

**SYLLABUS FOR ENTRANCE TEST EXAMINATION OF M.PHIL, PH.D. AND URS IN
PHYSICAL EDUCATION**

The entrance test examination will consist of questions of the following topics:

- | | | |
|-----|---|----------|
| 1. | Sports Psychology | 8 marks |
| 2. | History & Principles of Physical Education & Sports | 8 marks |
| 3. | Kinesiology | 8 marks |
| 4. | Anatomy, Physiology, Physiology of Exercise & Sports Medicine | 10 marks |
| 5. | Sports Sociology | 5 marks |
| 6. | Bio-mechanics in Physical Education | 08 marks |
| 7. | Officiating and Coaching (rules, dimension, regulations of major
Athletic and sports (games event) | 08 marks |
| 8. | Health Education & Recreation | 05 marks |
| 9. | Yoga | 05 marks |
| 10. | Research Methodology | 08 marks |
| 11. | Test Measurement & Evaluation in Physical Education | 08 marks |
| 12. | Sports Management | 04 marks |
| 13. | Computer Applications | 05 marks |
| 14. | Current Affairs | 05 marks |
| 15. | Sports Training | 05 marks |

Total marks: - 100

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**SCHEME OF EXAMINATIONS FOR M.PHIL PROGRAMME IN PHYSICAL
EDUCATION FOR THE SESSION 2010-11**

Semester I

Paper	Nomenclature	Written Theory	Internal Max Marks	Total Marks
I	Research Methodology	80	20	100
II	Statistics in Physical Education	80	20	100
III	Computer Application	80	20	100
	Total	240	60	300

Semester II

Paper	Nomenclature	Written Theory	Internal Max Marks	Total Marks
IV	Measurement Evaluation in Physical Education.	80	20	100
V	Optional a) Sports Bio-mechanics b) Sports Psychology c) Sports Management	80	20	100
VI	Dissertation	200 (150+50)		
	Total	400		
	Grand Total	300+400=700		

Note:- Paper III is an optional paper, out of these three options candidate is required to choose one as per his/her choice.

Dissertation and Viva-voce examination would be assessed by the external examiner and would be awarded grade.

DISSERTATION

The scholar will be required to write a dissertation on a selected topic in the second semester. The dissertation may include the results of original research empirical or documentary or a fresh interpretation of existing knowledge of date.

Paper-I RESEARCH METHODOLOGY

Time – 3 hours

Max. Marks = 100

External marks: 80

Internal marks: 20

Note: - The paper setter is required to set eight questions from four units, two questions from each unit. Candidate is required to attempt four questions in all selecting one question from each unit. All questions carry equal marks.

UNIT –I
RESEARCH

- Meaning, Need, Nature and scope of Research in Physical Education
- Characteristics of a good research
- Fundamental, applied and action research
-

REVIEW OF LITERATURE

- Importance, location of the research material – index, books, bibliography, reviews and abstract, critical literature and allied literature
- Steps in reviewing literature
- Not taking, scanning and sbimming,

UNIT-II
RESEARCH PROBLEM

- Identification of area for research in Physical Education
- Selection of problem
- Delimitation and operationalization of variables

HYPOTHESIS

- Meaning and Importance
- Characteristics of good hypothesis
- Sources (iv) Types of hypothesis

UNIT-III
METHODS OF RESEARCH

- Historical
- Descriptive
- Experimental
- Philosophical

RESEARCH DESIGN

- Meaning of research design and its importance
- Type of research design

UNIT-IV

SAMPLING

- Concept of population and sample
- Method of sampling : Probability and non-probability

TOOLS & TECHNIQUES

- Characteristics of a good research tools
- Questionnaire, Interview, Observation, Psychological Test, Sociometric Techniques, Attitude Scale, Inventories

REPORT WRITING

- Developing research proposal (synopsis)
- Characteristics of a good research report
- General format of a research report

REFERENCE

1. Aggarwal, Y.P. (1998) The Science of Educational Research, A Source book, Nirmal, Kurukshetra.
2. Garrett, H.E. (1973), Statistics in Psychology and Education Vakils, Feffer and Simon, Bombay.
3. Good: C.V. and Douglas, E.Scates 1954, Methods in Social Research, Mcgraw Hill, New York.
4. Kou, Lokesh (1988), Methodology of Research, Vikas, New Delhi.
5. Mouly, A.J. (1963), The Science of Educational Research Euroasia, New Delhi.

Paper-II STATISTICS IN PHYSICAL EDUCATION

Time – 3 hours

Max. Marks = 100

External marks: 80

Internal marks: 20

Note: The paper setter is required to set eight questions from four units, two questions from each unit. Candidate is required to attempt four questions in all selecting one question from each unit. All questions carry equal marks.

UNIT-I
STATISTICS

- Meaning and importance in Physical Education

DATA

- Method of organizing data through frequency distribution

MEASURE OF CENTRAL TENDENCY (meaning and computation)

- Mean, Median, Mode.

UNIT-II

MEASURES OF DISPERSION (Meaning & Computation)

- Range
- Quartile Deviation
- Average Deviation
- Standard Deviation

MEASURES OF RELATIVE POSITION

- Meaning & Computation
- Percentile
- Percentile rank

UNIT-III

NORMAL PROBABILITY CURVE

- Meaning
- Characteristics
- Application
- Skewness and Kurtosis

CORRELATION

- (Meaning uses and computation)
- Product Moment Correlation Rank Difference Correlation (a) Partial and Multiple (b) Phi and Tetrachoric

UNIT-IV

ANALYSIS OF VARIANCE

- Meaning, Assumption and Computation (a) One way Anova (b) Two way Anova

CHI-SQUARE

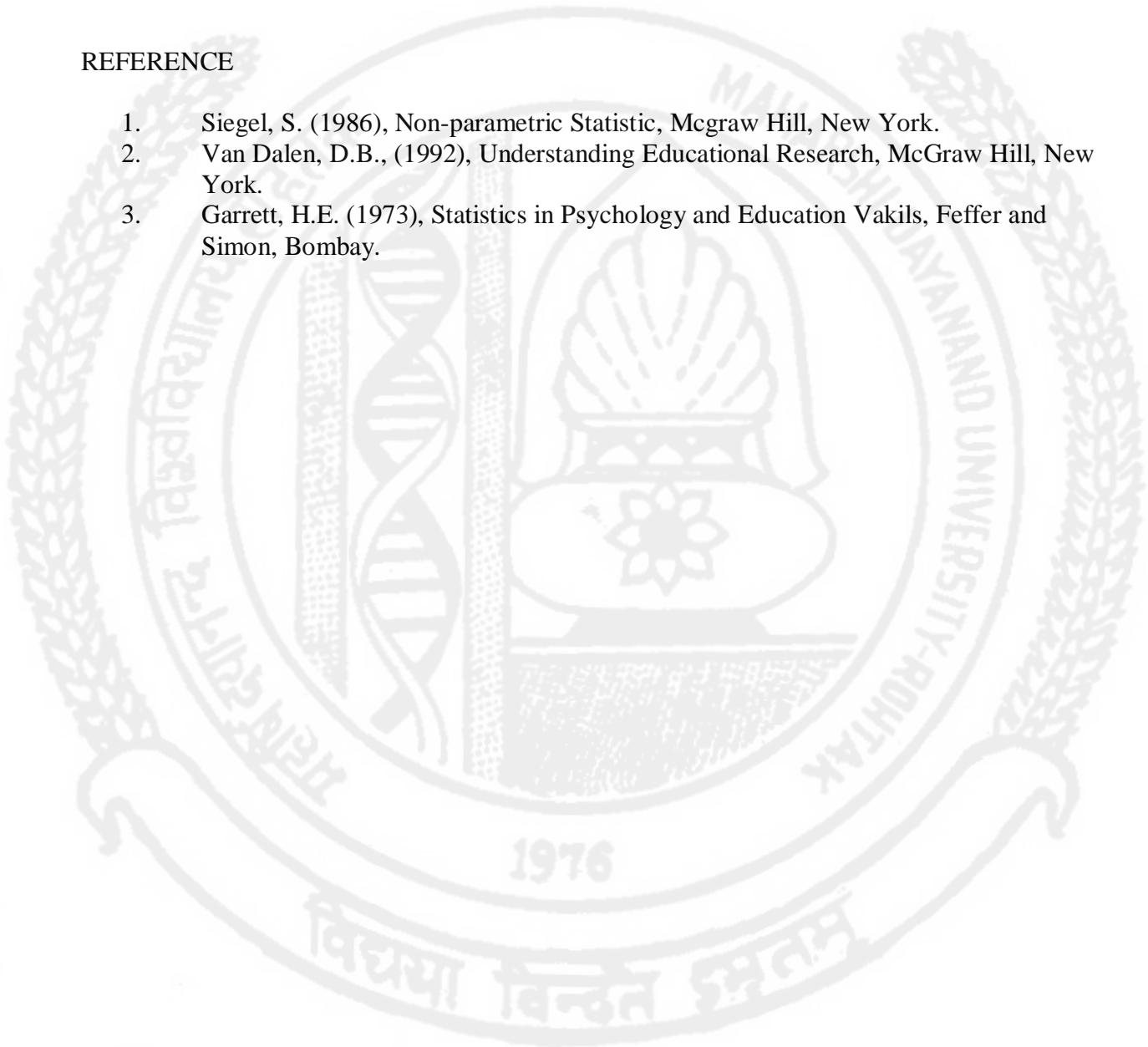
- tests of equality and Independence (Meaning, Assumption and Computation)

T -TEST:

- Significance of difference between two means (independence samples)

REFERENCE

1. Siegel, S. (1986), Non-parametric Statistic, McGraw Hill, New York.
2. Van Dalen, D.B., (1992), Understanding Educational Research, McGraw Hill, New York.
3. Garrett, H.E. (1973), Statistics in Psychology and Education Vakils, Feffer and Simon, Bombay.



PAPER-III
Computer Applications
(SEMESTER-I)

Max. Marks: 80

Int. Marks : 20

Time: 3 hours

NOTE:- Paper setter is required to set eight questions from entire syllabus by selecting at least two questions from each unit. The candidate is required to attempt four questions in all by selecting atleast one question from each unit.

UNIT-I

- Definition of Computer, Block diagram of computers, classification of computers, role of computer in Physical Education.
- Components of Computer
Hardware {CPU, Monitor, Keyboard etc.)
Software (DOS, Basic, Colbol}

UNIT-II

- What is an OS? Functions of an OS?
- OS as a resource manager, Types of OS, Features of OS, Concepts of warm & Cold booting, swapping, spooling and buffering.

UNIT-III

MS-office and data Analysis Software

- Word-Introduction of word processor, creating & saving documents.
- Excel- Introduction to excel, need of spreadsheet, creating, opening & saving workbook, editing worksheet, using links, applying different views, Types of functions.
- Power Point-Introduction of slides, speaker notes, media clips, graphs, picture, web pages, adding different kind of slides, working with Power Point, inserting text objects, formatting Text.
- Introduction to Data analysis software SPSS & application of t-test, Chi square and Anova through SPSS Soft-ware.

UNIT-IV

- Introduction
- Evaluating internet resources: Authority, Accuracy and objectivity.
- Brief note on e-books and virtual library.
- UGC-infonet, INFLIBNET and ERNET.
- What is Plagiarism and how to avoid it?

**Paper- Measurement Evaluation in Physical Education
(SEMESTER-2nd)**

**Max. Marks: 80
Int. Marks: 20
Time: 3 hours**

NOTE:- Paper setter is required to set eight questions from entire syllabus by selecting at least two questions from each unit. The candidate is required to attempt four questions in all by selecting at least one question from each unit.

UNIT-I

Measurement and Evaluation

- Measurement (Meaning and its levels)
- Evaluation
 - a) Meaning
 - b) Need and Importance
 - c) Characteristics
 - d) Formative and Summative Evaluation
 - e) External and Internal Evaluation (Advantages and disadvantages)
- Inter relationship between measurement and evaluation

UNIT-II

- Test Meaning & Importance
- Test for strength, Endurance, speed, flexibility & agility
- Administration of various fitness test
- **Agility test:** (a) Zig-zag test (ii) Burpee test
- **Mobility & Balance:** Sit & Reach test (b) Trunk flexion test (c) Hip flexion test
- **Strength:** Chin-up test (b) Grip Strength test
- **Speed & Power:** 60 meter speed test (b) 400 meter sprint test

UNIT-III

CHARACTERISTICS OF A GOOD MEASURING INSTRUMENT

- Reliability (Concept and Procedures of Estimation)
- Validity (concept and Procedures of Estimation)
- Norms
- Usability

UNIT-IV

TEST STANDARIZATION

- Norm Referenced and Criteria Referenced
- Test, Standard Scores, T-scores
- Construction and standardization of Test
- Interpretation of Test Scores and Methods of Feedback to students.

References:

1. Measurement & Evaluation in Physical Education and Exercise Science – by Alan C. Lacy, Benjomin Cummings 2010

Paper-II (Optional)
BIO-MECHANICS IN PHYSICAL EDUCATION & SPORTS (a)
(Semester-2nd)

Max. Marks: 80

Int. Marks : 20

Time: 3 hours

NOTE:- Paper setter is required to set eight questions from entire syllabus by selecting at least two questions from each unit. The candidate is required to attempt four questions in all by selecting atleast one question from each unit.

UNIT-I

Meaning of Bio-mechanics function & importance in sports

Linear Kinematics, Angular Kinematics

Linear Kinematics

Angular Kinematics

UNIT-II BALANCE AND EQUILISIUM

Various stages of stability on which stability depends

Guiding principles of stability

What is motion causes of motion, kinds of motion & factors modifying motion?

Newton's Laws of motion and its application in sports.

UNIT-III SPECIAL FACTOR SAFFECTING PERFORMANCE FORCE

Nature of force, magnitude of force, point of application of direction of force Component of force, torque (moment) summation of movement transfer of momentum.

Parallelogram of force, Effect of gravity, determination of location of high point of flight, optimum projection and angle for greatest distance special application for principles of projectiles. Shot-put, broad jump, high jump, javelin and shooting in Basketball.

UNIT-IV LIVER & FLUID MECHANICS AND MECHANICAL PRINCIPLE INVOLVED

Definition and description of elements of liver

Advantage of liver in sports, Movement arm length specific of each pattern

Under arm pattern, Over arm pattern side arm pattern

Pushing and pulling pattern

ASSIGNMENTS

Find out the C.G. of human being in a stationary position with movements of the segments of the body.

Find out the C.G. of human being with different movement implements.

Analysis of movements. A subject will be provided to the candidate will write detail reports of his movements. The examiner will give topic of movements.

Lever: Advantages of lever and demonstration of its functioning Equilibrium and demonstration of its various positions.

Paper-V (Optional)
SPORTS PSYCHOLOGY (b) (Semester – 2nd)

Max. Marks: 80

Int. Marks : 20

Time: 3 hours

NOTE:- Paper setter is required to set eight questions from entire syllabus by selecting at least two questions from each unit. The candidate is required to attempt four questions in all by selecting atleast one question from each unit.

UNIT-I INTRODUCTION OF SPORTS PSYCHOLOGY

Definition of Psychology and Sports Psychology, Scope of sports Psychology, Methods and Utility of Psychology in Physical & Sports.

UNIT-II TRANSFER OF TRAINING

Various types of transfer of training.
 Different theories, importance of transfer of training
 Conditions of motor skill learning
 Competition as a social necessity
 Competition and Motivation
 Competition and Co-operation and its significance in sports.

UNIT-III PSYCHING UP TECHNIQUES FOR SPORTS PERFORMANCE

Goal Setting
 Pap talks
 Bulletin Boards, Mass Media, Fan Support
 Pre-competitive work out, Post competition evaluation
 Guidelines for improving sports performance.

UNIT-IV INDIVIDUAL DIFFERENCES & ADJUSTMENT

Various causes, Different Types, The role of a Coach/Physical Education teacher to minimize the differences
 Various level of adjustment, Home Family, School
 Environments and adjustment in sports competition

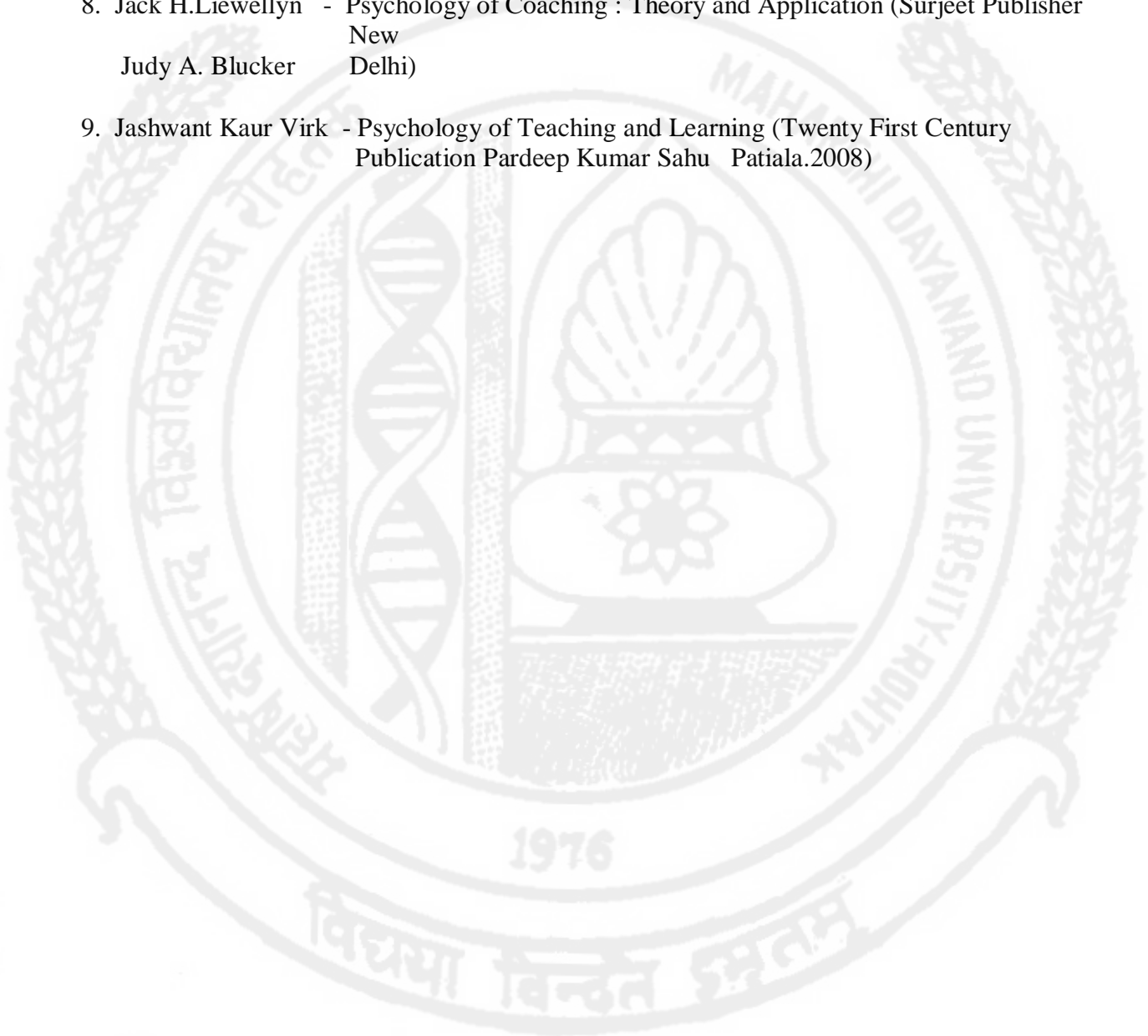
ASSIGNMENTS

Sociometric test, Personality Test (16 P.F.)
 Sports Competition anxiety test.
 H.S. Ashtnana's adjustments inventory.

REFERENCE

1. Bhatia, Hans Raj, Test Book of Education Psychology, Delhi: Macmillan,2003.
2. Rouben.B.Frost : Psychological concepts applied to Physical Education and Coaching, Edition, Wesley Publishing Co.London.
3. Dridge & Hung : Psychological foundations of Education. Harper and Row Publishers.
4. Jain, D.,Introduction to Psychology, New Delhi: K.S.K,2003.

5. Kamlesh, M.L. Education Sports Psychology, New Delhi, Friends Pub., 2006.
6. Kamlesh, M.L., Key Ideas in Sport Psychology, New Delhi, Friends Pub. 2007
Kutty, S.K Foundations of Sports & Exercise Psychology, New Delhi: Sports, 2004.
7. Robert.S.Weinberg - Foundations of Sports and Exercise Psychology (Third Edition)
Daniel Gould
8. Jack H.Liewellyn - Psychology of Coaching : Theory and Application (Surjeet Publisher
New
Judy A. Blucker Delhi)
9. Jashwant Kaur Virk - Psychology of Teaching and Learning (Twenty First Century
Publication Pardeep Kumar Sahu Patiala. 2008)



PAPER-V(OPTIONAL)
(c) SPORTS MANAGEMENT (SEMESTER-2nd)

Max. Marks: 80
Int. Marks: 20
Time: 3 hours

NOTE:- Paper setter is required to set eight questions from entire syllabus by selecting at least two questions from each unit. The candidate is required to attempt four questions in all by selecting atleast one question from each unit.

UNIT-I

- Scope and Concept of Sports Management, (Element or Function)
- Management, its advantages, organizing in Sports, staffing controlling in sports, Importance and Philosophy of Sports Management system and profession.
- Scope and concept of Administration, relation between administration Sports Management, Importance of Sports administration, planning, organization, resource mobilization, Principles of Planning, Pol standard practices.

UNIT-II

- Organizational elements, rules and regulations, procedure and attributes of an organization, delegation of authority and division of power, Destination characteristics of delegation, organization dynamics, open and close advantages and disadvantage, type of organizations, line organizational structure, their functional pattern, manpower plan features of human resources, controlling and development organizational structures and practices.

UNIT-III

- Designation, meaning of leadership, its personality traits, leadership managerial grid, qualities of leader, leadership and managerial behavior approach, co-ordination: its definition, Principle and techniques co-ordination. Motivation for sports, enhancement of motivation, motivation in sports organizations and participation, motivator in sports, organizations and participation, incentive as motivator sports.
- Direct and Indirect public relation, importance of public relation media, press relations, qualities of good PRO, correspondence and public relation establishment, community involvement and relations.

UNIT-IV FINANCE AND BUDGET FOR SPORTS

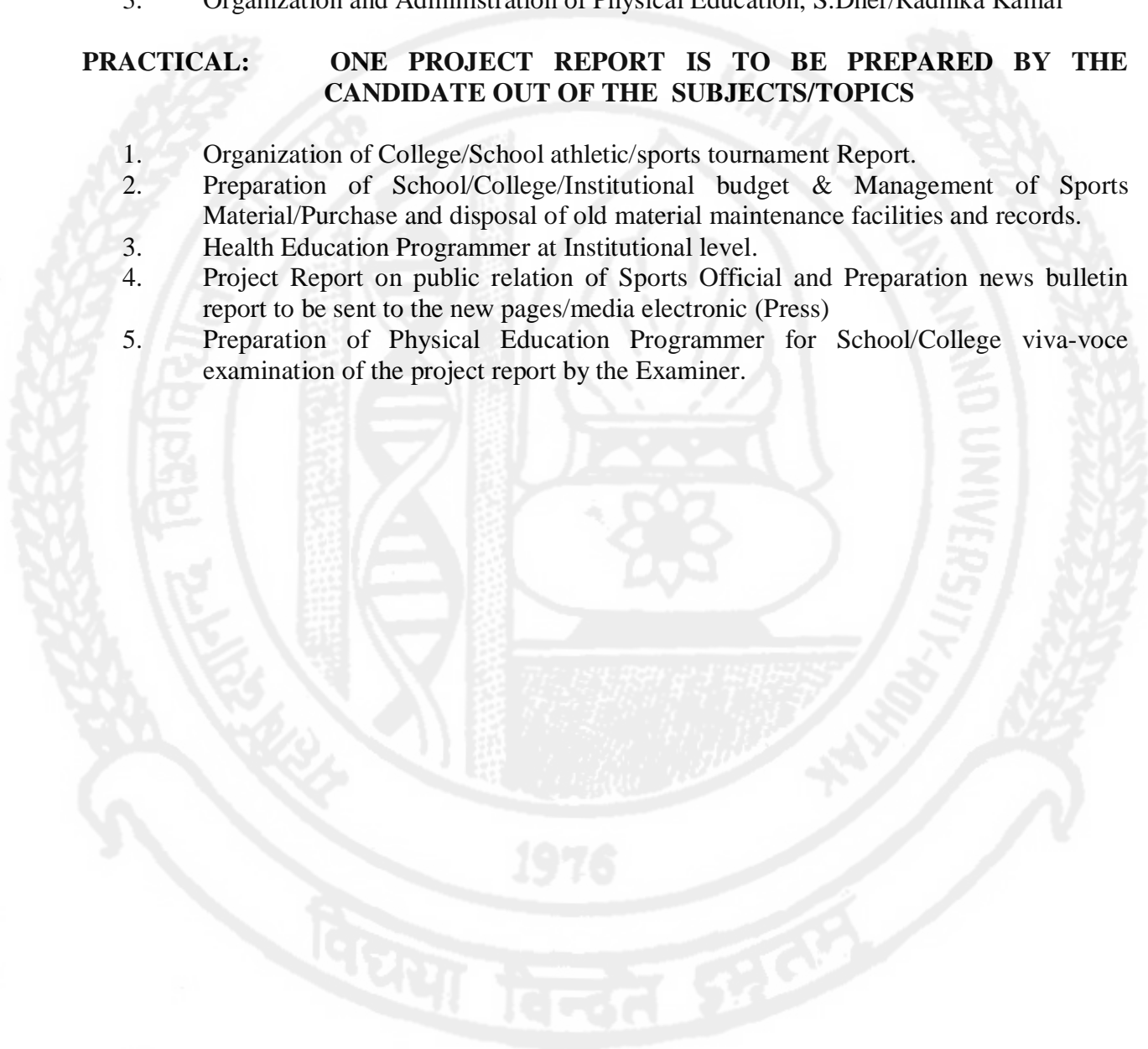
- Infrastructure, equipment, salaries, rewards, rising of funds, funds-drives, budget: functional budget, works expenses budget, performance budgeting, management of denial resources.
- Physical Education Programmers, Teaching Methods, Class Management Intramural, recreational and leisure services, planning, construct maintenance of facilities, use of computer. Inter scholastic & Inter Collegiate athletics and competitions, School Health Education.

REFERENCES

1. Administration of Physical Education and Athletics/Sports practices, Reubden D.Frost, Barbura Bay Lckgart, Stanlay J. Manchsal Universal Book Stall, 5 Ansari Road, New Delhi.
2. Sports Management, Sudhanca Shekhar Ray, Friends Pub. (India) Delhi 110089
3. Organization and Administration of Physical Education, S.Dher/Radhika Kamal

PRACTICAL: ONE PROJECT REPORT IS TO BE PREPARED BY THE CANDIDATE OUT OF THE SUBJECTS/TOPICS

1. Organization of College/School athletic/sports tournament Report.
2. Preparation of School/College/Institutional budget & Management of Sports Material/Purchase and disposal of old material maintenance facilities and records.
3. Health Education Programmer at Institutional level.
4. Project Report on public relation of Sports Official and Preparation news bulletin report to be sent to the new pages/media electronic (Press)
5. Preparation of Physical Education Programmer for School/College viva-voce examination of the project report by the Examiner.



**SCHEME OF EXAMIANATIONS FOR PRE-PH.D. PROGRAMME IN PHYSICAL
EDUCATION FOR THE SESSION 2010-11**

Paper	Nomenclature	Written Theory	Internal Max Marks	Total Marks
I	Research Methodology	80	20	100
II	Statistics in Physical Education	80	20	100
III	Computer Application	80	20	100
	Total	240	60	300

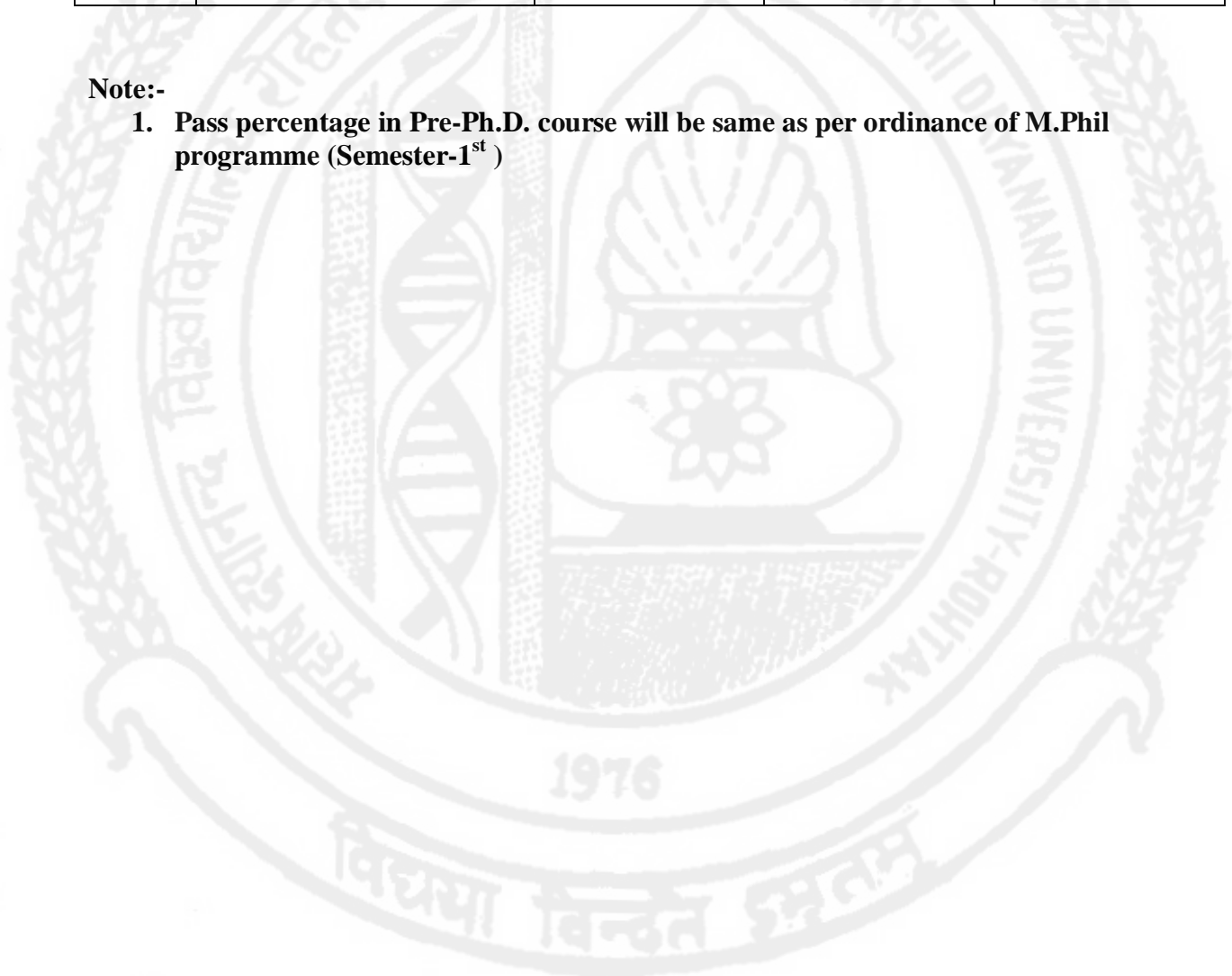


**Scheme of Examination for URS and
Pre-Ph.D. Course Work for the session 2010-11**

Paper	Nomenclature	Written Theory	Internal Max Marks	Total Marks
I	Research Methodology	80	20	100
II	Statistics in Physical Education	80	20	100
III	Computer Applications	80	20	100
	Total	240	60	300

Note:-

- 1. Pass percentage in Pre-Ph.D. course will be same as per ordinance of M.Phil programme (Semester-1st)**



SYLLABUS FOR PRE-PH.D COURSE 2010-11**Paper-I RESEARCH METHODOLOGY****UNIT –I**
RESEARCH

- Meaning, Need, Nature and scope of Research in Physical Education
- Characteristics of a good research
- Fundamental, applied and action research
-

REVIEW OF LITERATURE

- Importance, location of the research material – index, books, bibliography, reviews and abstract, critical literature and allied literature
- Steps in reviewing literature
- Not taking, scanning and skimming,

UNIT-II
RESEARCH PROBLEM

- Identification of area for research in Physical Education
- Selection of problem
- Delimitation and operationalization of variables

HYPOTHESIS

- Meaning and Importance
- Characteristics of good hypothesis
- Sources (iv) Types of hypothesis

UNIT-III
METHODS OF RESEARCH

- Historical
- Descriptive
- Experimental
- Philosophical

RESEARCH DESIGN

- Meaning of research design and its importance
- Type of research design

UNIT-IV
SAMPLING

- Concept of population and sample
- Method of sampling : Probability and non-probability

TOOLS & TECHNIQUES

- Characteristics of a good research tools

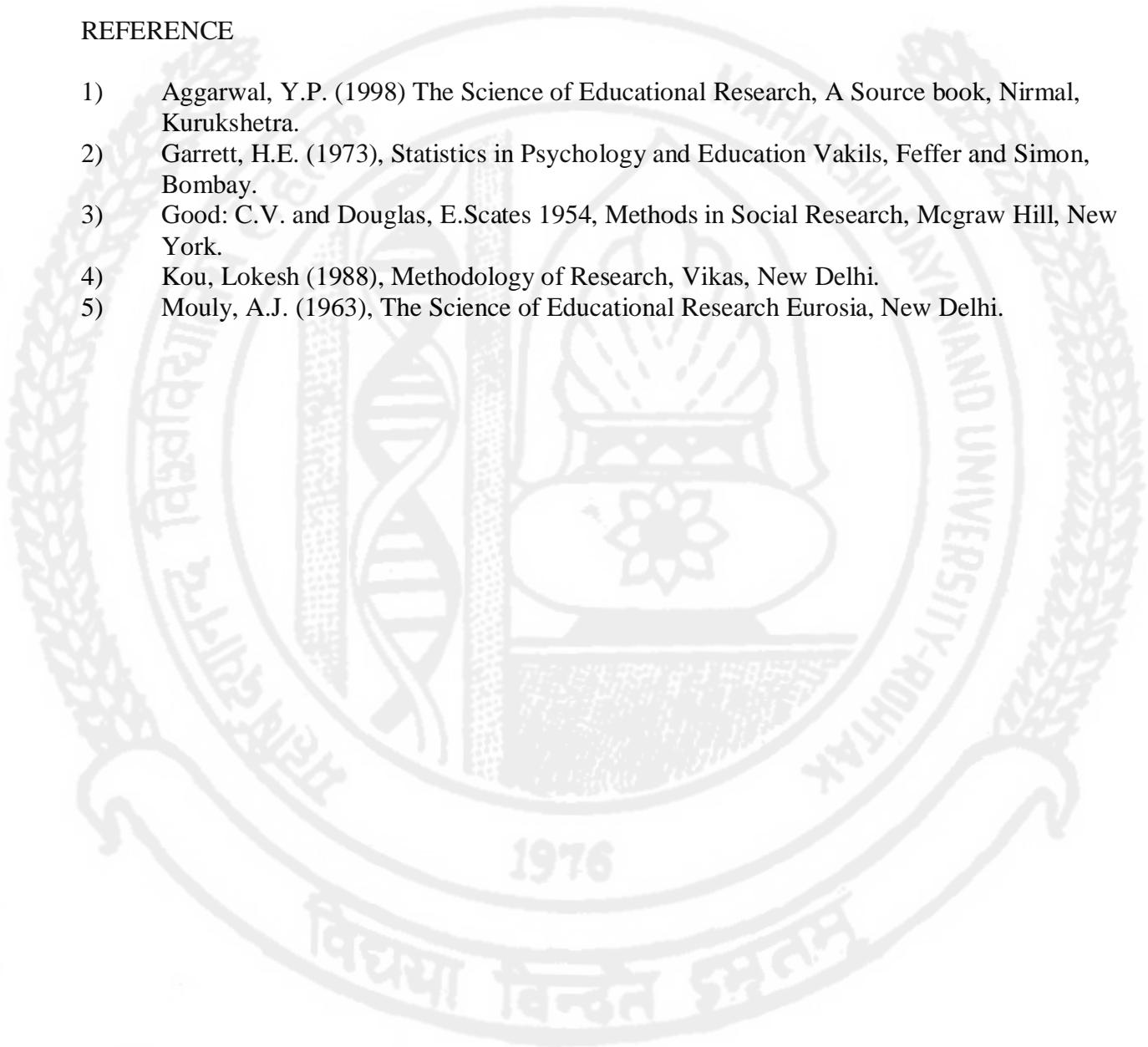
- Questionnaire, Interview, Observation, Psychological Test, Sociometric Techniques, Attitude Scale, Inventories

REPORT WRITING

- Developing research proposal (synopsis)
- Characteristics of a good research report
- General format of a research report

REFERENCE

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- 5) Mouly, A.J. (1963), The Science of Educational Research Euroasia, New Delhi.



Paper-II STATISTICS IN PHYSICAL EDUCATION
UNIT-I

STATISTICS

- Meaning and importance in Physical Education

DATA

- Method of organizing data through frequency distribution

MEASURE OF CENTRAL TENDENCY (meaning and computation)

- Mean, Median, Mode.

UNIT-II**MEASURES OF DISPERSION** (Meaning & Computation)

- Range
- Quartile Deviation
- Average Deviation
- Standard Deviation

MEASURES OF RELATIVE POSITION

- Meaning & Computation
- Percentile
- Percentile rank

UNIT-III**NORMAL PROBABILITY CURVE**

- Meaning
- Characteristics
- Application
- Skewness and Kurtosis

CORRELATION

- (Meaning uses and computation)
- Product Moment Correlation Rank Difference Correlation (a) Partial and Multiple (b) Phi and Tetrachoric

UNIT-IV**ANALYSIS OF VARIANCE**

- Meaning, Assumption and Computation (a) One way Anova (b) Two way Anova

CHI-SQUARE

- tests of equality and Independence (Meaning, Assumption and Computation)

T-TEST:

- Significance of difference between two means (independence samples)

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