

**MANONMANIAM SUNDARANAR UNIVERSITY
TIRUNELVELI**

UG COURSES – AFFILIATED COLLEGES

B.Sc. Physical Education

(Choice Based Credit System)

(with effect from the academic year 2016-2017 onwards)

(44th SCAA meeting held on 30.05.2016)

Sem	Pt I/II/ III/IV V/VI	Sub No.	Subject status	Subject Title	Hrs/ week	Cre dits	Marks				
							Maximum			Passing minimum	
							Int.	Ext	Tot.	Ext	Tot.
V	I	33	Core - 7	Theories of Games (Basket Ball, Foot ball Hockey Cricket, Volley ball)	4	4	25	75	100	30	40
	II	34	Core - 8	Theories of Track and Field	4	4	25	75	100	30	40
	III	35	Elective - 1	Sports Nutrition	5	5	25	75	100	30	40
		36	Elective - 2	Exercise Physiology	5	5	25	75	100	30	40
		37	Practical -5	Major Game (Basket Ball, Foot ball, Hockey Cricket, Volley ball) Anyone Game (Carry Over Practical)	3	-	50	50	100	20	40
		38	Practical - 6	Track and Field Events (Carry Over Practical)	3	-	50	50	100	20	40
		39	Practical - 7	Physiotherapy (Carry Over Practical)	2	-	50	50	100	20	40
	IV	40	Skill Based subject (Common)	Personality Development / Effective Communication	4	4	25	75	100	30	40
				Subtotal	30	22					

VI	I	41	Core - 9	Test Measurement and Evaluation	6	4	25	75	100	30	40
	II	42	Core - 10	Principles of Sports Training	6	4	25	75	100	30	40
	III	43	Core - 11	Sports Physiotherapy	5	4	25	75	100	30	40
		44	Elective - 3	Sports Journalism and Mass Communication	5	5	25	75	100	30	40
		45	Practical - 5	Major Game (Basket Ball, Foot ball, Hockey Cricket, Volley ball) Anyone Game (Carry Over Practical)	3	4	50	50	100	20	40
		46	Practical - 6	Track and Field Events(Carry Over Practical)	3	4	50	50	100	20	40
		47	Practical - 7	Physiotherapy (Carry Over Practical)	2	4	50	50	100	20	40
				Subtotal	30	29					

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-V/ Ppr.no.33/Core -7**

THEORIES OF GAMES

(Basketball, Cricket, Foot ball, Hockey, & Volleyball)

- Unit I** a) History of the Games: World, India.
 b) Organization of Games: (Working Federations): World, India.
- Unit II** Training Warm-up, Warming- down,. Specific Warming for the Games
 Essential fitness Components Conditioning, Load.
- Unit III** Fundamental Skills and Advanced Skills
 Types of Skills, Special Applied Mechanics
- Unit IV** Tactics and Strategy: Systems in the Games, Lead -up Games, Evaluation.
- Unit V** Rules of Games
 a) Rules and their interpretations.
 b) Method of officiating and scoring
 c) Layout and maintenance of play fields
 d) Equipments and their specifications.

References:-

1. Cole man brain and peter ray,basset hall ,East ardsley,Ep publishingltd.,1976.
2. Tyson frank The Cricket Coaching Manual ,Calcutta,Rupa &Co.,1985.
3. Andrew keith ,Bob carter and les lenham,Cricket ,East ardesly,Ep Publishing ltd.,1978.
4. Amarnath Mohinder ,learn to play Good cricket ,Delhi ,surjeet publications.
5. Thomson willam teaching soccer ,Delhi ,surjeet publications
6. Dhanraj V.Hubert ,volley ball ,A modern approach ,patila ,SAINSNIS ,1971
7. Cox H.Richard Teaching Volley ball ,delhi ,surjeet publiucations
8. James Dane,Volley ball for schools ,delhi,S.Chand&Company ltd.
9. Saggar S.k .,Skills and Tatics: Volleyball, Delhi Lokesh Thani Sports Publiction,1984.

10. Larche, Harry, F, "Techniques to Football Coaching" London, A.S. Barnes and company 1969.
11. Carting Ganagon, "Play Better Soccer, in All Colour" W.B,Saundess Company, 1972.
12. Wein Horat, " The Science of Hockey:" London, Pelham Books, 1970.
13. Milford, D.S Hockey Practice and Tactics, London Mnolds and Company, 1949.
14. Colberk, A.L, "Modern Basketball - A Fundamental Analysis of Skills and Tacties" London, Nicholes Kayl 1966.

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-V/ Ppr.no.34/Core -8**

THEORIES OF TRACK AND FIELD

- Unit I** History of Track and Field: India, Asia, and World.
Organisation of Track and Field, Federations: India, World Track and Field Events.
- Unit II** Warm-up, Warm down, Physical fitness Qualities, load and safety measures in track and field. Techniques in Sprints, Middle Distance and Long distance Running, types of starts, acceleration and finishing.
- Unit III** Techniques in Jumps: Long Jump, Triple Jump, High Jump, Pole vault Techniques in Throws: Shot Put, Discus Throw, Javelin Throw, Hammer Throw
- Unit IV** Combined Events Decathlon, Heptathlon, Pentathlon and Triathlon. Scoring system of combined events Techniques in Hurdles, and Relay Races
- Unit V** Competitions, Rules, Officiating, Equipments and their specifications, Standard and Non Standard tack Guiding principles of standard track. Lay out of 200 m Track and Lay out and maintenance of 400m Track.

References:-

1. Doherty, J., Manneth, Mudern Track and Field Engle wood Cliffs; N.J. Prientice Hall Inc.
2. Dyoon, Geoffray, G.H. The Mechanics of Athelitics London : University of London Press Ltd., 1962.
3. Ken O Bosen Track and Field Fundamental Techniques, MS Publicationm Patiala.
4. Handbook, AAFI, New Delhi.
5. Prabakhar Eric., The way to Atheletic Gold Delhi, Affiliated Eastt - West Press Privated Ltd., 1995.
6. Rogres, L. Joseph., USA Track & Field Coaching Manual USA: Herman Kinetics.

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-V/ Ppr.no.35/Major Elective -1**

SPORTS NUTRITION

- Unit I** Meaning Need, Nature and Importance of Nutrition Role of Nutrition on Higher Performance in sports
- Unit II** Basics of Nutrition, Carbohydrates, Fats, Proteins, Vitamins, Minerals, Water, Balanced diet, Nutritive value of Food stuffs.
- Unit III** Nutrition for Athletes and players, Energy requirements in Sports, Carbohydrate in loading.
- Unit IV** Percentage of energy derived from foods, Glycemic Index of food, Dietary fiber of food. Nutritive value of food stuffs.
- Unit V** Principles of weight control, Exercise. The Key to successful weight loss management designing weight loss programme. Tips for control body weight.

References:-

1. Pande P.K. and L.C. Gupta, Putline of Sports Medicine : Jaypee Brothers, New Delhi, 1987.
2. Hoeger W.K. Werner and Sharon A. Hoeger, Fitness and Wellness : Mortor Publishing Company, Englewood, 1990.
3. Goswami Shashikant, Nutrition for sports, SAINSNIS, Patiala, 1996

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-V/ Ppr.no.36/ Major Elective - 2**

EXERCISE PHYSIOLOGY

- Unit I** Proportion and Structure of muscle - Structure of muscle - fiber - filament model of contraction - muscular theory of contraction - Muscular fatigue
- Unit II** Energy Release -Aerobic metabolism - Anaerobic metabolism - Nerves integration - The motor neuron - The synapse - The action potential - Transmission of the nervous impulse
- Unit III** Oxygen and Carbon dioxide Transport - Gas exchange - Respiration - lung volume - mechanism of breathing - Effect of exercise on pulmonary ventilation - Intra pulmonary pressure - Intrapelmal pressure - Reflex regulation of respiration.
- Unit IV** Heart and Circulation - Effect of exercise on cardiac output - Effect of exercise on muscle blood flow - Cardiac cycle - Cardiac output and Cardiac index - Stroke volume - Nervous and Chemical control of the heart.
- Unit V** Physiological aspect of exercise and sports - Concept of physical fitness and physical training - Physiological aspects of developments of basic motor qualities like strength, speed, endurance, flexibility and coordination - Work capacity under different environmental condition - hot cold, humid, high altitude - Effect of alcohol, drugs and smoking on athletic performance - Exercise and weight control.

References:-

1. Gresyton Ac. text book of Medical Physiology, W,B, Saunder Company, Philodelphia.
2. Karporich P.V. and Sinning W.B. - Physiology of muscular activity.
3. D.E. Vries H.A. - Physiology for physical Education and Athletics. Strape press, London. 1976.

Core Practical III - Major Games Specialization
BASKETBALL, CRICKET, FOOTBALL, HOCKEY, VOLLEYBALL
(CARRY OVER PRACTICAL)

Core Practical IV - TRACK AND FIELD
(CARRY OVER PRACTICAL)

Core Practical V - PHYSIOTHERAPY
(CARRY OVER PRACTICAL)

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.41/Core-9**

TEST AND MEASUREMENT IN PHYSICAL EDUCATION

- Unit I** Meaning of Test, Measurement and Evaluation. History of Test, Measurement and Evaluation, Need and importance of Test, measurement and Evaluation.
- Unit II** Classification of test- Sports Knowledge test- Purpose of knowledge test- classification of knowledge test- Standardised and Teacher made test- Skill test classification- Objective test- subjective test- qualities of the test- Administration of the test- Advance preparation- Duties during testing - Duties after testing
- Unit III** Criteria of test selection-Validity, reliability, Objectivity, Norms, Administrative feasibility- Strength test – Bend knee sit ups test. Flexibility test – Sit and reach test- Speed test – 50 mts run- Cardio respiratory Endurance Cooper 12 minute Run / Walk test.-Explosive strength test – Standing Broad Jump
- Unit IV** Definition - Health related fitness - Skill related Physical fitness.
- AAHPERD Youth Fitness test. . Motor fitness –JCR test
- Barrow motor ability test. Harward step test
- Karws weber test. Margaria –Kalamen power test
- Unit V** Test of Specific sport skills.
- Basketball test- Johnson Basketball Ability test – Knox Basket Ball test.
- Hockey Chapman Ball Control test in Hockey.
- Soccer -McDonald Volleying Soccer Test.-
- Volley ball Helmen Volley ball test
- Modified Brady Volley Ball Test.
- Badminton French Short Serve Test. - Tennis - Broer - Miller Tennis Test.

References :-

1. Safrit Margarat J. "Measurement in Physical Education and Exercise Science". St. Louis, Times Mirror Mosby College publishing, 1986.
2. Bosco, James S. "Measurement and Evaluation in physical Education and Sports", New Jersey, Prentice Hall Inc., 1983.
3. Clarke H. "Application of measurement in Health and Physical Education, Pretice Hall Inc., 1967.
4. Mathews K. Donald, "Measurement in Physical Education" London W.S. Saunders Company, 1973.

MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.42/Core-10

PRINIPICLES OF SPORTS TRANING

- Unit I** Introduction - Meaning and Definition of Sports Training -Aim -characteristics- Principles of Sports Training-
- Unit II** Training Load – Types of Load –Components of load- Judgment of Load- Adaptation - Relationships between Load and Adaptation. Over load- Causes, Symptoms and Remedies.- Strength - Forms of strength - Means and Methods to improve strength.
- Unit III** Speed Forms - Means and Method to improve speed - Endurance -Forms of Endurance - Means and Methods to improve Endurance
- Unit IV** Flexibility - Forms of flexibility Means and Methods to improve flexibility - Coordination - Forms of Coordination - Means and Methods to improve coordination - Training plan- Periodisation- Stages of Periodisation- Types of Periodisation - Preparatory period - competition period - Transitional period- long term and Short term plans - Cyclic process of training
- Unit V** Technical preparation - Aims to techniques in sports- Fundamentals and methods for development of technique in sports - Stages of technical development - causes and correction of fault – Tactical preparation- Aims of Tactics- Methods of tactical development.

References :-

1. J. Bunn Scientific Principles of coaching -.
2. Hardayal Singh.Sports Training:
3. Dr M.Elango, M.Kandasamy,P.Sivagnanam Fundamentals of Sports Training

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.43/Core-11**

SPORTS PHYSIOTHERAPY

- Unit I** Meaning, Nature, Need and Importance of Physiotherapy
- Unit II** Electricity and Conductor, Short wave diathermy, Microwave diathermy, Diapulse Diathermy, Ultra Sound Waves, Infra red rays, Ultra violet rays - Sources - Effect and uses - Techniques for infra red and ultra violet irradiation.
- Unit III** Massage Therapy
- Brief History of Massage, Points to be considered in giving massage, classification of the Manipulations used in massage. The Technique, the Effect, uses, Indication and contra- Indications of all manipulations.
- Unit IV** Rheumatic Conditions
1. Classification – Rheumatoid Arthritis
 2. Spondylitis
 3. Acute respiratory conditions
 4. Chronic respiratory conditions
 5. Conditions of the Nervous System.
- Introduction, Sign and Symptoms of neurological dis-orders like Paraplegia, Hemiplegia, Cerebral Palsy. Various infections of the Nervous System-Meningitis, Poliomyelitis, cerebral palsy.
- Unit V** Conditions of the cardio vascular system
1. Introduction, heart failure, classification, care, signs and symptoms and prevention.
 2. Chronic vascular disorders, coronary occlusion and Efforts requiring hypertension.
 3. Dis-orders of the blood vessels- Atherosclerosis, cold extremities, various thrombosis
 4. Fracture of the upper extremity and lower extremity
 5. Dislocation

References:

- 1) Joan, N. Laan, "Physiotherapy in Medical Conditions"
- 2) Thorndike, "Athletic Injuries"
- 3) Joan, "Physiotherapy in Surgical conditions"
- 4) Henry, C. Kondal and Florence P. Kondal, Muscle and Functions.
- 5) I.B. Clayton, "Text Book of Electrotherapy" and Actiontherapy
- 6) Branda Savage, "Preliminary electricity for the Physiotherapist"
- 7) Edwin M. Prasnet, "Manual of Massage and Movements"
- 8) R. Foracks, "Exercise Therapy"
- 9) M.V.Locs, "Manual of Massages"
- 10) Adish Luchwald, "Physical Rehabilitation for Daily Living"

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.44/Major Elective-3**

SPORTS JOURNALISM AND MASS COMMUNICATION

- Unit I** Sports Journalism - Meaning, Need, Nature and Scope, Aim and Objectives of Mass Communication. Purpose of mass media for the propagation of sports and games Growth of sports communication and periodicals Sports coverage Sports coverage on AIR, T.V and Films
- Unit II** Basic Principles of sports reporting. Difference between general news reporting and Sport reporting Source of sports news, Sports spot news Advanced story and flash back Follow up story Basic of Athletic reporting, Basics of Games Reporting, Interviews, Photos, News, Tit-bits.
- Unit III** Editing - Techniques Editor - Sub Editors Copy reading and handling sports news Design and makeup of the sports page Typography and various process of printing News paper styles and slant News Structure
- Unit IV** Radio & TV Commentary. Differences between Radio & TV Commentary. Experts comments Sports reviews for the radio and T.V
- Unit V** Advertising and Newspaper Management. Radio and T.V Advertising News paper organization and management of news paper circulation Ethics and Responsibilities of Sport Journalists.

References :-

1. Gurusamy, Ithazial Kalai, Dindigul : Guru - Themozhi, 2001.
2. Ahuja A.N., Theory and Practice of Journalism, Subject Publication, New Delhi, 1984.
3. Kamath, M.V., Professional Journalism, Vikas Publishing House Ltd., New Delhi, 1981.
4. Puri G.K., 'Journalism, Sudha Publication, Pvt., Ltd., New Delhi.

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.45/Core Practical - 5**

Major Games (Specialization)

Unit I

General and Specific Conditioning Exercises

Unit II

Fundamental Skills (Offensive Skills, Defensive Skills)

Unit III

Techniques and Tactics

Unit IV

Lead up games and System of Play

Unit V

Method of Officiating Play field, Equipment specifications and Scoring

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI / Ppr.no.46/Core Practical - 6**

TRACK AND FIELD

Unit I

Warming up: General and Specific Exercises

Unit II

Techniques in Sprints Middle Distance Long Distance Hurdles and Relay Races

Unit III

Techniques in Jumps Long Jump, Triple Jump, High Jump, Pole Vault

Unit IV

Techniques in, Shot Put, Discus Throw, Javelin Throw, Hammer Throw

Unit V

Officiating, Rules and Regulations Play field, Equipment specifications and Scoring

**MSU/2016-17/UG-Colleges/Part-III (B.Sc. Physical Education)
Semester-VI/ Ppr.no.47/Core Practical -7**

PHYSIOTHERAPY

Unit I

Action Therapy - Infra Red Radiation

- a) How to give the Infra red Radiation
- b) Techniques for Infra red Radiation
- c) Indication of Infra red Radiation
- d) Contra Indication Infra red Radiation
- e) Complications of Infra red Radiation

Unit II

Massage Therapy

- a) How to give general Massage
- b) General Massage Technique
- c) Effects of sports Massage
- d) Correct use of sports Massage
- e) Contra indication of sports Massage
- f) Cardiac Massage
- g) Abdominal Massage

Unit III

Exercise Therapy

- a) Basic Principles of Exercise Therapy
- b) Purpose of Exercise Therapy
- c) Types of Exercise Therapy
- d) Instruments used for Exercise Therapy
 - 1. Tacment Bar
 - 2. Abdominal Bench Press
 - 3. Overhead Lateral Pully
 - 4. Leg Press

Unit IV

A. Respiratory System

How to Examine the Patients Suffering from Respiratory disease

- a) Inspection
- b) Palpation
- c) Auscultation
- d) Percussion
- e)

B. Cardio-Vascular System

- a) Inspection
- b) Palpation
- c) Auscultation
- d) Percussion

How to measure the Blood Pressure

How to use the Treadmill for Cardio-vascular patients

Unit V

Nervous System

How to Examine the Patients Suffering from Nervous system

- a) Carnial Nerve Examination
- b) Motor system examination
- c) Sensory system examination
- d) Reflexes
 - i) Superficial Reflexes
 - ii) Deep Reflexes