

Department of Physical Education

Tripura University

Syllabus for PhD Course Work

ADVANCE AREA OF RESEARCH IN PHYSICAL EDUCATION

UNIT-1 **Research issues in Exercise Physiology**

- a) Exercise load variations and changes in-various system of the body, Lipid Profiles
- b) Training and Gender related Issues.
- c) Process food and Replimentation Performance , Doping .
- d) Latest Trend in Exercise Physiology Research

UNIT-II **Research Issues inn Psychological Domains of Sports Person**

- a) Skill Acquisition and Teaching Methodology.
- b) Motivational Issues in relation to Training and Competition.
- c) Psychological intervention Techniques in relation to Sports Competition Anxiety and Under Preparedness.
- d) Psychological preparation of Sportsmen for Competition.
- e) Psychological issues in relation to Women Sports Participation, Role Conflict, and Discrimination /Gender Bias etc:
- f) Latest trend in Research – Sports Aggression, Mental/Imaginary Training Exercise Addiction, Simulation training, Para – Normal Psychic Abilities.
- g) Leadership role in Sports Performance.
- h) Laboratory Testing of Psychological Parameters Construction of Test for specific Psychological Parameters.

UNIT – III Measurement of training modalities in research in Physical Education

Construction of Test for assessment of Parameters of Physical Fitness, Component.

- a) Construction of Test for assessment of Physiological Variables through Performance Test and Laboratory Test.
- b) Construction of Skill Specific test for Various Sports Disciplines.

Research Issues in Training

- a) Training Load specificity and resultant effect in relation in different Sports.
- b) Concept of different types of training methods and their specific adaptation for various sports disciplines.
- c) Designing Strength and Endurance Training according Sports Discipline.
- d) Research for developing recovery from fatigue from Training Session and Competition, Reason, Tackling of Burnout.

UNIT-IV Research Issues in Sports Biomechanics

- a) 3D analysis of sports skill for understanding Biomechanical Factor contributing to Performance.
- b) Analysis of force of contraction in a given Skill/Exercise using force platform/Electromyography.
- c) Role of spin effects, elasticity, fluid friction on skill execution and performance.
- d) Sports implement design and mechanical consideration
- e) Sports playing surfaces and their effects.

UNIT – V Yoga

- a) Effect of Asanas and Kriyas on various Systems.**
- b) Concept of**
 - i) Dhyana (Meditation) in Yoga.
 - ii) Underlying Principals in Yogic Meditation.

- iii) Health Benefit from Yogic Practices.
- iv) Preventive and Remedial aspect of Yoga
- c) Current trends of Research in Yoga.

