

**MANONMANIAM SUNDARANAR UNIVERSITY,
TIRUNELVELI
UG COURSES – AFFILIATED COLLEGES
B.Sc. Physical Education
(Choice Based Credit System)
(With effect from the academic year 2020-2021 onwards)**

I Semester

PART	Core/Allied	Title	Hours	Credits
Part I	Language	Tamil/other	6	4
Part II	Language	Communicative English	6	4
Part III	Core I	Foundation of Physical Education & Theories of Gymnastics	4	4
Part III	Major Practical-I	Gymnastics (Practical)	2	2
Part III	Add on Major (Mandatory)	Professional English for Physical Sciences - I	4	4
Part III	Allied I	Anatomy and Physiology	4	3
Part III	Allied Practical-I	Anatomy and Anthropometric Measurement (Practical)	2	2
Part IV	Common	Environmental Studies	2	2
Total			30	25

II Semester

PART	Core/Allied	Title	Hours	Credits
Part I	Language	Tamil/other	6	4
Part II	Language	English	6	4
Part III	Core III	Theories of Yoga	4	4
Part III	Major Practical-II	Asanas, Pranayama, Kriyas	4	2
Part III	Add on Major (Mandatory)	Professional English for Physical Sciences - II	4	4
Part III	Allied II	Health Education, Safety Education & First Aid	4	3
Part IV	Common	Value Based Education / சமூகஓழுக்கங்களும் பண்பாட்டு விழுமியங்களும் / Social Harmony	2	2
Total			30	23

Foundation of Physical Education & Theories of Gymnastics

Unit I Meaning, Need, Nature and Scope of Physical Education, Aim and objectives of Physical - Education (Physical, Cognitive, Neuromuscular, Affective, Social, emotional, spiritual and recreational)Physical Training and Physical Culture - Recreation and its types, Philosophy and Physical Education.

Unit II Scientific basis of Physical Education: Contributions of Allied Sciences – Anatomy, Physiology, Kinesiology, Biomechanics, Biochemistry, Sports Medicine, Morphology, Computer Science, Psychology, Sociology and Bio-Technology. Body Type – Sheldon and Kresthmer classification - Biological Foundation of Physical Education

Unit III Physical Education in India,YMCA and its contributions for sports in India - Recent Developments on sports in India, SAI, NSNIS, LNIPE, SDAT, Sports Academics,National Awards and Honors in Sports, Sports Scholarships. Sports competitions – (Asian games –Commonwealth games- Asia- Afro games-SAF, SGF, RDS and BDS).Olympic Games - (Ancient and Modern), Olympic flag, Olympic Torch.Indian Olympic Association - Careers in Physical Education (Teaching, Coaching). Issues, challenges and the Future of Physical Education.

Unit IV History of Gymnastics: India, Asia, and World Organization of Gymnastics: Federations_ India, World Warming-up, Specific Exercises for Gymnasts, Training Qualities, Load, Safety Hints, Warm-down.

Unit V

Floor Exercises for Men and Women Exercises and Techniques on Pommel Horse, Exercises and Techniques on Vaulting, Exercises and Techniques on Roman Rings, Exercises and Techniques on Parallel Bar, Exercises and Techniques on Horizontal bar Exercises and Techniques on Balance Beam, Exercises and Techniques on Asymmetric Bar. Important Competitions, Rules, Officiating, Equipments and their specification, Maintenance of Equipments.

References:-

1. Kamlesh M.L., Physical Education : Facts and Foundation, New Delhi, P.B. Publication, 1998.
2. Wuest, Deborah, A. and Charles A. Bucher : Foundations of Physical Education and Sport, New Delhi : B.L. Publication Pvt., Ltd.,
3. Wellman and Cowell, Philosophy and Principles of Physical Education, AmarvatiSuyogPrakasan.
4. Thirunarayanan, C. and Hariharan, S., Analytical History of Physical Education, Karaikudi, C.T. & S.H. PUB., 1990.
5. Sharma, O.P., History of Physical Education, New Delhi :KhelShitya Kendra, 1998.
6. Jackson Sharman/Modern Principles of Physical Education : A.A. Barnes & Co., New York.
7. Coopn Phyllis and Milan Trnka, Teaching Gymnastic Skills to men and Women, Delhi, Surject Publications, 1982.
8. Ayleoyd Peter, skills and Tactics of Gymnastics, Hong Kong : Marshall Cavendish, Ltd., 1982.
9. ModakpintumGymnastics : A Scientific Approach, Pilani : Runthala Publisher's and Printers, 1996.
- 10.Elango.M, Kandasamy. M ,Sivagnanam.P . Basic Gymnastics: Krishna Publications, 2007

**MSU/ 2020-21 / UG-Colleges /Part-III (B.Sc. Physical Education) /
Semester – I / Major Practical – I**

Gymnastics (Practical)

Unit I - Floor Exercises

1. Forward Roll , 2. Backward Roll, 3. Handstand Forward Roll
4. Jump Forward to Roll Forward, 5. Head Spring, 6. Hand Spring
7. Cart Wheel, 8. Round Off

Any one of the Apparatus in the following

Unit II - Pommel Horse

1. Supports, (Front , Rear ,Straddle, Split, Feint) ,
2. Single leg Circle Clockwise (Right leg and Left leg)
3. Single leg Circle Anti Clockwise (Right leg and Left leg)
4. Double leg Circle , 5. Scissors

Unit III - Parallel Bar

1. Perfect Swing , 2 .Straddle Seat, 3. L-Support, 4.Forward Roll
5. Backward Roll, 6. Shoulder Stand, 7. Dismount

Unit IV - Horizontal Bar

1. Perfect Swing, 2. Free Hip Circle, 3. Mill Circle Forward
- 4.Mill circle Backward, 5.Dismount

Unit V - Roman Rings

1. Perfect Swing, 2. Invested Hang, 3. Rear Hang, 4.Upstart
- 5.L-Support, 6.Shoulder Stand, 7.Dismount

References:

1. Coopn Phyllis and Milan Trnka, Teaching Gymnastic Skills to men and Women, Delhi, Surject Publications, 1982.
2. Ayleoyd Peter, skills and Tactics of Gymnastics, Hong Kong : Marshall Cavendish, Ltd., 1982.
3. ModakpintumGymnastics : A Scientific Approach, Pilani : Runthala Publisher's and Printers, 1996.
4. Elango.M, Kandasamy. M ,Sivagnanam.P . Basic Gymnastics: Krishna Publications, 2007

Anatomy and Physiology

Unit I Description of Cell, Tissue, organ system, microscopic structure of the Cell and functions of various parts of the cell

Skeletal System

The arrangement of the Skeleton - Functions of the Skeleton - Classification of Joints with examples- Structure of the synovial joints- Movement of the joint.

Unit II Muscular System

Functional Classification of Muscles and its significance, General characteristics of Muscles.Terms and Terminology- Myology, Histology, Osteology, Arthology, dermatology, Ophthalmology, cardiology, Neurology, Nephrology, Anterior, Posterior, Lateral, Medial, Inferior, and Superior.

Unit III Cardio- Vascular System

Constituents of Blood and their functions - Functions of Blood Groups - clotting of Blood, Structure and function of the heart and -major blood vessels in different parts of the body - properties of the heart muscle - circulation of the Blood - Cardiac cycle - Blood pressure - Pulse rate, cardiac output.

Unit IV Respiratory System

Structure of lungs and Bronchial tree - Mechanism and regulation and respiration - exchange of Gases, Second wind, vital capacity and oxygen debt. Excretory system - Kidney and skin

Unit IV Digestive System

Structure and function of various parts (Gastro intestinal system) - Movement of digestive tract - Functions of liver.

Nervous System

The Nerves- structure and function of cerebrum and Cerebellum - Medulla and Spinal Cord - Reflex arc - Automatic Nervous System .

Reference:-

1. Curton, A.C." Function of the Human Body", London W.B. Saunders Company 1986.
2. Srivastava, etc. "Text book of practical Physiology", Calcutta, Scientific Boo Agency, 1976.
3. Morehous and Miller, "Physiology of Exercise", St. Louis the C.V. Moshy Company, Latest (ed.).
4. Kapovich and Sinnser, "Physiology of Muscular Activity", London W.B. Saunders company 1965.
5. Anderson T.Mc. CLurg, "Human Kinetics and Analysing Body Measurments, London. William Heinmann Medical Books Ltd., 1961.
6. Davis, D.V. "Gray's Anatomy", London Longman Green and Company Ltd., 1967.
7. Dual, Ellen Neil Kinesiology. The Anatomy of motion.
8. Pearse Evelyn, B., "Anatomy and Physiology for Nurses" London, Faber amd Faber Ltd., 1967.
9. Pearce J.W., "Anatomy for Students and Teachers of Physical Education, London, Edward Arnold and Company, 1959.

Anatomy and Anthropometric Measurement (Practical)

Know about various systems of the body

Unit I

Skeletal System

Unit II

Muscular System
Cardio- Vascular System
Respiratory System
Digestive System
Nervous System[□]

Unit III Kinanthropometric equipments:

- a. Stadio meter
- b. Weighing Scales
- c. Anthropometric tape
- d. Skinfold caliper
- e. Bone calipers
- f. Segmo meter
- g. Wide spread caliper
- h. Amall sliding caliper
- i. Footplate
- j. Anthropometric rod
- k. Anthropometric box

Unit III- Measurements

- Length measurements – Height, Arm length, Leg length, Hand length, Palm length;
- Breadth measurements –Forearm girth, Chest girth, waist girth, Hip girth, Thigh girth and Calf girth.
- Other measurement: BMI & waist circumference

Reference:-

1. Curton, A.C." Function of the Human Body", London W.B. Saunders Company 1986.
2. Srivastava, etc. "Text book of practical Physiology", Calcutta, Scientific Boo Agency, 1976.
3. Morehous and Miller, "Physiology of Exercise", St. Louis the C.V. Moshy Company, Latest (ed.).
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5. Anderson T.Mc. CLurg, "Human Kinetics and Analysing Body Measurments, London. William Heinmann Medical Books Ltd., 1961.
6. Davis, D.V. "Gray's Anatomy", London Longman Green and Company Ltd., 1967.
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8. Pearse Evelyn, B., "Anatomy and Physiology for Nurses" London, Faber amd Faber Ltd., 1967.
9. Pearce J.W., "Anatomy for Students and Teachers of Physical Education, London, Edward Arnold and Company, 1959.
10. Marfell-Jones, Michael.,Olds,Tim., Stewart,Arthur., Carter, Lidsay., (2006). *International Standards for Anthropometric Assessment*. Potchefstroom: The International Society for the Advancement of Kinanthropometry
11. The International Society for the Advancement of Kinanthropometry (2010) Retrieved January 20, 2011 from <http://www.isakonline.com/>

Theories of Yoga

- Unit I** Meaning of yoga - Aim and objectives of Yoga - Concept of yoga, History of yoga.
- Unit II** Systems of Yoga - Eight limbs of yoga - Asanas - Classification of Asanas - Differences between Physical exercises and yogic exercises - Guidelines for practicing Asanas.
- Unit III** Procedure of doing Asanas.Asanas in Long sitting Position - Prone Position - Supine Position - Standing Position - Kneeling Position. Physiological Benefits of Asanas
- Unit IV** Pranayama - Types & Concepts of Prnayama - Closing the nostrils - Controlling the breath - Bhandhas - Practice regulation - Importance of suspension (Kumbhaka) - Kriyas and its tyoes.
- Unit V** Meditation and its Types.Role of Meditation in Physical Education and Sports

References :-

1. B.K.S., Iyengar Light on Yoga, London :Unwin Paperbacks, 1989.
2. P. Mariayyah - "Pranayamas" Sports Publication, Coimbatore.
3. K. Chandrasekaran, "Sound health through yoga" PremKalyan Publication, Sedapatti, 1999.
4. Yogeshwar, "Text Book of Yoga", Madras yoga Centre.
5. Kumaresan P, yogasanam, Tirunelveli :Abinaya Publications, 2002.

**MSU/ 2020-21 / UG-Colleges /Part-III (B.Sc. Physical Education) /
Semester – II / Major Practical - II**

Asanas, Pranayama, Kriyas

OBJECTIVES

To enable the students to

- i. Learn various skills in track and field and gymnastics.
- ii. Be familiar with rules and regulations, and learn the method of officiating for all track and field events and gymnastics.

ASANAS

- Swastickasana
- Pad asana
- Vajrasana
- matsyendrasan
- Samasana
- Vipareetakarani
- Bhujangasana
- Dhanurasana
- Matsyasana
- Shalabasana
- Halasana
- Patchimotanasana
- Yogamudra
- Vakrasana
- Sarvangasana
- Shirsasana
- Mayurasana
- Vrikshasana
- Tadasana
- Makarasana
- Shavasana

(20 hours)

Bandha and Kriyas

Jalaneti, Sutraneti Uddyana and Nauli, KapalaBhati

(15 hours)

Pranayama

- Suryabandha
- Ujjayi

- Bhastrika
- Nadishodhana
- Sheetalī
- Shitkari

(20 hours)

References :-

1. B.K.S., Iyengar Light on Yoga, London :Unwin Paperbacks, 1989.
2. P. Mariayah - "Pranayamas" Sports Publication, Coimbatore.
3. K. Chandrasekaran, "Sound health through yoga" PremKalyan Publication, Sedapatti, 1999.
4. Yogeshwar, "Text Book of Yoga", Madras yoga Centre.
5. Kumaresan P, yogasanam, Tirunelveli :Abinaya Publications, 2002

Health Education, Safety Education and First aid

- Unit I:** Meaning, nature, Need and scope of health Education - Aims and Objectives of Health Education, Factors influencing Health. Health Organization - State, National and International Health Careers available in India- Health programme and functions.
- Unit II:** Meaning of wellness and Health- Components of Health-Physical health,- Physical, mental and socioeconomic health-Factors affecting Health
- Unit III:** Definition – Characteristics – Principles of Safety Education- Need for safety Education in Physical Education. Principle of safety with respect of play fields- Principles of safety with respect of equipments, dress etc- Class organization and demonstration and safety during matches
- Unit IV :** Communicable diseases – Agent, causative organism, Incubation period-Mode of spread, sign and symptoms, preventive measure of Typhoid, Cholera, Pulmonary Tuberculosis, Amoebiasis, Malaria, Tetanus, Poliomyelitis - Non-Communicable diseases – Symptoms and prevention of Peptic ulcer, Malignancy, cancer , Hyper tension, Diabetic mellitus
- Unit V:** Definition and importance of first aid – first aid for injuries - sprain, Fracture and its types - Types of Bleeding- Laceration. Artificial respiration

References

- 1) Royappa, Daisy Joseph and Govindarajulu, J.K."Safety Education", 1972.
- 2) "First Aid to the Injured", New Delhi. St.John Ambulance Association.
- 3) "Safety at school" (Education pamphlet Number 53), London, Her Majesty's stationery Office, 1969.
- 4) "School Safety Policies" Washington D.C American Association for Health, Physical Education and Recreation, 1968.
- 5) Herbert, Stack, U. and Elkow Duke. I., "Education for safety Living", New Jersey Englewood Cliffs, Prentice Hall Inc., 1966.
- 6) Florio, A.E and Stafford, G.T., "Safety Education", New York, McGraw Hill Book Company, 1969.
- 7) "William, Evans, A", Everyday Safety, Lyons and Carnahan, 1952.
- 8) "Manual Safety Education Review", Washington D.C American Association for Health Physical Education and Recreation, 1969.