

**KADI SARVA VISHWAVIDYALAYA
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Ph.D Course Work

In

Physical Education

Curriculum of the Course Work

There will be three papers of 100 marks each.

Paper-I Research Methodology

Paper-II Scientific Communication

Paper-III Core Paper: Physical Education

Scheme of Examination

Paper No.	Subject	Total Marks	Max Marks University Exam	
			Objective	Descriptive
Paper – I	Research Methodology	100	60	40
Paper – II	Scientific Communication	100	60	40
Paper – III	Core Paper: Physical Education	100	60	40

Paper – I

Research Methodology

UNIT-I

1.1 Introduction

- 1.1.1 Meaning, Nature and scope of Research, Importance of Research in General and with special reference to Physical Education and Sports.
- 1.1.2 Characteristics of Research and Research workers.
- 1.1.3 Basic, Applied and Action Research - Their relationship and differences.
- 1.1.4 Characteristics, importance and methodology of action research.
- 1.1.5 Research Ethics and Plagiarism.

1.2 The Problem

- 1.2.1 Selection of Problem.
- 1.2.2 Developing problem statement.
- 1.2.3 Meaning and significance of hypothesis.
- 1.2.4 Type of hypothesis

UNIT-II

- 2.1.1 The concept of population and samples in research procedure.
- 2.1.2 Library techniques, Testing techniques, laboratory planning.
- 2.1.3 Analysis and interpretation of data.
- 2.1.4 Constructions of Tests.

UNIT-III

3.1 Non Laboratory Research Techniques

3.1.1 Historical Research

- 3.1.1.1 Meaning and significance
- 3.1.1.2 Examining Validity of Historic Data
- 3.1.1.3 Principles of Historical Criticism
- 3.1.1.4 Pitfalls in Historical Research

3.1.2 Philosophical Studies

- 3.1.2.1 Meaning and Significance
- 3.1.2.2 Methodology of Philosophical Research
- 3.1.2.3 Critical Thinking continuum

3.1.3 Descriptive Studies - Broad: Survey

- 3.1.3.1 Questionnaire, Opinionaire and interview techniques
- 3.1.3.2 Case studies and profiles

3.2 Laboratory Research

- 3.1.1 Experiments methods: Designs and applicable statistical procedures.

- 3.1.2 Control of Experimental factor
- 3.1.3 Principles of experimental enquiry mill canons.
- 3.1.4 Establishing a research laboratory

UNIT-IV

4.1 Research Reports

- 4.1.1 Difference between Abstract, Research Proposal and Research Report.
- 4.1.2 Format of Research Report.

Paper – II

Scientific Communication

- 1. Present, Past and Future Tenses
- 2. Parts of speech (Noun, Pronoun, Adjective, Verb, Adverb, Conjunction, Preposition and Interjection)
- 3. Comprehension
- 4. Precise Writing
- 5. What is research paper? How to write research paper?
- 6. Norms and standards of writing research papers and publishing papers;
 - a. Reviewing and recording from books, journals, articles and thesis
 - b. Writing titles, running title
 - c. Authors-single and multiple authorship
 - d. Writing abstract/summary/briefs
 - e. Selecting key words
 - f. Writing introduction of the paper
 - g. Tools and methods selection
 - h. Writing result
 - i. Presentation of figures, design, table components Graphs; types, style, table v/s graph
 - j. Discussion section; format, drawing conclusion, language style
 - k. Acknowledgement
 - l. References: different style
 - m. Communication with the editor, reviewing references' comments, galey proofs
- 7. Writing review articles
- 8. Preparing and delivering of oral presentation of research paper and handling questions
- 9. Funding agencies of research work, preparing project proposal and applying for financial assistance
- 10. Basics of computer
- 11. Microsoft Word
- 12. Microsoft Excel
- 13. Microsoft PowerPoint
- 14. Use of Internet

Paper – III

Core Paper: Physical Education

Section - A

1. Introduction of sports sciences

- a. Exercise physiology
- b. Kinesiology
- c. Bio physics
- d. Bio chemistry
- e. Scientific principle of sports training
- f. Dietetics

2. General health related tests

- a. Body composition tests
 - (i) Biceps skin thickness measurement
 - (ii) Triceps skin thickness measurement
 - (iii) Skin below the scapula thickness measurement
 - (iv) Skin in front of the waist bone thickness measurement
 - (v) Body mass index
- b. Cardiovascular fitness tests
 - (i) Hayward step test
 - (ii) Cooper 12 minutes run/walk test
 - (iii) Vol2 max or aerobic capacity test
 - (iv) 1.5 mile running test
- c. Flexibility tests
 - (i) Sit and reach test
 - (ii) Floor touch test
- d. Muscular strength tests
 - (i) Right and left hand grip strength test
 - (ii) Leg strength test
 - (iii) Back strength test
- e. Muscular strength tests
 - (i) Sit-up test
 - (ii) Circuit training test

3. Skill related or specific fitness test

- a. Agility tests
 - (i) Squat thrust test
- b. Balance tests
 - (i) One leg or stork balance test

- (ii) Inverted balance test
- c. Co-ordination tests
 - (i) Eye hand co-ordination test
 - (ii) Eye leg co-ordination test
- d. Physical power tests
 - (i) Jump and reach test (vertical jump)
 - (ii) Standing broad jump test
- e. Reaction time tests
 - (i) Nelson's hand reaction time test
 - (ii) Nelson's leg reaction time test
- f. Speed tests
 - (i) 50 yards dash test
 - (ii) Test of the distances covered in 4, 6 or 8 seconds

4. Different games skill tests

- a. Basketball skill tests
 - (i) AAHPERD Basketball skill test
 - (ii) SAI Basketball test
- b. Football skill tests
 - (i) McDonald football skill test
 - (ii) SAI football test
- c. Hockey skill tests
 - (i) Target shooting test
 - (ii) Harbans Singh's Hockey test
- d. Volley ball skill tests
 - (i) Brady's volleyball skill test

Section - B

1. Management in Physical Education: Concept, scope need & its importance in field of physical education and sports.
2. Sports Personnel: Types of personnel, requirement, types of work, interview for selection.
3. Sports leadership: Meaning of definition, personality factors, leadership and organization
4. Modern trends in physical education: Sports computer, sports engineering, sports media.
5. Control and evaluation in sports: Meaning & definition, principle of control, research in evaluation