#### DOCTOR OF PHILOSOPHY IN PHYSICAL EDUCATION

### **Programe Outcomes**

- 1. The Programme of Doctoral Studies in Physical Education is geared towards advancing the Studies pertaining to Physical Education and Sports.
- 2. To inculcate the spirit of research in Physical Education Professionals and thereby expand the horizons of knowledge in the field.
- 3. To popularize the Physical Education and sports as an analytical discipline and add a scientific touch to it;
- 4. To add to the existing knowledge by acquainting oneself with different types of tools of research and becoming proficient in it.

## **Programme Specific Outcomes**

- 1. To identify the areas of Research in Physical Education and Sports and develop expertise in those areas
- 2. To increase the depth of understanding of issues existing in sports and develop an attitude of solving these issues.
- 3. To understand the analytical tools of analyzing data pertaining to varying types of research in physical education and sports.

SYLLABUS

#### PAPER I: RESEARCH METHODOLOGY

#### **Course Outcomes:**

- 1. To Understand the fundamentals of Research Methodology in Research
- 2. To understand the types of research prevailing in physical education and sports
- 3. To Understand the analysis of different types of research.
- 4. To become acquainted with the writing of thesis and data.

## **Chapter I – Foundations:**

The language of Research, Types of Studies, Time of Research, Variables, Hypothesis, Types of data, The Unit of Analysis, Philosophy of Research, Ethics in Research, Problem formulation, The Literature Review.

### **Chapter II – Sampling:**

External validity, Sampling Terminology, Statistical terms in sampling, probability sampling, non probability sampling

## **Chapter III – Survey Research and Scaling:**

Survey Research, Types of Survey, Selecting the Survey Method, Constructing the Survey Interviews, Advantages and disadvantages of Survey Methods, Scaling, Qualitative and Quantitative data.

Chapter IV – Experimental Design

Introduction to Experimental Design, Classifying Experimental Designs, Factorial Designs, Randomised block designs, Covarians designs, Quasi-Experimental Designs.

### **Chapter V – Analysis:**

Conclusion validity, Data preparation, Statistical Power, Checking the data for accuracy, Data transformation, Descriptive statistics, the distribution, Central Tendency, Dispersion, Correlation, Testing the significance of a correlation, other correlations, Inferential statistics.

# **Chapter VI – Research Proposal and Reporting:**

Formatting, title page, Abstract, Body of thesis, Introduction, Methods, Sample, Measures, Design Procedures, Results, Conclusions, References, Tables, Figures, Appendices, Sample Paper.

## **Reference Books:**

- 1. William M K Trochim, Research Methods, Atomic God Publishing, USA
- 2. Best, J. W. (1971) Research in Education, New Jersey, Prentice Hall Inc.
- 3. Clarke, David H & Clarke H, Harrison (1984). Research Processes in Physical Education, New Jersey, Prentice Hall Inc.
- 4. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London, Routledge Press.
- 5. Jerry R Thomas & Rack K Nelson (2000) Research Methods in Physical Activities, Illinois, Human Kinetics
- 6. Kamlesh, M L (1995) Tesis Writing Format. Chennai, Poompugar Pathippagam

# II PAPER – REVIEW OF LITERATURE

## **Course Outcomes:**

- 1. To become aware of the research done in an individual's area of expertise.
- 2. To understand the methodology followed and analysis done on related areas of research.
- 3. To develop a topic of research based on the literature reviews done and finalise the research topic.

