DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2019-20)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)
Semester-I[st]

Title: Research process in Physical Education

Credits: 04
Max. Marks: 100
Sessional Marks: 30
Examination Marks: 70
Paper Code: PEM-1001
Duration: 2:30 Hours

Objectives: To Provide Understanding of Research Approach and Theoretical Framework of Research and Development of Scientific Skill to Deal with Ethical Issues and Complexity of Problems.

Unit – I

Introduction:

1.1 Classification of Research, Location of Research Problem,
1.2 Criteria for selection of a problem,
1.3 Qualities of a good researcher.
1.4 Scientific versus unscientific methods of problem solving.
1.5 Alternative models of research.

Unit – II

Methods of Research:

2.1 Descriptive Methods of Research:
- 2.1.1 Survey Study
- 2.1.2 Case study

2.2 Introduction of Historical Research:
- 2.2.1 Steps in Historical Research.
- 2.2.2 Sources of Historical Research
- 2.2.3 Primary Data and Secondary Data.
- 2.2.4 Historical Criticism, Internal Criticism and External Criticism.

2.3 Experimental Research:
- 2.3.1 Meaning Nature and Importance
- 2.3.2 Meaning of Variable, Types of Variables
- 2.3.3 Experimental Design - Single Group Design, Reverse Group Design, Factorial Design.

Unit – III

Sampling:

3.1 Meaning and Definition of Sample and Population.
3.2 Types of Sampling and Probability Methods.
3.3 Systematic Sampling, Cluster sampling, Stratified Sampling, Area Sampling, Multistage Sampling.
3.4 Non-Probability Methods.
3.5 Convenience Sample, Judgment Sampling, Quota Sampling.

Unit – IV

Research Proposal and Report Writing:

4.1 Chapterization of Thesis/Dissertation, Front Materials, Body of Thesis–Back materials.

4.2 Method of Writing Research Proposal, Thesis/Dissertation.

4.3 Mechanics of writing Research Report, Footnote and Bibliography Writing.

4.4 Method of writing abstract and full paper for presenting in a conference and to publishing journals,

References:

1) Best J.W (1971) Research in Education, New Jersey; Prentice Hall, Inc
2) Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc.
3) Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London l Rutledge Press
4) Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;
5) Kamlesh, M.L. (1999) Research Methodology in Physical Education and Sports, New Delhi Moses, A.K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam
6) Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
7) Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication
8) Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi

Updated on 04.10.2018

IH

DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2019-20)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)
Semester-1st

Title: Physiology of Exercises

Credits: 04
Max. Marks: 100
Sessional Marks: 30
Examination Marks: 70
Paper Code: PEM-1002
Duration: 2:30 Hours

Objectives:

1. To empower the students with the applicable knowledge of physiology in physical activity and sports.
2. To enable the learner in incorporating this knowledge in the training and coaching programme for the betterment of his trainee's performance.

Unit-I

Functional Adaptations to Exercise

1.1 Hormonal control during exercise
1.2 Exercise and neuromuscular system
1.3 Metabolic adaptations to exercise
1.4 Cardio-respiratory changes
1.5 Effects of exercise and training on health and fitness

Unit-II

Energy Continuum and Recovery Process

2.1 Metabolism and exercise
2.2 Recovery from exercise
2.3 Replinishment of energy stores during recovery process
2.4 Removal of excess lactic acid produced during exercise
2.5 Restoration of myoglobin oxygen stores

Unit-III

Exercise in hot and cold environment

3.1 Body temperature regulations
3.2 Physiological responses to exercise in the heat
3.3 Acclimatization to exercise in heat
3.4 Physiological responses to exercise in cold
3.5 Health risks during exercise in the cold

Unit-IV

Altitude and physiology

4.1 Exercise performance at altitude
4.2 Physiological responses to acute altitude exposure
4.3 Chronic altitude exposure and acclimitisation

Aging process and Ergogenics

4.4 Age related changes and exercise
4.5 Ergogenic aids and physical activity

References:

1) W. Larry Kenney, Jack H. Wilmore, David L. Costill, 2012, Physiology of Sports and Exercises.
2) Robert A. Robergs, Scott O. Roberts, 2000, Fundamental Principles of Exercise Physiology for Fitness, Performance, and Health.
3) Larry G. Shaver, 1982, Essentials of Exercise Physiology.
4) Dr. Sandhya Tiwari, 2006, Exercise Physiology.
5) M. Dena Gardiner, 1985, The Principles of Exercise Therapy.
6) Edward L. Fox, Richard W. Bowers, Merle L. Foss, 1981, The Physiological Basis of Physical Education and Athletics.
7) Michael S. Bahrke, Charles E. Yesalis, 2002, Performance – Enhancing Substances in Sport and Exercises.

DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2019-20)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)
Semester-I[st]

Title: Yogic Sciences

Credits: 04
Max. Marks: 100
Sessional Marks: 30
Examination Marks: 70
Paper Code: PEM-1003
Duration: 2:30 Hours

Unit - I

Introduction

1.1 Types of Yoga: Hatha Yoga, Karma Yoga, Bhakti Yoga and Mantra Yoga.
1.2 Study of essential requirements and equipments for advance practice of yoga.
1.3 Concept of Yogic Practice; Indications and Contra-Indications
1.4 Principles of Performing Asanas and Pranayama

Unit - II

Asanas and Pranayama

2.1. Silent features of Asanas (Cultural, Relaxative and Meditative)
2.2. Benefits and precautions of Surya Namaskar.
2.3. Benefits of different types of Pranayamas.
2.4. Nadis and Chakras in Body

Unit - III

Kriyas and Mudras

3.1. Meaning, Techniques and Benefits of Shat Kriyas - Neti – Dhauti – Kapalabathi-Trataka – Nauli – Basti, Bandhas.
3.2. Meaning, Techniques and Benefits of Bandhas Jalendra Bandha, Uddiyana Bandha, & Mula Bandha.
3.3. Meaning, Techniques and Benefits of Yogic Mudras
3.4. Meditation: Benefits & its Types

Unit - IV

Yoga and Sports

4.1. Power of Yoga to Improve Sports Performance
4.2. Role of Yoga in Psychological Preparation of athlete
4.3. Yoga and Mental Wellbeing, Anxiety, Depression Concentration, & Self Actualization.
4.4. Effect of Yoga on Physiological System

References:

1) Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter Housebook.
2) Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
3) Karbelkar N.V.(1993) Patanjal Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
4) Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
5) Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
6) Amresh kumar (2007), Encyclopedia of yoga, Khel Sahitya Kendra.
7) Yadav and Rachna Yadav (2003) Art of Yoga, Friend publications.

A. Khel

Updated on 04.10.2018

AA

DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2019-20)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)
Semester-1st

Title: Test, Measurement and Evaluation in Physical Education (Elective)

Credits: 04
Max. Marks: 100
Sessional Marks: 30
Examination Marks: 70
Paper Code: PEM-1011
Duration: 2:30 Hours

Objectives: To Highlight the Applications of Test, Measurement and Evaluation in Physical Education and to Develop Practical Competency in Conducting Motor, Physical Fitness and Sports Skill Tests.

Unit – I

Introduction:

1.1 Principles and process of evaluation in Physical Education.
1.2 Common methods of test and measurement used in Physical Education.
1.3 General steps involved in test construction.
1.4 Somatotype and posture evaluating technique.

Unit – II

Motor Fitness and Physical Fitness Tests:

2.1 Test for Motor Fitness – Indiana Motor Fitness Test (for high School boys and College Men).
2.2 Motor Ability- Barrow Motor Ability Test for Men, Strength Fitness- Kraus-Weber Minimum Muscular Fitness Test.
2.3 Physical Fitness Test- AAHPERD Youth Fitness Test.
2.4 Cardio Vascular Test-Harvard Step Test, 12Min. Run/Walk Test.

Unit – III

Anthropometric and Aerobic-Anaerobic Tests:

3.1 Anaerobic Capacity-Margaria-Kalamen test, Wingate Anaerobic Test.
3.2 Anthropometric Measurements- Method of Measuring Height, Standing and Sitting Height.
3.3 Method of Measuring Circumference- Arm, Waist, Hip, Thigh.
3.4 Method of Measuring Skin Folds - Triceps, Sub Scapular, Suprailiac.

Unit – IV

Skill Tests:

4.1 Badminton: Miller Wall Volley Test.
4.2 Hockey- Schmithals-French Field Hockey Skill Test, Friendel Field Hockey Test,
4.3 Volleyball- Russel Lange Volleyball Test, Brady's Volleyball Test.
4.4 Tennis- Dyer Tennis Test.

Note: Practicals of indoor and out-door tests be designed and arranged internally.

References:

1) Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
2) Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press

3) Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications
4) Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
5) Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research
6) Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm IL: Human Kinetics
7) Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications.
8) Hennery Allen Lipman (2009), Measurement and evaluation in Physical Education.Friends Publication in INDIA.
9) Gladys Scott and Esther French (2009), Measurement and Evaluation in Physical Education, Sports Education Technologies.
10) Kalpana Debnath 91994), Womenn's performance & Sports, Friends Publications.
11) J.P.Sharma (2006), Tests and Measurements in Physical Education, Khel Sahitya Kendra.

Updated on 04.10.2018