.(2005).Drugs in sports, (4th Ed). Routledge Taylor and Francis Group.
4. Hunter, M.D.(1979). A dictionary for physical educators. In H.M.Borrow&R. McGee, (Eds.), A Practical approach to measurement in Physical Education (pp.573-74). Philadelphia: Lea &Febiger.

Gopa Saha Ray.

SEMESTER- 3

Course Code: EC- 302

COURSE TITLE: Curriculum Design (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Modern Concept of the Curriculum

- 1.1 Need and importance of curriculum, need and importance of curriculum development, the role of the teacher in curriculum development.
- 1.2 Factors affecting curriculum-Social factors-Personnel qualifications-climatic consideration.
- 1.3 Equipment and facilities-Time suitability of hours.
- 1.4 National and Professional policies, Research finding.

UNIT- 2: Guidelines for curriculum construction

- 2.1 Focalization, Socialization.
- 2.2 Individualization.
- 2.3 Sequence and operation.
- 2.4 Steps in curriculum construction.

UNIT-3: Curriculum-Old and New Concepts, Mechanics of Curriculum Planning

- 3.1 Basic principles of curriculum construction.
- 3.2 Curriculum Design, meaning, Importance and factors affecting curriculum design.
- 3.3 Principle of Curriculum design according to the needs of the students and state and national level policies.
- 3.4 Role of Teachers.

UNIT-4: Under-graduate Preparation of Professional Preparation

- 4.1 Areas of Health Education, Physical Education and Recreation.
- 4.2 Curriculum Design-Experience of Education, Field and Laboratory.
- 4.3 Teaching practice.
- 4.4 Professional Competencies to be developed-Facilities and special resources for library, laboratory and other facilities.

References:

1. Barrow, H.M.(1983). Man and movement: principles of physical education. Philadelphia: Lea &Febiger.
2. Bucher, C.A. (1986). Foundation of physical education: St. Louis: The C.V. Mosby & Company.
3. Cassidy, R. (1986). Curriculum development in physical education. New York: Harper & Company.
4. Cowell, C.C. & Hazelton, H.W.(1956). Curriculum design in physical education, Englewood Cliffs: N.J. prentice Hall Inc.
5. Larson, L.A. (n.d.). Curriculum foundation in physical education. Englewood Cliffs: N.J. prentice Hall Inc.
6. Underwood, G.L. 91983. The physical education curriculum in secondary school: planning and implementation. England: Taylor and Francis Ltd.
7. Willgoose, C.E. (1979). Curriculum in physical education. 3rd Ed. Englewood Cliffs: N.J. prentice Hall Inc.

Glopa Saha Ray.

SEMESTER- 3

Course Code: PC- 301

COURSE TITLE: Combative Sports

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Combative Sports- any two (50+50= 100 Marks)

KARATE

A. Fundamental skills

1. Player Stances- walking, hand positions, front-leaning, side-fighting.
2. Hand Techniques - Punches (form of a punch, straight punch, and reverse punch), Blocks (eight basic).
3. Leg Techniques - Snap kicks, stretching straight leg, thrust kicks, sidekicks, round house.
4. Forms - The first cause Katas.
5. Self Defense - against punches, grabs and strikes, against basic weapons (knife, club sticks).
6. Sparring - One step for middle punch, high punch and groin punch. (Defended by appropriate block from eight basic blocks).
7. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

JUDO

A. Fundamental skills

1. Rei (Salutation)-Ritsurei(Salutation in standing position), Zarai (Salutation in the sitting position)
2. Kumi kata (Methods of holding judo costume)
3. Shisei (Posture in Judo)
4. Kuzushi (Act of disturbing the opponent posture)
5. Tsukuri and kake (Preparatory action for attack)
6. Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), Mae Ukemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)
7. Shin Tai (Advance or retreat foot movement)-Suri-ashi (Gliding foot), Twugi-ashi (Following footsteps), Ayumi-ashi (Waling steps).
8. Tai Sabaki (Management of the body)
9. NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi (Drawing ankle throw), De ashihari (Advance foot sweep), O Goshi (Major loinm), SeoiNage (Shoulder throw).
10. Katamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulder hold), Kami shihogatama (Locking of upper four quarters), Method of escaping from each hold.
11. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

BOXING

A. Fundamental skills

- a. Player stance o Stance - Right hand stance, left hand stance.
- b. Footwork – Attack, defense.
- c. Punches – Jab, cross, hook, upper cut, combinations.
- d. Defense slip – bob and weave, parry/block, cover up, clinch, counter attack.
- e. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

TAEKWONDO

A. Fundamental skills

1. Player Stances – walking, extending walking, L stance, cat stance.
2. Fundamental Skills – Sitting stance punch, single punch, double punch, triple punch.

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3. Punching Skill from sparring position – front-fist punch, rear fist punch, double punch, and four combination punch.
4. Foot Techniques (Balgisul) – standing kick (soseochagi), Front kick (AP chagi), Arc kick (Bandal Chagi), Side kick, (YeopChagi), Turning kick (DollyoChagi), Back kick (Twit Chagi), Reverse turning kick (BandaedollyoChagi), Jump kick (TwimyoChagi).
5. Poomsae (Forms) – Jang, Yi Jang, Sam Jang, Sa Jang, O Jang, Yook Jang, Chil Jang, Pal Jang (Fundamental Movement – eye control, concentration of spirit, speed control, strength control, flexibility, balance, variety in techniques).
6. Sparring (Kyorugi) – One Step Sparring (hand techniques, foot techniques, self defense techniques, combination kicks), Free Sparring.
7. Board Breaking (Kyokpa) – eye control, balance, power control, speed, point of attack.
8. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

WRESTLING

A. Fundamental skills

1. Take downs, Leg tackles, Arm drag.
2. Counters for take downs, Cross face, Whizzer series.
3. Escapes from under-sit-out turn in tripped.
4. Counters for escapes from under-Basic control back drop, Counters for stand up.
5. Pinning combination-Nelson series(Half Nelson, Half Nelson and Bar arm), Leg lift series, Leg cradle series, Reverse double bar arm, chicken wing and half Nelson.
6. Escapes from pinning: Wing lock series, Double arm lock roll, Cridge.
7. Standing Wrestling-Head under arm series, whizzer series.
8. Referees positions.
9. Game practice with application of Rules and Regulations.

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

E. Strategically approach during competition.

LATHI

A. Fundamental skills

1. Holding, Height and weight of a Lathi.
2. Anulom and Bilom- Uttar & Dakshin
3. Sannukhuttarpresthabeetan.
4. Sandipani, Jamak, Chalit, Risramandal – Baddha, Chalit&Pluta.
5. Ran of harua – Greda, Palat, Tamecha&Asar Man, Behera, Ratkathi, and Bhandar.

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

C. Strategically approach during competition.

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

Gopa Saha Ray.

SEMESTER- 3

Course Code: TP- 302

COURSE TITLE: Teaching Practice

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. General lessons- 10: within college-5 (Mock Teaching) and School Situation-5
2. Specific lessons- 10: within college-5 (Mock Teaching) and School Situation-5

Evaluation will be done by internal examiner or external examiner as per suitability of administration.

SEMESTER- 3

Course Code: TP- 303

COURSE TITLE: Coaching Practice

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Sports Specialization- Coaching lesson plan
Within college-5 (Mock Teaching)
School Situation-5

Evaluation will be done by internal examiner or external examiner as per suitability of administration.

SEMESTER- 3

Course Code: TP- 304

COURSE TITLE: Teaching Practice

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Teaching Practice: Yoga or Aerobics
Within college- 5 (Mock Teaching)
School Situation-5

Evaluation will be done by internal examiner or external examiner as per suitability of administration.

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SEMESTER- 4

Course Code: CC- 401

COURSE TITLE: Measurement and Evaluation in Physical Education

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction to Test, Measurement & Evaluation

- 1.1 Meaning of Test, Measurement & Evaluation in Physical Education.
- 1.2 Need, Importance of Test, Measurement & Evaluation in Physical Education.
- 1.3 Application of Test, Measurement & Evaluation in Physical Education.
- 1.4 Principle of Evaluation.

UNIT- 2: Criteria, Classification and Administration of Test

- 2.1 Criteria of good Test and Scientific authenticity (reliability, objectivity, validity and availability of norms)
- 2.2 Types of Test.
- 2.3 Difference between Physical Fitness test, Motor Fitness test and Sports skill test.
- 2.4 Administration of test-Advance preparation, Duties during test and after test.

UNIT- 3: Physical Fitness, Motor Fitness and Cardio-respiratory Test

- 3.1 AAHPER Youth Fitness Test.
- 3.2 AAHPERD Health Related Physical Fitness Test
- 3.3 Indiana Motor Fitness Test and JCR Test
- 3.4 Harvard Step Test, Tuttle pulse ratio Test, Yo-Yo Test and Beep Test

UNIT- 4: Sports Skill Tests

- 4.1 Mitchei's modification of McDonald Soccer Test
- 4.2 Johnson Basketball Test
- 4.3 Lockhart and McPherson Badminton Test
- 4.4 Russel-Lange volleyball Test and Schmithal-French Field Hockey Test

References:

1. Bangsbo, J.(1994). Fitness training in football: A scientific approach. Bagvaerd, Denmark: Ho+Strom.
2. Barron, H.M., &Mchee, R.(1997). A practical approach to measurement in physical education, Philadelphia: Lea and Febiger.
3. Barron, H.M., &Mchee, R.(1997). A practical approach to measurement in physical education, Philadelphia: Lea and Febiger.
4. Kansal, D.K., (1996). Test and measurement in sports and physical education. New Delhi: D.V.S. Publications.
5. Mathews, D.K., (1973). Measurement in physical education, Philadelphia: W.B. Saunders Company.
6. Pheasant, S. (1996). Body space: anthropometry, ergonomics and design of work. Taylor & Francis, New York.
7. Phillips, D.A., &Hornak, J.E. (1979). Measurement and design of work. Taylor & Francis, New York.
8. Sodhi, H.S. & Sidhu, L.S. (1984). Physique and selection of sports- a kinanthropomeric study. Patiala: Punjab Publishing House.

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SEMESTER- 4

Course Code: CC- 402

COURSE TITLE: Kinesiology and Biomechanics

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction to Kinesiology and Sports Biomechanics

- 1.1 Meaning and Definition of Kinesiology, Biomechanics and Sports Biomechanics.
- 1.2 Importance and Scope of Kinesiology and Sports Biomechanics in Physical Education and Sports Science.
- 1.3 Terminology of Fundamental Movements: Locomotion, Non-locomotion and Manipulative
- 1.4 Fundamental Concepts of axes and Planes, Centre of Gravity, Line of Gravity, Scalars and Vectors Quantities, Equilibrium.

UNIT- 2: Kinesiological Aspects of Human Movement

- 2.1 Classification of Joints and Muscles, Name of the Major Superficial Muscles, movements around the joints.
- 2.2 Types of Muscle Contractions.
- 2.3 Posture- Meaning, Types and Importance of Good Posture.
- 2.4 Fundamental Concepts of - Angle of Pull, All or None Law, Reciprocal Innervations.

UNIT- 3: Mechanical Concepts

- 3.1 Force- Meaning, Definition, Types, Units and its application to sports activities.
- 3.2 Lever- Meaning, Definition, Types and Body Lever. Wheel, Axel and Pulley.
- 3.3 Motion- Concept, Types and its Application to Sports Activities. Newton's Law of Motion.
- 3.4 Projectile Motion- Concept, Types, Principles and Factors Influencing Projectile Motion.

UNIT-4: Kinematics and Kinetics of Human Movement

- 4.1 Linear Kinematics- Distance and Displacement, Speed and Velocity, Acceleration.
- 4.2 Angular Kinematics- Inertia, Mass, Momentum, Impulse, Friction.
- 4.3 Linear Kinetics- Inertia, Mass, Momentum, Impulse, Friction.
- 4.4 Angular Kinetics- Moment of – Inertia, Couple, Stability.

References:

1. Bunn, J.W.(1972). Scientific principles of coaching, Englewood Cliffs: N.J. prentice Hall Inc.
2. Hay,J.G.& Reid, J.G. (1982). The anatomical and mechanics and human motion. Englewood Cliffs: N.J. prentice Hall Inc.
3. Hay,J.G.& Reid, J.G. (1988). Anatomy and mechanics and human motion. Englewood Cliffs: N.J. prentice Hall Inc.
4. Hay, L.G. (1970). The biomechanics of sports techniques. Englewood Cliffs: N.J. prentice Hall Inc.
5. Simonian, C.(1811). Fundamentals of sport biomechanics Englewood Cliffs: N.J. prentice Hall Inc.
6. Hall.J.S. (1991), Basic Biomechanics. The McGraw-Hill Companies, Inc. First Edition 1991, Brown and Benchmark Publishers.

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SEMESTER- 4

Course Code: CC- 403

COURSE TITLE: Research and Statistics in Physical Education

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction to Research

- 1.1 Definition of Research, Need and importance of Research in Physical Education and sports.
- 1.2 Scopes of Research in Physical Education & sports.
- 1.3 Classification of Research.
- 1.4 Research Problem, Quality of a good researcher.

UNIT- 2: Research Proposal and Project Report

- 2.1 Need for surveying related literature sources.
- 2.2 Research Proposal- Meaning and Significance of Research Proposal.
- 2.3 Preparation of a Project proposal and Project report.
- 2.4 Methods of Collection of data.

UNIT- 3: Basic of Statistical Analysis

- 3.1 Statistics: Meaning, Definition, nature and Importance.
- 3.2 Class Intervals, Raw Score, Continuous and Discrete Series.
- 3.3 Frequency and Frequency Distribution, Construction of Frequency Distribution table.
- 3.4 Graphical Presentation of Data Histogram, Frequency Polygon, Frequency Curve.

UNIT-4: Statistical Models in Physical Education and Sports

- 4.1 Measures of Central Tendency: Mean, Median and Mode.
- 4.2 Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungroup data.
- 4.3 Measures of variability: Meaning, importance, computing from group and ungroup data.
- 4.4 Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data.

References:

1. Best, J.W.(1963). Research in education. U.S.A.: Prentice Hall
2. Clark, H.H. & Clark, D.A.(1975). Research process in physical education. Englewood cliffs, New Jersey: Prentice Hall, Inc.
3. Garrett, H.H., (1981). Statistics in psychology and education. New York: VakilsFeffer and Simon Ltd.
4. Oyster, C.K., Hanten, W.P., L lorens, L.A. (1987). Introduction to research: A guide for the health science professional, London: J.B. Lippincott Company.
5. Thomas, J.R., & Nelson J.K. (2005). Research method in physical activity U.S.A.: Champaign, IL: Human Kinetics Books.
6. Thomas, J.R., Nelson, J.K., & Silverman, S.J. (2011). Research method in physical activity U.S.A.: Champaign, IL: Human Kinetics Books.
7. Uppal, A.K. (1990). Physical Fitness: how to develop. New Delhi: Friends Publication.
8. Verma, J.P. (2000). A text book on sports statistics, Gwalior: Venus Publications.

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SEMESTER- 4

Course Code: EC- 401

COURSE TITLE: Theory of sports Games (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT- 1: Introduction

- 1.1 General Introduction of specialized game and sport: Athletics, Badminton, Volleyball, Football, Kabaddi, Kho-Kho, Each Game or Sports to be dealt under the following heads: History and development of the game and sports.
- 1.2 Ground preparation and lay out of the above mentioned games/sports.
- 1.3 Standard equipment and their specification of the above mentioned games/sports.
- 1.4 Ethics of sports and sportsmanship.

UNIT-2: Scientific principles of coaching (particular sports and game specific)

- 2.1 Motion- Types of motion and displacement, Speed, Velocity, Acceleration, Distance and Newton's Laws of motion.
- 2.2 Force-Friction, Centripetal and Centrifugal force, principles of force.
- 2.3 Equilibrium and level: Their types
- 2.4 Sports Training- Aims, Principles and Characteristics, Training load-Component. Principles of load, over load (Causes and symptoms), Crest load, Maximum and Sub maximum load.

UNIT-3: Physical fitness components: (Particular sports and games specific)

- 3.1 Definition and types of speed, strength and endurance.
- 3.2 Flexibility and its types.
- 3.3 Coordinative ability and its types.
- 3.4 Training methods: Development of Components of Physical fitness and fitness through following training methods (Continuous method, Interval method, Circuit method, Fartlek and Weight training.)

UNIT-4: Conditioning Exercise and Warming Up

- 4.1 Concept of Conditioning and warming up.
- 4.2 Role of weight training in games and sports.
- 4.3 Teaching of fundamental skill and their mastery (Technique, Tactics and different phases of skill acquisition), Recreational and lead up games.
- 4.4 Offence and defense, Principles of offense and defense.

References:

1. Bunn, J.W. (1968). The art of officiating sports. Englewood cliffs N.J. prentice Hall.
2. Bunn, J.W.(1972). Scientific principles of coaching, Englewood Cliffs: N.J. prentice Hall.
3. Dyson, G.H. (1963). The mechanics of athletics. London: University of London Press Ltd.
4. Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
5. Singer, R.N. (1972). Coaching, athletic & psychology. New York: Pre. Hall.

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SEMESTER- 4

Course Code: EC- 402

COURSE TITLE: Sports Management (Elective)

Full Marks: 100 (Theory: 70, Internal: 30)

Credits: 04

Lecture Hours: 80

UNIT-1: Introduction to Sports Management

- 1.1 Nature, Scope and Purpose of Sports Management.
- 1.2 Steps and Principles of Sports Management.
- 1.3 Qualities and Competencies require for the Sports Manager.
- 1.4 Even Management in Physical Education and Sports.

UNIT-2: Development of Leadership Qualities

- 2.1 Meaning and Definition of Leadership.
- 2.2 Forms of Leadership- Autocratic, Laissez-Faire, Democratic, Benevolent dictator.
- 2.3 Qualities of administrative Leader.
- 2.4 Preparation of administrative Leader.

UNIT-3: Sports Management in Different Agencies

- 3.1 Sports Management in School, College and Universities.
- 3.2 Factors affecting planning.
- 3.3 Planning a school or college sports programme.
- 3.4 Controlling a school, college and university sports programme- Developing Performance standard, establishing a reporting system, Evaluation.

UNIT-4: Financial Management in Physical Education

- 4.1 Financial Management in Physical Education and Sports in different Institutions.
- 4.2 Budget-Meaning, Importance, Criteria of preparing a good Budget.
- 4.3 Steps of Budget Making.
- 4.4 Principles of Budgeting.

References:

1. Ashton, D.(1968). Administration of physical education for women. New York: The Ronal Press CI.
2. Bucher, C.A. Administration of physical and athletic programme. 7th edition, St. Louis: The C.V. Mosby Co.
3. Daughtrey, G. & Woods, J.B.(1976). Physical education and intramural programmes.
4. Earl, F.Z., & Gary, W.B. (1963). Management competency development in sports and physical education. Philadelphia: W.Lea and Febiger.

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SEMESTER- 4

Course Code: PC- 401

COURSE TITLE: Game Specialization

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Games Specialization:

Evaluation of Performance Ability: to Select one activity as per available facilities of the College (except Track & Field/Gymnastics/Swimming)

SEMESTER- 4

Course Code: PC- 402

COURSE TITLE: Adventure Sports and Lab Practical

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. Adventure activity/Outdoor activity: Camping/Trekking/Hiking/Rock Climbing/Artificial Climbing, Educational Tour etc. (50 marks) Evaluation by Internal examiner (within college)
2. Lab-based Psychological/Biomechanical measures-50 marks. Evaluation by External examiner (within college)

SEMESTER- 4

Course Code: PC- 403

COURSE TITLE: Team Games

Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

Team Games- any two (50+50= 100 Marks):

CRICKET

A. Fundamental skills

6. Batting-Forward and backward defensive stroke.
7. Bowling-Simple bowling techniques.
8. Fielding-Defensive and offensive fielding.
9. Catching-High catching and Slip catching.
10. Stopping and throwing techniques.
11. Wicket keeping techniques.
12. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

BASKETBALL

A. Fundamental skills

1. Player stance and ball handling.
2. Passing-Two Hand chest pass, Two hand Bounce Pass, One Hand Base ball pass, Side Arm Pass, Over Head pass, Hook Pass.
3. Receiving-Two Hand receiving, One hand receiving, Receiving in stationary position, Receiving while jumping, Receiving while running.

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4. Dribbling-How to start dribble, How to drop dribble, High dribble, Low dribble, Reverse dribble, Rolling dribble.
 5. Shooting-Layup shot and its variations, one hand set shot, One hand jump shot, Hook shot, Free throw.
 6. Rebounding-Defensive rebound, Offensive rebound, Knock out, Rebound Organization.
 7. Game practice with application of Rules and Regulations.
- B. Rules and their interpretations and duties of the officials.**
- C. Strategically approach during competition.**

HOCKEY

A. Fundamental skills

8. Player stance & Grip 2. Rolling the ball Dribbling 3. Push o Stopping 4. Hit 5. Flick
6. Scoop 7. Passing – Forward pass, square pass, triangular pass, diagonal pass, return pass.
8. Reverse hit 9. Dodging 10.Goal keeping – Hand defense, foot defense 11. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

SOFTBALL

A. Fundamental skills

1. Catching: one handed, two handed, with feet grounded, in flight.
2. Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, lob); two handed passes (push, overhead, bounce).
3. Footwork: landing on one foot; landing on two feet; pivot; running pass.
4. Shooting: one hand; two hands; forward step shot; backward step shot.
5. Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
6. Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
7. Game practice with application of Rules and Regulations.

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

C. Strategically approach during competition.

BASEBALL

A. Fundamental skills

1. Hitting
2. Catching: one handed, two handed, with feet grounded, in flight.
3. Throwing
4. Fielding
5. Base running
6. Game practice with application of Rules and Regulations.

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

8. Strategically approach during competition.

THROWBALL

A. Fundamental skills

1. Stance 2. Service 3. Catching 4. Passing 5. Smash 6. Block

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

C. Strategically approach during competition.

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TENNIKOIT

A. Fundamental skills

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

C. Strategically approach during competition.

N.B: In order to assess the officiating level, students will be asked to work on the blank score sheet used for team games and individual activities. For this purpose, fifteen (15) marks be reserved out of thirty (30) marks kept for internal assessment.

SEMESTER- 4

Course Code: PC- 404

COURSE TITLE: Fitness and Skill Test
Full Marks: 100 (External: 70, Internal: 30)

Credits: 06

Practical Hours: 120

1. AAHPERD Youth Fitness Test (50 marks Evaluation on any three items).
2. Standardized Skill Test: McDonald Soccer Test, Brady Volleyball Test, Miller wall Volley Test (50 marks any two)

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