MANGALORE UNIVERSITY PHYSICAL EDUCATION SYLLABUS for BA PROGRAMME CBCS SCHEME: 2019-20 Onwards

Marks T/ Instruction **Duration of Course Code** Credits Course Ρ hrs/week Exam (hrs) Exam IΑ **Total** I SEMESTER Group I BASPEC131 History of Physical Education 3 20 80 100 2 (a) Athletics - Track events, Hurdles Ρ BASPECP132 3 3 10 40 50 1 (b) Karate Group II BASPEE133 Officiating, Coaching and Training 2 2 10 40 50 1 BASPEE134 Evaluation in Physical Education 2 10 50 1 II SEMESTER Group I BASPEC181 Foundations of Physical Education 20 80 100 2 4 3 BASPECP182 (a) Athletics- Jumps Ρ 3 10 3 40 50 1 (b) Major Game - Kabaddi Group II BASPEE183 Sports Biomechanics 10 **4**0 50 2 2 1 BASPEE184 ICT in Physical Education 2 10 40 50 1 III SEMESTER Group I BASPEC231 Anatomy and Physiology 20 80 100 Τ 4 3 2 BASPECP232 (a) Athletics- Throws Р 3 3 10 40 50 1 (b) Yogasanas **Group II** BASPEE233 Yoga Education Τ 2 2 10 40 50 1 BASPEE234 Physiology of Exercise 2 Т 2 10 40 50 1 IV SEMESTER Group I BASPEC281 Sports Psychology Т 4 3 20 80 100 2 BASPECP282 (a) Athletics - Combined Events, Relays Р 3 3 10 40 50 1 (b) Major Game - Football Group II BASPEOE283 Health and Wellness Т 2 10 40 50 2 1 V SEMESTER BASPEC331 Health and Safety Education Т 20 80 100 3 3 2 BASPEC332 Т Theory of Sports and Games 3 20 100 3 80 2 BASPECP333 (a) Weightlifting and Powerlifting Р 2 2 3 10 40 50 (b) Major Game - Cricket BASPECP334 (a) Swimming or Gymnastics Ρ 2 2 3 10 40 50 (b) Major Game - Volleyball **VI SEMESTER** BASPEC381 Kinesiology Τ 3 3 20 80 100 2 BASPEC382 **Sports Nutrition** Τ 3 3 20 80 100 2 (a) Weight Training Ρ BASPECP383 2 3 10 40 50 2 (b) Major Game - Basketball (a) Wrestling BASPECP384 Р 2 3 10 40 50 2 (b) Major Game - Kho Kho

BOS Members

Sd/- Sd/- Sd/- Sd/Dr. Haridas K Dr. C. Venkatesh Dr. P C Krishnaswamy Dr. Kishore Kumar CK (Member) (Member) (Member)

I SEMESTER

Group I

THEORY

BASPEC131 History of Physical Education

- Unit I Physical Education in India Advent of Aryans, Epic age, Buddhist age, Mohammedans period, British period, post independence period, YMCA and its contribution, LNIPE.
 India in Olympics
- Unit II Physical Education in Ancient Greece Sparta and Athens, ancient Rome.Origin and development of ancient Olympics
- **Unit III** History of Physical Education in Germany (FRG and GDR), Denmark, Sweden, UK, USA and USSR.

 Origin and development of Modern Olympics
- Unit IV Post Independence period coaching schemes Central Advisory Board of Physical education and sports, All India Council of Sports, NIS, Association of Indian Universities, Games Federations, Youth Boards, Sports Authority of India, PYKKA, Khelo India

References:

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.

Mohan, V. M. (1969). *Principles of physical education*. Delhi: Metropolitan Book Dep. Nixon, E. E. & Cozen, F.W. (1969). *An introduction to physical education*. Philadelphia: W.B. Saunders Co.

Obertuffer, (1970). *Delbert physical education*. New York: Harper & Brothers Publisher. Sharman, J. R. (1964). *Introduction to physical education*. New York: A.S. Barnes & Co. William, J. F. (1964). *The principles of physical education*. Philadelphia: W.B. Saunders Co.

I SEMESTER Group I

PRACTICAL

BASPECP132 (a) Athletics - Track events, Hurdles (b) Karate

(a) Athletics - Track Events

- Sprints Technique of block starts, Curve running, specific exercise, 100 mts, 200 mts, 400 mts running
- Hurdles Clearance technique, rules and specific exercise, 100 mts hurdles (w), 110 mts hurdles (m), 400 mts hurdles running
- Record book (Marks – Semester exam - 20, IA- 5 marks)

(b) Karate

- · Conditioning and specific exercies
- Punches, Blocks and Kicks
- Katas 1, 2 and 3.
- Record book (Marks – Semester exam - 20, IA- 5 marks)

I SEMESTER Group II

BASPEE133 Officiating, Coaching and Training

Unit I Meaning and importance of officiating

- Principles of Officiating
- Relationship of officials with players and team officials
- · Methods to improve officiating
- Qualities and Qualifications of a official and coach.

Unit II Officiating techniques and procedures in various games:

- Hockey, Kabaddi, Volleyball, Basketball, Kho Kho, Cricket, Football
- Officials and their pregame, during game and post game duties in the above mentioned games.

Unit III

- Meaning of Coaching and Training
- Role of a coach and trainer in sports performance
- Training plans Microcycle, mesocycle and macrocycle.

Unit IV

- Principles of Training
- Principles of Load
- Factors to be considered when applying training Load
- Causes, Symptoms and measures to overcome overload
- Periodisation

Reference Books:

Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice Hall. Bunn, J. W. (1972). *Scientific principles of coaching*. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther, J.D. (1965). *Psychology of coaching*. New York: Pre. Hall.

Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.

I SEMESTER Group II

BASPEE134 Evaluation in Physical Education

Unit I Introduction

- Meaning, Definition and scope of Test, Measurement and Evaluation.
- Need and importance of Measurement and Evaluation
- Criteria of a test- Validity, Validity, Reliability, Objectivity, Norms

 Administrative Considerations.
- Administration of a test Duties before, during and after a test

Unit II

- Classification of tests: Motor fitness test, Motor Educability test, Sports skills test, Anthropometric tests, Physiological tests (Aerobic, Anaerobic), Posture test,
- Knowledge test.
- List of tests in various classifications
- Uses and importance of each classification of test

Unit III

Motor fitness and ability related tests:

AAHPER Youth Fitness test, JCR test, Johnson Metheny Motor Educability test, Kraus Weber Minimum Muscular Fitness Test SAI fitness test.

Anthropometric tests:

Method of Measuring Height: Weight, Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Biceps, Sub scapular, Suprailiac.

Unit IV

Sports kill Tests

Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test Volleyball: Russel Lange Volleyball Test Football: Mc-Donald Volley Soccer Test.

Physiological test: Cooper test, Multi stage Beep test

REFERENCES:

Authors Guide (2013) A CSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications

Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press

Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc Jenson, Clayne Rand Cyntha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc

Kansal D. K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications

Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication

Wilmore J H and Costill D L. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm I L: Human Kinetics

Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

Alan C Lacy (2010), Measurement and Evaluation in Physical Education, Pearson Benjamin Cummings

Barry L. Jonson, Jack K Nelson (1986) Practical Measurement for evaluation in Physical Education, Burgess Publications.

II SEMESTER Group I

BASPEC181 - Foundations of Physical Education

Unit I Meaning, Definition, Aim and Objectives of Physical Education, Relationship of Physical Education with General Education.

Meaning of the terms – Physical Culture, Physical Training, Sports and Games, Gymnastics, Recreation and Health Education.

Sources of Principles of Physical Education

- Unit II Philosophical Bases of Physical Education Meaning and definition of Philosophy, Branches of Philosophy, Different Philosophical Schools of thought Naturalism, Realism, Idealism and Pragmatism and their relation to physical education, Role of Philosophy in Physical Education
- **Unit III** Biological Bases of Physical Education Heredity and Environment, Stages of Growth and Development, Body types (Sheldons and Kretschmers), Structural and Functional differences in males and females, muscle tone, athletic heart, receiprocal innervations, types of load (norma, crest and overload), Types of ages (Chronological, physiological and Anatomical)
- **Unit IV** Sociological Bases of Physical Education Meaning of socialisation, social nature of man, Individual and society, cultural values of sports, competition and cooperation, influence of groups on the individual and vice versa, Physical Education as a Socialising agency.

References:

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.

Mohan, V. M. (1969). *Principles of physical education.* Delhi: Metropolitan Book Dep. Nixon, E. E. & Cozen, F.W. (1969). *An introduction to physical education.* Philadelphia:

W.B. Saunders Co.

Obertuffer, (1970). *Delbert physical education*. New York: Harper & Brothers Publisher. Sharman, J. R. (1964). *Introduction to physical education*. New York: A.S. Barnes & Co. William, J. F. (1964). *The principles of physical education*. Philadelphia: W.B. Saunders Co.

II SEMESTER Group I

PRACTICAL

BASPECP182 (a) Athletics - Jumps (b) Major game - Kabaddi

(a) Athletics - Jumps

- Long Jump, High Jump, Triple Jump Techniques
- · General and specific conditioning exercises.
- Rules and regulations.
- Record book (Marks – Semester exam - 20, IA- 5 marks)

(b) Major Game- Kabaddi

- History
- Court marking and measurements
- · General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- Common injuries and prevention in Kabaddi
- Record book (Marks – Semester exam - 20, IA- 5 marks)

II SEMESTER Group II

BASPEE183 Sports Biomechanics

Unit I Definition, Meaning and Importance of Biomechanics.

Meaning of the following concepts: Kinetics and Kinematics, Speed, Velocity, Acceleration, Momentum, Force, Mass, Centre of Gravity, Work, Energy, Power

Unit II Motion – Types of motion, Newton's laws of motion and its applications in sports activities.

Force – Meaning, Characteristics of force, Types of forces

Basics of Water resistance and air resistance and their applications in sports

Unit III Levers – Definition, meaning, classes of levers, application of levers in sports activities

Stability – Meaning and factors affecting stability, equilibrium.

Gravity, center of gravity, Kinetic and Potential energy.

Unit IV Analysis of skills – Walking, running, jumping.

Analysis of sports skills – Volleyball service and smash, Athletics – sprinting, long jump and shot put, Shooting in Basketball, Hit in hockey, Bowling in cricket.

REFERENCES:

Deshpande S.H.(2002). ManavKriyaVigyan – Kinesiology (Hindi Edition) Amravati:Hanuman Vyayam Prasarak Mandal.

Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005.

Steven Roy, & Richard Irvin. (1983). Sports Medicine. New Jersery: Prentice hall.

Thomas. (2001). Manual of structural Kinesiology, New York: McGraw Hill.

Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)

Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.

Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

Lynn S. Lippert (2006), Clinical Kinesiology and Anatomy (4th Ed), E A Davis Company, Philadelphia

Peggy A Houglum and Dolores B. Bertoti (2011), Brunnstrom's clinical Kinesiology (6th Ed.), E A

Davis Company, Philadelphia

Carol A Oatis (2009), Kinesiology – Mechanics and Pathomechanics of Human Movement (2nd Ed.), Lippincott Williams and Wilkins, Philadelphia

II SEMESTER Group II

BASPEE184 - ICT in Physical Education

Unit I Meaning, and importance of ICT in Physical Education.

Scope of ICT: Teaching Learning Process, Evaluation, Research, Administration,

Management.

Integration of ICT in Physical Education

Unit II Computers – Meaning of Computers, Characteristics, Hardware and software components of a computer.

Functions of a computer

 $\label{eq:multimedia} \mbox{Multimedia equipment required to set up ICT-Multimedia projectors, Smart screens etc.}$

Internet – search engines, web browsers, applications for physical education

Unit III MS Office Applications

MS Word: Main Features & its Uses in Physical Education

- MS Excel: Main Features & its Applications in Physical Education
- MS Power Point: Preparation of Slides with Multimedia Effects, its applications in physical education

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Unit IV Software Used in various fields of Physical Education

- Sof twares used across various teaching learning situations: Class room Teaching, technical teaching in areas such as biomechanics, physiology, psychology; Coaching, Commercial sports, Organisation, Officiating.
- Web based learning
- E content and e-learning

REFERENCES:

- B. Ram, New Age International Publication, Computer Fundamental, Third Edition-2006
- Brain under IDG Book. India (p) Ltd Teach Yourself Office 2000, Fourth Edition-2001
- Douglas E. Comer, The Internet Book, Purdue University, West Lafayette in 2005
- Heidi Steel Low price Edition, Microsoft Office Word 2003- 2004
- ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing-2006
- Pradeep K. Sinha & Priti; Sinha, Foundations computing BPB Publications -2006. Rebecca Bridges Altman Peach pit Press, Power point for window, 1999
- Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006

III SEMESTER Group I

BASPEC231 Anatomy and Physiology

Unit I Meaning and the importance of its study in Physical Education.

Cell and its parts, Tissues-meaning and different types of tissues

Unit II Skeletal system – Functions, Classification, Different bones of the body.

Muscular system – Types of muscles, characteristics and functions of muscles, types of muscle contraction.

Unit III Cardiovascular system – Structure and functions of heart, types of blood circulation.

Respiratory system – Structure, types of respiration.

Unit IV Digestive system – structure and functions

Endocrine system- Meaning, different endocrine glands and functions

Kidney- structure and functions

References:

Gupta, A. P. (2010). Anatomy and physiology. Agra: SumitPrakashan.

Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.

Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B.Saunders.

Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co.

Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surject Publication.

Moorthy, A. M. (2014). Anatomy physiology and health education. Karaikudi: Madalayam Publications.

Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co.

Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd. Sharma, R. D.

(1979). Health and physical education, Gupta Prakashan.

Singh, S. (1979). Anatomy of physiology and health education. Ropar: Jeet Publications.

III SEMESTER Group I

PRACTICAL BASPECP232 (a) Athletics – Throws (b) Yogasanas

(a) Athletics - Throws

- Shotput, Discus Throw, Javelin Throw Techniques
- General and specific conditioning exercises.
- Rules and regulations.
- Record book (Marks – Semester exam - 20, IA- 5 marks)

(b) Yogasanas

- Asanas Suryanamaskar, Tadasana, Paschimottanasana, Sarvangasana, Vajrasana, Swasthikasana, Dhanurasana, Trikonasana, Janu Shirsasana, Halasana, Navasana, Bhujangasana, Ardha Matsyendrasana
- Pranayama Anuloma viloma, Kapalabhati, Bhastrika
- Kriyas Jala nethi, Sutranethi, Jala dhauti (any one)
- History, Conditions for practicing yoga
- The procedures, benefits and contraindications of practicing the above yoga practices.
- Record book

(Marks - Semester exam - 20, IA- 5 marks)

III SEMESTER Group II

BASPEE233 Yoga Education

Unit I Meaning and Definition of Yoga

Aims and Objectives of Yoga

Need and Importance of Yoga in Physical Education and Sports

Unit II The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara,

Dharana, Dhyana and Samadhi

Schools of Yoga - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

Unit III Asanas - Procedures and their benefits

Kriyas - Procedures and benefits

System of diet in Yoga - Satvik, Tamasik and Rajasik food

Bandhas - Types and uses

Unit IV Mudras and Pranayama – Different types and benefits

Meditation

The conditions for practicing yoga Contraindications of practicing Yoga

Misconceptions about Yoga

References:

Brown, F. Y.(2000). How to use yoga. Delhi:Sports Publication.

Gharote, M. L. & Ganguly, H. (1988). *Teaching methods for yogic practices*.Lonawala: Kaixydahmoe.

Rajjan, S. M. (1985). *Yoga strenthening of relexation for sports man.* New Delhi:Allied Publishers.

Shankar, G. (1998). Holistic approach of yoga. New Delhi: Aditya Publishers.

Shekar, K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.

III SEMESTER Group II

BASPEE234 Physiology of Exercise

- Unit I Meaning and importance of study of exercise physiology.
 Muscular system microscopic and gross structure of skeletal muscle, Types of muscle fibers, Sliding filament theory of muscle contraction
- **Unit II** Energy metabolism ATP-CP, Lactate (Anaerobic) and Oxidative (Aerobic), Metabolism of Carbohydrates, Fats and Proteins. Energy metabolism with reference to different sports,
- Unit III Cardiovascular system- Cardiac output (stroke volume and heart rate), Vo2 max.. Blood pressure,
 Cardiac cycle, Effect of exercise on cardiovascular system.
 Respiratory system Minute ventilation, Lung volumes and capacities, Process of gas exchange in lungs and tissues, Effect of exercise on respiratory system
- **Unit IV** Physiological bases of warm up and warm down, Female athlete and performance, Ergogenic aids and performance, Exercise in hot and humid, cold and high altitude conditions.

REFERENCES:

Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.

Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.

Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.

David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.

Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics.

Philadelphia: Sanders College Publishing.

Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W.

Bowers. (1989). Sports Physiology. WMC: Brown Publishers.

Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.

Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.

Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication. William, D.

McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia:

Lippincott Williams and Wilkins Company.

IV SEMESTER Group I

BASPEC281 Educational and Sports Psychology

Unit I Meaning of Psychology, Fields of psychology – Comparative, Developmental, Social, Differential and Applied.

Methods of Psychology - Observation, Experimental, Introspection and Clinical.

Social Psychology as applied to Physical Education and Sports – Human relations, Leadership, group morale, crowd behaviour, group dynamics.

Unit II Learning – Meaning and Definition, Theories and laws of learning, Feedback, Transfer of learning, learning curve.
 Intelligence – Meaning and nature of intelligence, Measurement of intelligence, Intelligence tests.

Unit III Sports Psychology – Meaning and definition, Nature and role of psychology in sports training and performance.

Skill learning - Stages of skill learning - Cognitive, Associative and Autonomous,

Unit IV Psychological considerations in sports performance – Motivation and types of motivation, Anxiety, Personality, Aggression.

Psychological preparation for sports competitions – Pep talk, auto suggestion, Visualisation, Feedback techniques, Progressive relaxation.

REFERENCES:

Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.

Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Test, New Delhi: National Council of Educational Research and Training Publication.

Jain. (2002), Sports Sociology, Heal Sahet y Kendre Publishers.

Jay Coakley. (2001) Sports in Societ y – Issues and Controversies in International Education, Mc-Craw Seventh Ed.

John D Lauther (2000) Psychology of Coaching. Ner Jersy: Prenticce Hall Inc. John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.

Miroslaw Vauks & Br yant Cratt y (1999). Psychology and the Superior Athlete. London: The Macmillan Co.

Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.

Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co.

Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.

Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.

Whiting, K, Karman.,. Hendry L.B & Jones M.G. (1999) Personalit y and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

IV SEMESTER Group I

PRACTICAL

BASPECP282 (a) Athletics - Combined Events, Relays (b) Major game - Football

(a) Athletics - Combined Events, Relays

Decathlon – Sequence of events, Rules of the event

Heptathlon – Sequence of events, Rules of the event

 $Relays-4x100,\,4x400-Specific \,drills,\,tactics,\,Baton\,\,exchange\,\,technique,\,Rules\,\,of\,\,the\,\,event.$

(Marks - Semester exam - 20, IA- 5 marks)

(b) Major Game - Football

- History
- Court marking and measurements
- General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- Common injuries and prevention in Football
- Record book

(Marks - Semester exam - 20, IA- 5 marks)

IV SEMESTER Group II

BASPEOE283 Health and Wellness

Unit I Introduction

Concept of Health and Wellness

Dimensions of Health and factors influencing health

Components of wellness

Relationship and differences between health and wellness.

Meaning of active life style, Hypokinetic Diseases - Diabetes, Hypertension, Atherosclerosis. Arthritis.

Unit II Methods to maintain health and wellness

- Health related Fitness, Physical activity/exercise and health, benefits of health related fitness. Exercise protocols for the health related fitness components.
- Role of Yogasana and meditation in maintaining Health and wellness

Unit III Nutrition

- Basic Concepts in nutrition; Nutritional requirements and components of a healthy diet.
- Nutritional Guidelines. Nutritional Planning, Balanced diet.
- Recommended intake for Normal persons and exercising individuals.

Unit IV Body composition, Aging and Stress

- Concepts and components of body weight, Assessment of body composition BMI, Body compositon
- Over weight and Obesity and their health implications. Factors contributing to excess body fat. Approaches to overcome weight problem.
- Fitness and Aging: Risk factors of Aging Cardiovascular, skeletal, sense organs, balance etc., Exercise and aging.
- Stress-meaning and types of stress, Stress relief through exercise and stress management protocols.

References:

William D McArdle, Frank I Katch and Vitor I Katch, Essential of Exercise Physiology, Second edition, New York: Lipincoff Welliams and wilkins, 2000

Arthar C. Guyton, Physiology of Human Body, Philadelphia: Saunders Company, 1972.

Melwin H. Williams. Nutrition for Health Fitness and sport. McGraw Hill Company, Newyork: 1995

Bradfird B, Strand and Others. Fitness Education Arizona Gorsuch Seani; sbrick Publishers, 1997.

Scott K. Powers and Stephen L. Dodd. Total Fitness: Exercise, Nutrition and wellness, Boston: Allyn and Bacon, 1999.

Thomas D. Fahey and Others. Fit and Well 6th Edition; Newyork: MCGraw Hill Publishers, 2005.

V SEMESTER

THEORY

BASPEC331 Health and Safety Education

- Unit I Definition of Health, Factors influencing Health: Heredity, environment and habits
 Physical Health and Mental Health Meaning and dimensions
 Personal Hygiene Skin, mouth, teeth, nails, clothing, shoes, food, exercise, sleep and relaxation
- **Unit II** Communicable diseases Causes of diseases, Spread of infections, Causes and preventive measures of Malaria, Filaria, Typhoid, Cholera, Dysentery, Small pox, whooping cough, Diphtheria, Tuberculosis, Filaria, AIDS, Syphilis, Gonorrhea.
- **Unit III** Public Health, General methods of sanitation Disposal of garbage, sewage. Supply of drinking water, methods of water purification.
- Unit IV Safety Education Safety measures at home, street, school and playground. First aid for sprains, strains contusions, dislocations and fractures, burns, bleeding, electric shock, drowning.
 CardioPulmonary resuscitation Chest compressions, rescue breathing

References:

Agrawal, K.C. (2001). *Environmental biology*.Bikaner: Nidhi publishers Ltd. Frank, H. &Walter, H., (1976). *Turners school health education*. Saint Louis: The C.V. Mosby Company.

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.

Melwin H. Williams. Nutrition for Health Fitness and sport. McGraw Hill Company, Newyork: 1995 Bradfird B, Strand and Others. Fitness Education Arizona Gorsuch Seani; sbrick Publishers, 1997. Scott K. Powers and Stephen L. Dodd. Total Fitness: Exercise, Nutrition and wellness, Boston: Allyn and Bacon, 1999.

Thomas D. Fahey and Others. Fit and Well 6th Edition; Newyork: MCGraw Hill Publishers, 2005.

V SEMESTER

THEORY

BASPEC332 - Theory of Sports and Games

Unit I General Introduction of the following sport/games:

Athletics, Basketball, Cricket, Football, Hockey, Kabaddi, Kho-Kho, Volleyball Salient Features and general rules and regulations

Unit II Details regarding the above mentioned sport/game:

- History and development of the Game and Sports
- Ground preparation, dimensions and marking
- Standard equipment and their specifications

Unit III Fundamental and advanced skills involved in each game

- Athletics: Sprints, Hurdles, Long Jump, High Jump, Shot put, Relays
- Hockey: Hit, Push, Stop, Scoop, Dodging, Tackling
- Cricket: Various drives, Pace bowling, wicket keeping, Fielding
- Football: Kicks, various traps, Heading, Goalkeeping
- Kabaddi: Raiding, various catches, Chain system
- Kho Kho: Sitting, giving kho, pole dive, ring method, chain method.

Unit IV Various motor abilities involved in the games

- Training to develop motor abilities
- · Recreational and lead up games in various games
- Tactics: Offensive and defensive tactics
- Injuries occurring in various games and their management.

References:

Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice Hall. Bunn, J. W. (1972). *Scientific principles of coaching*. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd. Lawther, J.D. (1965). *Psychology of coaching*. New York: Pre. Hall.

Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.

V SEMESTER PRACTICAL

BASPECP333 (a) Weightlifting and Powerlifting (b) Major Game - Cricket

(a) Weightlifting

Clean and Jerk and Snatch – Technique, General and Specific drills, Rules of the event (Marks – Semester exam - 20, IA- 5 marks)

(b) Major Game - Cricket

- History
- Pitch marking and measurements
- General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- · Common injuries and prevention in Cricket
- Record book

(Marks - Semester exam - 20, IA- 5 marks)

V SEMESTER PRACTICAL

BASPECP334 (a)Swimming or Gymnastics / (b) Major Game - Volleyball

(a) Swimming

- History
- Strokes Freestyle, Back Stroke, Butterfly and Breaststroke (any one)
- · General and specific exercises
- Rules of swimming

Or

Gymnastics

- History
- Basic exercises in Ground exercises, parallel bars, balancing beam. (Any one).
- Rules of the event

(Marks - Semester exam - 20, IA- 5 marks)

(b) Major Game - Volleyball

- History
- Court marking and measurements
- General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- Common injuries and prevention in Volleyball
- Record book

(Marks - Semester exam - 20, IA- 5 marks)

VI SEMESTER

THEORY

BASPEC381 Kinesiology

- Unit I Definition and meaning of Kinesiology, Significance of Kinesiology in Physical Education
 Meaning of terms: Planes and Axes Types, Fundamental movements, Anatomical
 Position
- Unit II Joints —Types, Characteristics of Synovial joint
 Muscles Role of muscles in movement Agonist, Antagonist, Neutralizer, Supporter)
- Unit III Origin, Insertion and action of major muscles Biceps Brachii, Triceps, Deltoids,
 Trapezius, Pectoralis major, Gastrocnemius, Sloeus, Gluteus group, Quadriceps group,
 Hamstring group, Rectus Abdominus
- **Unit IV** The neural bases of movement The nervous tissue, CNS, PNS, Neuromuscular junction, Proprioceptors Muscle spindle, Joint receptors, Golgi tendon organs etc.

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Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005. Steven Roy,& Richard Irvin. (1983). Sports Medicine. New Jersery: Prentice hall.

Thomas. (2001). Manual of structural Kinesiology, New York: McGraw Hill.

Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)

Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.

Lynn S. Lippert (2006), Clinical Kinesiology and Anatomy (4th Ed), E A Davis Company, Philadelphia Peggy A Houglum and Dolores B. Bertoti (2011), Brunnstrom's clinical Kinesiology (6th Ed.), E A Davis Company, Philadelphia

VI SEMESTER

THEORY

BASPEC382 - Sports Nutrition

Unit I Introduction

- Meaning and Definition of Sports Nutrition
- Balanced Diet
- Basic Nutrition guidelines
- Role of nutrition in sports

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Unit II Macro and micro nutrients

- Carbohydrates, Protein, Fat Meaning, classification, functions and their benefits to athletes
- Vitamins, Minerals, Water Meaning, classification, functions and their benefits to athletes.
- Daily caloric requirement and expenditure.

Unit III

- Carbohydrate metabolism and its role as a fuel for muscular activity
- Protein metabolism and its role as a fuel for muscular activity
- Fat metabolism and its role as a fuel for muscular activity
- Hydration during exercise

Unit IV

- Body composition: Fat, skeletal mass and bone percentage of body weight and its significance.
- · Nutritional intake before, during and after sports activity
- Special nutritional considerations for diet for long duration games (football, hockey etc.), athletics (sprints and long distance events) and power events (volleyball, weight lifting etc.).

References:

Bessesen, D. H. (2008). Update on obesity. J ClinEndocrinolMetab.93(6), 2027-2034.

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Chu, S.Y. & Kim, L. J. (2007). Maternal obesity and risk of stillbirth: a metaanalysis. Am J ObstetGynecol, 197(3), 223-228.

DeMaria, E. J. (2007). Bariatric surgery for morbid obesity. *N Engl J Med*,356(21), 2176-2183. Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA*. 299(3), 316-323.

VI SEMESTER

PRACTICAL

BASPECP383 (a) Weight Training (b) Major Game - Basketball

(a) Weight Training

- Upper body, Lower body and Core exercises with weights
- System of training
- Principles of weight training
- Injury prevention
- Methods of managing a gym and maintaining the equipment.

(Marks - Semester exam - 20, IA- 5 marks)

(b) Major Game - Basketball

- History
- Basketball marking and measurements
- · General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- Common injuries and prevention in Basketball
- Record book (Marks – Semester exam - 20, IA- 5 marks)

VI SEMESTER

PRACTICAL

BASPECP384 (a) Wrestling (b) Major Game - Kho Kho

(a) Wrestling

- General and specific mat exercises
- Stance
- Wrestling techniques Single leg attack, Double leg attack, Side leg attack, Duck under, Arm drag,
 Reverse attack, Sngle leg counter attack, hip throw, Arm throw, neck roll, Single nelson, double arm roll,
 Gut range (Barandas).

(Marks - Semester exam - 20, IA- 5 marks)

(b) Major Game - Kho Kho

- History
- Court marking and measurements
- General and specific conditioning
- General Rules and regulations
- Fundamental and advanced skills
- Tactics
- Common injuries and prevention in Cricket
- Record book

(Marks - Semester exam - 20, IA- 5 marks)

Question Paper format Group I courses

Time: 3 hours		Max marks: 80
Instruct		
1.	Answer all questions	
2.	Each question shall not exceed 5 pages	
1.	(a) Essay Question (from unit 1) Or	16 marks
	(b) Essay Question (from Unit 1)	
2.	(a) Essay Question (from unit 2) Or	16 marks
	(b) Essay Question (from Unit 2)	
3.	(a) Essay Question (from unit 3) Or	16 marks
	(b) Essay Question (from Unit 3)	
4.	(a) Essay Question (from unit 4) Or	16 marks
	(b) Essay Question (from Unit 4)	
5.	Write short notes on any two of the following: (should include from all units)	(2x8=16marks)
	(a)	
	(b)	
	©	
	(d)	

Question Paper format Group II courses

Time: 2 hours			Max marks: 40	
Instructions:				
	1.	Answer all questions		
	2.	Each question shall not exceed 5 pages		
	1.	(a) Essay Question (from unit 1) Or	8 marks	
		(b) Essay Question (from Unit 1)		
	2.	(a) Essay Question (from unit 2) Or	8 marks	
		(b) Essay Question (from Unit 2)		
	3.	(a) Essay Question (from unit 3) Or	8 marks	
		(b) Essay Question (from Unit 3)		
	4.	(a) Essay Question (from unit 4) Or	8 marks	
		(b) Essay Question (from Unit 4)		
	5.	Write short notes on any two of the following: (should include from all units) (a) (b) © (d)	(2x4=8 marks)	
GROUP I - PRACTICAL COURSES				
(THE VALUATION OF PRACTICAL COURSES SHALL INCLUDE THE FOLLOWING)				
(a)		ls / Demonstration of techniques – 15		
	Kno	wledge (rules and general) – 5		
	Rec	ord book – 5		
(b)	Skil	ls / Demonstration of techniques – 15		
		wledge (rules and general) – 5		
		ord book – 5		

Sd/-

Dr. P C Krishnaswamy

(Member)

Sd/-

(Member)

Dr. Kishore Kumar CK

Sd/-

Dr. C. Venkatesh

(Member)

BOS Members

Sd/-

Dr. Haridas K

(Member)