

DEPARTMENT OF RESEARCH DEVELOPMENT & ADVANCED STUDIES

STAFF PROFILE

Dr. Jasraj Singh	:	Professor and Head
Dr. Ramesh Pal	:	Professor
Dr. V.K. Shrivastava	:	Professor
Dr. B. Basumatary	:	Professor
Dr. Madan Singh Rathore	:	Assistant Professor

3.1 INTRODUCTION

The Department was established in order to cater the need of research in the area of Physical Education & sports and to serve as a nodal agency for the research in various disciplines of Physical Education & Sports. In addition, the department also trains students in utilizing the equipments available in the research laboratories of this Institute.

3.2 COURSES OFFERED

At present, the department offers following courses-

3.2.1 Master of Philosophy (M.Phil.) in Physical Education.

3.2.2 Doctor of Philosophy (Ph.D.) in Physical Education (Regular & Part time).

3.3 REQUIRMENTS & PROCEDURES FOR ADMISSION TO MASTER OF PHILOSOPHY (M.Phil.) IN PHYSICAL EDUCATION (18 months) PROGRAMME.

Last Date of Receipt of Application (Extended) : July 7, 2010

Date of Admission Test (Extended) : July 10, 2010

Venue: L.N.U.P.E, Gwalior MP

Reporting Time for Admission Test: 10 am on : July 10, 2010

Date of Interview : July 20-21, 2010

Commencement of Course Work (For qualifiers) : Aug 02, 2010

NOTE: After qualifying the entrance test each successful scholar will have to appear before panel of experts to discuss their Research area/ interest, which he/she would be pursuing during his/her MPhil course.

Scholars with satisfactory performance in Interview would be admitted to Course Work of ONE Semester commencing from Aug.2, 2010. Only after qualifying in the course work the scholar will be registered for full M.Phil course.

Please refer to the UGC Regulations 2009 available on our site, for more details.

3.4 NUMBER OF SEATS (Total 30): Regular seats - 20

Payment seats - 10

3.5 ELIGIBILITY

The candidate should have obtained M.P.Ed. (Master of Physical Education, (two years duration) or any other equivalent degree from a recognized University and also recognized by this University. The candidates seeking admission in M.Phil must have scored minimum 55% marks (50% for SC/ST candidates) in M.P.Ed. or equivalent examinations.

3.6 ADMISSION PROCEDURE

Duration of the test : 2 hours

Written Test (For General Awareness and Professional Competence and Interview) : 100 Marks

- i. The written test shall contain questions up to the level of M.P.Ed. with specific focus on proposed area of specialization, Research Methods, Applied Statistics, Current Affairs and General Awareness. The test shall have both objective (Multiple Choice) and subjective questions.

ii. The details of marks shall be as follows:

- (a) Current affairs and General Awareness : 10 Marks
- (b) Research Methods : 25 Marks
- (c) Applied Statistics : 25 Marks

(d) Specialization

: 40 Marks

Syllabus for entrance test

3.7 QUALIFYING MARKS

In entrance test minimum 50% marks (45% for SC/ST) shall be mandatory to qualify the test. The admission shall be granted strictly on merit basis for regular as well as for payment seats.

3.8 FEE STRUCTURE

Each student will pay the fees as given in **Annexure – VI** .

The candidates under self supporting scheme will be require to pay a sum of Rs. 30,000/- in addition to Normal Fee.

3.9 UNIFORM

Students of M.Phil. will be required to possess the uniform as per University rules, which is mentioned at **Annexure- XI** .

3.10 COURSES INFORMATION

The courses contains the compulsory and optional areas.

3.10.1 COMPULSORY AREA

- (1) Research Methods.
- (2) Advanced Statistics and Computer Application.
- (3) Dissertation.

3.10.2 OPTIONAL AREA/SPECIALIZATIONS

Candidates are required to select one of the following optional as specialization. Each specialization shall have two papers.

- (1) Sports Psychology (2) Exercise Physiology (3) Sports Biomechanics (4) Sports management (5) Health Education (6) Evaluation Techniques in Physical Education

3.11 AWARD OF M.PHIL. DEGREE

A candidate must obtain at least 50% marks in each theory paper, and dissertation separately.

IMPORTANT NOTE:

After qualifying the entrance test on merit, the candidates will be required to appear before the expert panel where they will be discussing their research area/interest, upon satisfactory Interview the admission to **COURSE WORK** of ONE semester (About 5-6 months) will be confirmed.

There will be an exam after the Course work and each scholar is required to score minimum 55% marks (50% for SC/ST) to qualify and then registration for M.Phil is done and the course commences.

SYLLABUS: M.Phil. ENTRANCE TEST

Selection (A) Current Affairs and General Awareness

10 Marks

Selection (B) Research Methods

25 Marks

- I. a. Characteristics of a Research worker.
b. Types of research – Basic, Applied and Action research.
- II. a. Formulation of research problem.
b. Location and criteria of selecting a research problem.
c. Limitations and delimitations.
- III. a. Meaning and definition of Hypothesis.
b. Significance of Hypothesis.
c. Types of Hypothesis.
- IV. Non-Laboratory research.
 1. Historical research-meaning, historical sources and their evaluation.
 2. Survey studies- Tools of Survey; Questionnaire & Interview
 3. Case studies.
- V. Laboratory research
 1. Experimental research.
 2. Types of Experimental designs and control of experimental factors.

Section (C) Applied Statistics

25 Marks

- I. Statistical processes and their application in research
- II. a. Probability – Meaning and methods of computing probability.
b. Binomial expansion and computing probability for the obtained scores. Problems on dice.
c. Normal curve-definition and properties of normal curve.
d. Divergence from normality – Skewness and kurtosis.
e. Development of norms in the form of grading scales – Hull, sigma T and percentile scales.
- III. a. Meaning and definition of Hypothesis.
b. Why sample is preferred over population.
c. Size of sample.
- IV. a. Testing of Hypothesis null and alternative Hypothesis.
b. Degree of freedom.
c. Type I and type II errors.
d. One and two tailed tests.

- e Level of significance.

Section (D) Specialization – Only one to be chosen

M.M.40

1. **Sport Psychology**
 - I. **Motor Learning**
 - a. Meaning of motor learning.
 - b. Factors affecting motor learning.
 - c. Motor development in various periods of childhood and adolescence.
 - II. **Psychological aspects of Competition**
 - a. Defining of competition.
 - b. Determinates of Competitive behavior.
 - c. Characteristics –pre-competition, and post competition state.
 - III. Psychological aspects of long term and short-term preparation for competition.

2. **Exercise Physiology**
 - I.
 - a. Fuel for muscular work (ATP.)
 - b. Energy of muscular contraction.
 - c. Various changes during muscular contraction.
 - d. Aerobic and anaerobic muscular activity.
 - e. Aerobic and anaerobic muscular activity.
 - II. Physiological changes due to exercise.
 - a. Immediate effect of exercise/work on various systems of body, cardio-respiratory muscular and thermo-regulatory system.
 - b. Effect of conditioning and training:
 - (i) Heart and circulatory training.
 - (ii) Respiratory system.
 - (iii) Brief discussion on other system during rest, sub-maximal and work
 - c. Oxygen debt, forced expiratory volume, breathing capacity, recovery rate.
 - d. Blood supply to skeletal muscle and regulation of blood flow during exercise.

3. **Sports Biomechanics**
 - I. Linear, angular and general motion
 - a. Distance and displacement (linear and angular)
 - b. Speed and velocity (linear and angular)
 - c. Acceleration for linear and angular motion.
 - d. Relationship for linear and angular.
 - e. Centrifugal and centripetal forces.
 - f. Newton's laws of motion as applicable to linear and angular motion.

 - I.
 - a. Force – meaning, units of force, effects of force, sources of force, components and resultant.
 - b. Work, power and energy.
 - c. Projectiles, momentum and Impulse
 - d. Stability (Static and Dynamic)
 - e. Spin, impact and elasticity.

4. Evaluation Techniques in Physical Education,

- I. Selection and construction of tests.
 - a. Criteria of test Selections –Selections authenticity, (Reliability, validity, objective, norms) administrative feasibility and education application.
 - b. Classification of tests: Standardized and teacher made tests (Objective and subjective tests)
 - c. Construction of test: Knowledge tests (Written test) and skill tests.
- II. Critical evaluation of tests for Physical fitness, motor fitness and sports skill tests.
- III. Anthropometric measurement.
- IV. Social & Psychological testing.
- V. Health related Physical fitness.

5. Sport Management

- I.
 - a. Management of sports in schools, colleges and Universities.
 - b. Inter – University, District, State and National levels.
 - c. India and International Olympic association.
 - d. Sports authority of India.
- II.
 - a. Changed process for the future: Theory and technique, system's approach marketing and sponsorship approach for competitive sports, successful management in future.
 - b. Selected problems in management/administration, professional preparation, profession athletics, class discipline and students teaching.

6. Health Education

- I. Concept of Health and Health education
- II. Various levels of Health
- III. Contents of Health education
- IV. School Health services
- V. Nutrients and their role
- VI. Balanced diet and malnutrition
- VII. Housing and air programmes
- VIII. Family welfare programmms
- IX. Sex education
- X. Drugs and alcoholism
- XI. Communicable diseases: TB. Malaria, AIDS
- XII. Non-Communicable diseases: Heart diseases and diabetes
