

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

UG COURSES – AFFILIATED COLLEGES

B.Sc.Physical Education

(Choice Based Credit System)

(with effect from the academic year 2017-2018 onwards)

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

II Semester (Revised)

	Core/Allied	Title	Hours	Credits
Part I	Language	Tamil	6	4
Part II	Language	English	6	4
Part III	Core III	Theories of Yoga	4	4
Part III	Core IV	Statistics in Physical Education	5	4
Part III	Major P II	Asanas, Pranayama, Kriyas	4	2
Part III	Allied II	Health Education, Safety Education and First aid	3	3
Part IV		Value Based Education	2	2
	Total		30	23

Foundation of Physical Education

- 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
- Unit II** Philosophy and Physical Education, Components of Philosophy (Metaphysics, Epistemology, axiology, ethics, logic and aesthetics), General Philosophies (Idealism, Realism, Pragmatism, Naturalism, and Existentialism) Modern humanistic view of Physical Education.
- Unit III** 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 IV** Physical Education in United States, Germany, China,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.National and International Trophies – (Santhosh trophy- Ranji trophy – Federation cup- Rengasamy cup- Thomas cup- Sivanthi gold cup- Davis cup- Wimbledon cup- Euro cup.)
- Unit V** 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, Fitness and Health related opportunities, Management Media and other related opportunities). Issues, challenges and the Future of Physical Education.

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.

Theories of Gymnastics

- Unit I** History of Gymnastics: India, Asia, and World Organization of Gymnastics: Federations - India, World
- Unit II** Warming-up, Specific Exercises for Gymnasts, Training Qualities, Load, Safety Hints, Warm-down.
- Unit III** Floor Exercises for Men
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
- Unit IV** Floor Exercises for Women
Exercises and Techniques on Vaulting,
Exercises and Techniques on Balance Beam,
Exercises and Techniques on Asymmetric Bar.
- Unit V** Important Competitions, Rules, Officiating, Equipments and their specification, Maintenance of Equipments.

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

Gymnastics

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.
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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

Know about various systems of the body

Unit I

- Skeletal System
- Muscular System

Unit II

- Cardio- Vascular System
- Respiratory System

Unit III

- Digestive System
- Nervous System

Unit IV- Kinanthropometric equipments:

- Stadiometer,
- weighing scales,
- anthropometric tape,
- skinfold caliper,
- anthropometer,
- large sliding caliper,
- bone calipers,
- segmometer,
- wide-spread caliper,
- small sliding caliper,
- footplate,
- anthropometric rod
- anthropometric box

Unit V- 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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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.
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.

Statistics in Physical Education

- Unit I** Meaning and Definition of Statistics, Nature, Need and Importance of Statistics, Types of Statistics. Data- Quantitative data and Qualitative data
- Unit II** Frequency Distribution – Measure of Central Tendency, Mean, Median and Mode Definition- Computation of mean and median and mode from the ungrouped and discrete data Specific characteristics and use of measure of measure of central tendency
- Unit III** Measure of variability – Range- Quartile deviation- Mean deviation- Standard deviation- Definition- Computation of Quartile deviation, Mean deviation, Standard deviation from the ungrouped data – Specific characteristics and uses of measure of variability.
- Unit IV** Measure of relative position- Meaning of percentiles, deciles and quartiles- computation of percentiles, deciles and quartiles from the ungrouped data- Standard scales – Computation of T scale and Hull scale- Normal Curve – Divergence from normality- Skewness and Kurtosis.
- Unit V** Measure of Relationship- Meaning and definition of correlation- computation of product moment correlation from the ungrouped data- rank order correlation

References:-

1. Clarke David H and H Harrison Clarke - Research Processes in Physical Education, Eaglewood Cliffs : Prentice Hall INC., 1984.
2. Gupta, Sp., Advanced Practical Statistics, New Delhi : S. Chand & Co., 1982.
3. Wilks, S.S., Elementary Statical Analysis, Deford& I, IBH publishing Co., Calcutta, 1984.

**MSU/ 2017-18 / UG-Colleges /Part-III (B.Sc. Physical Education) /
Semester – II / Major Practical -2**

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
- Padmasana
- 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, Hypertension, 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.