

**UNIVERSITY OF MUMBAI**

No. UG/ 26 of 2018-19

**CIRCULAR:-**

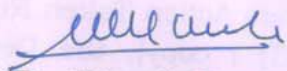
Attention of the Principals of the Affiliated Colleges, the Head University Departments and Directors of the recognized Institutions in Faculty of Interdisciplinary Studies is invited to this office circular No.UG/344 of 2011, dated 10<sup>th</sup> October, 2011 relating to syllabus of Master of Philosophy.

They are hereby informed that the recommendations made by the Ad-hoc Board of Studies in Physical Education at its meeting held on 24<sup>th</sup> April, 2018 have been accepted by the Academic Council at its meeting held on 5<sup>th</sup> May, 2018 **vide** item No. 4.3 and that in accordance therewith, the revised syllabus for the M.Phil. in Physical Education has been brought into force with effect from the academic year 2018-19, accordingly. (The same is available on the University's website [www.mu.ac.in](http://www.mu.ac.in)).

MUMBAI-400 032

22<sup>nd</sup> June, 2018

To

  
(Dr. Dinesh Kamble)  
I/c REGISTRAR

The Principals of the affiliated Colleges, the Head University Departments and Directors of the recognized Institutions in Faculty of Interdisciplinary Studies. (Circular No. UG/334 of 2017-18 dated 9<sup>th</sup> January, 2018.)

**A.C/4.3/05/05/2018**

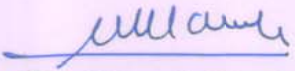
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No. UG/ 26 -A of 2018

MUMBAI-400 032 22<sup>nd</sup> June, 2018

Copy forwarded with Compliments for information to:-

- 1) The I/c Dean, Faculty of Interdisciplinary Studies,
- 2) The Chairman, Board of Studies in Physical Education,
- 3) The Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Professor-cum-Director, Institute of Distance and Open Learning (IDOL),
- 6) The Co-Ordinator, University Computerization Centre,

  
(Dr. Dinesh Kamble)  
I/c REGISTRAR

# UNIVERSITY OF MUMBAI

## M.PHIL IN PHYSICAL EDUCATION OUTLINE

(With Effect From the year 2018-2019)

### INTRODUCTION

The M. Phil. Degree shall have the status of an intermediate Degree between the first Post-Graduate Degree and the Doctorate Degree. It will have both research and course components and will give the student adequate background for advanced research.

### Objectives:

1. To equip students with essential knowledge and skills required for taking up multidimensional responsibilities in colleges of education at the pre-primary and secondary level.
2. To prepare students through systematic study and research towards contributing to the development of educational literature and lending to the growth of education as a discipline.
3. To develop a set of core skills in students to work with efficiency in the areas of teacher education, technology of teaching, educational administration and supervision
4. To train students to conduct field based research studies including selection of research problems, sampling, and preparation of research tools and adoption of statistical methodologies.
5. To prepare professional administrators and supervisors for the position of responsibilities in the context of emerging perspectives in educational planning and supervisory services.

COURSE WISE CREDIT ASSIGNMENTS  
Master in Philosophy (M.Phil) in Physical Education

| Course                                                                                                                                                                                                                                                                                                                                          | Code     | Hours      | Marks<br>(External) | Credit    | Code     | Hours     | Marks<br>(Internal) | Credit   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|---------------------|-----------|----------|-----------|---------------------|----------|
| <b>Course I</b><br>Research Methodology in<br>Physical Education &<br>Sports                                                                                                                                                                                                                                                                    | MPhil01  | 48         | 80                  | 4         | MPhil01  | 24        | 20                  | 2        |
| <b>Course II</b><br>Statistical Application in<br>Sports Sciences                                                                                                                                                                                                                                                                               | MPhil02  | 48         | 80                  | 4         | MPhil02  | 24        | 20                  | 2        |
| <b>Course III (Optional)</b> <ul style="list-style-type: none"> <li>• Test, Measurement &amp; Evaluation in Physical Education and Sports Sciences</li> <li>• Sports Psychology in Physical Education</li> <li>• Science of Exercise and Sports Training</li> <li>• Application of Yogic Sciences in Physical Education &amp; sports</li> </ul> | MPhil 03 | 48         | 80                  | 4         | MPhil 03 | 24        | 20                  | 2        |
| <b>Course IV</b><br>Dissertation                                                                                                                                                                                                                                                                                                                | MPhil 04 | 72         | 80                  | 6         | MPhil 04 | -----     | 20                  | -----    |
| <b>Total</b>                                                                                                                                                                                                                                                                                                                                    | -----    | <b>144</b> | <b>320</b>          | <b>18</b> | -----    | <b>72</b> | <b>80</b>           | <b>6</b> |

\* Total Credits =24 (18 theory + 6 projects)

\* Total marks = 400 (240 external + 60 interna

A learner should submit the two copies of dissertation to the University before the commencement of the University Examination. Each dissertation shall be examined by an external examiner appointed specifically for the purpose, by the board of Examination on the recommendation of the board of studies in Physical Education. Viva-voce examination on the dissertation will be held jointly by the external and internal examiners and the marks ( out of 80 ) will be given by the external examiner , on the basis of dissertation and viva- voce performance . whereas the marks out of 20 will be given by the concern guiding teacher on the basis of the work done by the learner.

## **COURSE I**

### **RESEARCH METHODOLOGY IN PHYSICAL AND SPORTS**

#### **UNIT-I : Basics Of Research**

- a. Meaning Need, and Scope of Research in Physical Education
- b. Types and methods of Research
- c. Agencies promoting research and new trends in P.E.
- d. Research Scholarship, contemporary issues and Awards in research field

#### **UNIT-II- Literature Search**

- a. Purpose of surveying related literature
- b. Selecting, Locating and Formulating research problem
- c. Library sources
- d. Allied and Critical literature

#### **UNIT-III: Hypothesis, Sampling And Tools OF RESEARCH**

- a. Types and formulation of Hypothesis
- b. Delimitations and Limitation of the study
- c. Sampling techniques
- d. Tools of research

#### **UNIT-IV: Ethics In Research, Writing Research Report**

- a. Plagiarism. Citations and Impact factor
- b. Research publication
- c. Bibliography, Appendices and References
- d. Steps in writing a research report

#### **References:**

1. Best, J. W. & Kahn, J. V. (1995). Research in Education.(9th ed.). New Delhi: Prentice Hall
2. Clark, D. H. & Clark, H. H. (1979). Research process in Physical Education, recreation & health. Englewood Cliffs: prentice Hall
3. Johnson, B. & Christensen, L. (2008). Education Research, Quantitative, Qualitative and Mixed Approaches. (3rd ed.). Sage Publication: England
4. Thomas, J. R. & Nelson, J. K. (2001). Research Methods in Physical Education, (4th ed.). USA: Human Kinetics

## **COURSE II**

## COUERS II

# STATISTICS IN PHYSICAL EDUCATION AND SPORTS RESEARCH

### OBJECTIVES:

- To develop the understanding of statistics in physical education and sports.
  - To understand the implications of statistics in physical education and sports.
  - To develop understanding graphical representation of data.
  - To develop understanding of data analysis and its interpretation.
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### I Introduction of Statistics

- a. Meaning, definition and need of statistics in Physical Education and Sports
- b. Important Functions of statistics in Physical Education and Sports
- c. Organization and tabulation of Discrete and Continues Data
- d. Graphical representation Histogram, Frequency Polygon and Frequency Curve

### II Normal Probability Curve

- a. Meaning and importance Normal Probability Curve
- b. Important properties of Normal Curve
- c. Meaning, definition and Types of Skewness and Kurtosis
- d. Measurement of Skewness and Kurtosis

### III Descriptive Analysis of Data

- a. Measurement of Central Tendency of Ungroup and Group Data: Mean, Median and Mode
- b. Measurement of Variability Ungroup and Group Data: Variance and Standard Deviation
- c. Measurement of Dispersion: Range, Quartile, Decile and Percentile
- d. Percentiles and Spearman's Rank Order Correlation Coefficient

#### IV Inferential Analysis of Data

- a. Concept and Interpretation of Inferential Statistical Measures: The Null Hypothesis, Degrees of freedom, Level of significance, Type I & Type II error, Standard Error of the Mean, Confidence Interval
- b. Parametric tools with Large Sample: One Sample, Independent Sample and Paired Sample Z-test
- c. Parametric tools with small Sample: One Sample, Independent Sample, Paired Sample t-test and One Way ANOVA
- d. Non-Parametric tools- Chi-square test of testing association between two attributes, Sign test, Mann Whitney U test

#### REFERENCES :

- 1 Beashel, P., & Taylor, J. (1996). *Advance Studies in Physical Education and Sports*. U.K.: Thomas Nelson and Sons Ltd.
- 2 Best, J.W., & Kahn, J.K. (2006). *Research in Education (10<sup>th</sup> Ed.)*. Delhi : Dorling Kindersley (India) Pvt. Ltd.
- 3 Clark, H., & Charke, D. (1987). *Application of Measurement to Physical Education* (6th add). New Jersey : Prentice hall, Inc. Englewood cliffs.
- 4 Creswell, J.W. (2006) *Education Research : Planning Conducting & Evaluating Quantitative and Qualitative Research*. New Jersey : Pearson/Merill Prentice Hall.
- 5 Howitt, D., & Cramer, D. (2001). *A Gude to Computing Statistics*. London : Prentice Hall.
- 6 Kamlesh, M.L. (2006). *Methodology of Research in Physical Education & Sports*. New Delhi : Metropolitan Book Co.
- 7 Leerkes, E.M. (2005). *SPSS Manual for Howell's Fundamental Statistics*. Australia: Thomson.
- 8 Lilly, a Chadha N. (2001). *Research Methods for Sports Scientists*. New Delhi : Friends Publication.
- 9 Murthy, A.M. (2000). *Research Method in Physical Education, Sports and Exercise Science*. New Delhi : Friends publication.
- 10 Pathad, A.B., Sharma, M.P., & Davi D.N. (1999). *A handbook on Educational Research*. NCTE Publication.
- 11 Rothstein, A. (1985). *Research Design and Statistics for Physical Education*. New Jersey : Prentice-hall, inc. Englewood cliffs Publication.
- 12 Sharma, Y.P. (1997). *Physical Education and Research Methodology*. New Delhi : Publishing house .
- 13 Thomas, J. & Nelson, J. (1996). *Research Method in Physical Activity*. USA : Human Kinetic Publication.
- 14 Verma, J.P. (2000). *A Text Book on Sports Statistics*. Gwalior : Venus Publication.
- 15 Yobu, A. (2008). *Research Process in Physical Education and Sports*. New Delhi : Friends publication.

- 16 मुळे, रा.श, व माळे, वि.तू. ;१९९७**शैक्षणिक संशोधनाची मुल तत्वे**. नागपूर:साहित्य प्रसार केंद्र.
- 17 पंडित, बी.बी. ;२००८**शिक्षणातील संशोधन**. पुणे :नुतन प्रकाशन.
- 18 **संशोधन मार्गदर्शक मालिका. पथदर्शक अभ्यासाचे संशोधनात उपयोग. नाशिक** : यशवंतराव चव्हाण महाराष्ट्र मुक्त विद्यापीठ.
- 19 दांडेकर, वा.ना. ;२००७**शैक्षणिक मुल्यमापन व संख्याशास्त्र**. पुणे : श्रीविद्या प्रकाशन.
- 20 भिंताडे, वि.रा. ;२००९**शैक्षणिक संशोधन पध्दती**. पुणे : नुतन प्रकाशन.

### **Course III (Optional)**

#### **TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION AND SPORTS (80 Marks)**

##### **OBJECTIVES:**

- To understand the concept of Test, Measurement, Evaluation and Assessment Procedure in Physical Education and sports.
- To gain knowledge regarding selection, construction and administration of tests.
- To administer different test in Physical Education and sports.
- To understand the involvement of Test, measurement and evaluation in research activity as a means of professional development.

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##### **I. INTRODUCTION**

- a) Meaning of test, Measurement and Evaluation in Physical Education and sports
- b) Need and Importance of test, Measurement and Evaluation in Physical Education and sports
- c) Technical Standards of a good test
- d) Administrative feasibility of a good test



## **II. CONSTRUCTION AND ADMINISTRATION OF TEST**

- a) Classification of Test
- b) Administration of Test
- c) Principles of Knowledge test construction
- d) Principles of Sport skill test construction

## **III. ANTHROPOMETRIC, PHYSICAL FITNESS AND MOTOR FITNESS TEST**

- a) Anthropometric tests
- b) Components of Physical Fitness and Health Related Physical Fitness
- c) Kraus- Weber Strength Test, Harward Step Test, Sit and Reach Test, Standing Broad Jump, Stork Stand Test, Nelson Hand Reaction Time Test
- d) Eye- Hand Coordination Test, Eye- Foot Coordination Test, Upper Limb Coordination test

## **IV. GENERAL MOTOR ABILITY TEST AND MOTOR EDUCABILITY TEST**

- a) Philip's J.C.R. Test
- b) Barrow General Motor Ability Test
- c) Metheny - Johnson Motor Educability Test
- d) IOWA Brace Motor Educability Test
- e) Sports Skill Test
- f) Psychological Testing
- g) Physiological Testing
- h) Socio- economical testing

### **Internal Assessment: (20 marks)**

1. **Term Papers** (10 marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 80 marks, which will be converted in to marks out of 10.
2. **Projects on testing Variables:** (10 marks): The scholar will be given any two projects on testing the variables of school / college students or athletes from the above mentioned Unit VI of skill and variables test and will prepare and submit the report.

### **REFERENCES:**

1. Barrow, H.M.(1979).Practical Approach To Measurement In Phy.Edu. (Ede Rd Ed.). Philadelphia: Lee & Febigeei,
2. Bovard John F., Frederich W., Ragman, Parcicia E., "Test And Measurement In 'Physical Education "1 Philadelphia,'W.B:,Sounders Company, 1949. .
3. Campbell, W.R. And Tauker, N.M. "An Introduction To Test And Measurement In Physical Education", London, C.Bellk & Sons Ltd.,
4. Clarke, & Clarke (1987). Application of Measurement In Health & Phy.Edu. Ed. (6th Ed.). New Jersey Prentic \_Hall,Inc
5. Cureton, Thomas K. 'Physical Fitness Appraisal And Guidance" St.- Louis, In Publication. The Mosby Company, 1947.
6. Hunsicker, Paul A., And Monteyer, Hendry:J.. 'Applied Tests and Measurements in.:-Pwslcal Education". New York, Prentice Halt:. 1953.
7. John & Nelson (1998). Practical Measurements for Evaluation In Phy.Edu. Delhi: Su•Rjit
8. Kansal, D.K. (2012) A practical Approach to Test, Measurement and evaluation. New Delhi:. S.S.S.Publications,
9. Meyers; Canton R. And Blesh, Erwin T. "Measurement In Physical Educat.10 New York, The Fonald Press Company, 1962.
10. Miller, David K. Measuiemera The \_Physical -E-D-Ucator. Ew. R \_Mcgraw Hill - ... Companies
11. Nilgoose, Erle: "Evalation In Health Education And Physical Edocation", New York:Mcgra-Eill Book Co., Inc.

### **Course III (Optional)**

#### **PSYCHOLOGY OF PHYSICAL EDUCATION AND SPORTS**

##### **Objectives:**

1. To develop understanding of the nature, scope and importance of Psychology of Physical Education and Sports.
2. To acquire the knowledge of Psychological facts for effective teaching and learning in Physical Education and Sports.
3. To understand the relationship between Individual differences, Personality and Sports Participation.
4. To gain knowledge regarding Psychology of Competition as well as Psychological for enhancement of Sports Performance.
5. To gain knowledge regarding the application of Psychological tests in Physical Education and Sports through various research tools.

## **Unit I Psychology of Physical Education and Sports**

- a. Nature, Scope and importance of Psychology in Physical Education and Sports.
- b. Concept and Principles of Growth and Development.
- c. Individual differences with respect to Physical Education and Sports.
- d. Concept of Play and Play Theories.

## **Unit II Learning in Physical Education and Sports**

- a. Learning Process, Factors affecting Learning: Maturation, Attention, Fatigue, and Motivation.
- b. Theories of Learning:
  - i. Theories of Association: Trial & Error theory - (E.L.Thorndike), Classical Conditioning - (Pavlov), Operant Conditioning - (Skinner)
  - ii. Cognitive theory: Learning by insight - (Wolfgang Kohler)
  - iii. Social learning Theory: Bandura.
- c. Transfer of Learning
- d. Concept of Motor Skill Learning, Information Processing Models, principles of Motor Skill Acquisition.

## **Unit.III Personality and Motivation**

- a. Concept Of Personality, Dimensions Of Personality, Factors Affecting The Development Of Personality, Theories Of Personality
- b. Comparison Of Personality Of Sportsman And Non-Sports Man, Assessment Of Personality.
- c. Meaning Of Motivation, Motives, Drive, Need, Level Of Aspiration, Achievement Motivation.
- d. Theories & Dynamics Of Motivation In Sports.

## **Unit IV Psychology of Competition**

- a. Psychological factors affecting Sports Performance viz., Stress, Anxiety, Aggression
- b. Group Dynamics, Team Cohesion and Leadership in Sports.
- c. Sports audience and their effect on the performance of the sportsman.
- d. Psychological Testing: Stress, Competitive Anxiety, Aggression, Personality, Motivation, Team Cohesion, Leadership.

## **Reference:**

1. Barrow, B., & Rosemary M, (1989). *Practical Measurement in Physical Education and Sports (4<sup>th</sup> Edition)*. London: Lea & Febiza Philadelphia.
2. Beashel, P., & Taylor, J. (1996). *Advance studies in Physical Education & Sports*, U.K.:Thomas Nelson and sons Ltd.
3. Bhatia & Bhatiya: (1998) A textbook of Educational Psychology, Doaba House book sellers and publishers, 1988, Delhi-110002, India
4. Clarke, h., & Clark D.(1987) *Application of Measurement to Physical Education* (6<sup>th</sup> Edition), New Jersey: Prentice Hall, Incl, Englewood cliffs.
5. Cratty Byant J *Movement behaviour and Motor Learning*, Philadelphia : Law and Febiger, 1975.
6. Crowell, L., Weibell F., & Pfeiffer, E. (2003). *Biomechanical Instrumentation and measurements*.
7. Johnson, B & Nelson K. (1987). *Practical Measurement for Evaluation in Physical Education*. Delhi; Surjeet publication
8. Kamlesh, M.L. (1998), *Psychology in Physical Education & Sports*. Metropolitan Book Co. Pvt. Ltd., New Delhi.
9. Kamlesh, M.L (2006),*Educational Sports Psychology*,M/s Friends Publications, NewDelhi, India
- 10.Kane J.Ed. *Psychological Aspects of Physical Education and Sports* : London : routedge and Keger Paul – 1972.
- 11.Singer, Rober N. *Motor Learning and Human Performance*, New York : Mc-Millan Publishing co-Inc. 1975.
- 12.Skinner,C.E.: *Educational Psychology*, Prentice Hall of India, New Delhi, 1964
- 13.Withing K. Harmon & Others : *Personality and performance*. Henry Kempton Publishers, London, 1973.

## Course III (Optional)

### SCIENCE OF EXERCISE AND SPORTS TRAINING

#### OBJECTIVES:

1. To understand the concept, principles and forms of sports training.
2. To understand the scientific principles of training and coaching.
3. To make able to apply scientific principles of training and coaching.
4. To understand the training methods of fitness factors and skill techniques, tactics and strategies.
5. To understand the methods of planning and periodization of training.
6. To understand the use of evaluation of training.

#### I. Sports Training & Coaching:

- a. Meaning and Definitions of Training and Coaching.
- b. Aims, tasks and characteristics of Sports training.
- c. Principles of sports training.
- d. Forms of Sports Training.

#### II. Training Load:

- a. Important Features of training load (Intensity, Density, Duration and Frequency).
- b. Principles of training load.
- c. Relationship between load and adaptation, conditions of adaptations.
- d. Principles of over load, causes and symptoms, tackling of overload.

#### III. Conditioning of Individual and Team Sports:

- a. Concept and need of physical fitness, motor fitness and conditioning.
- b. Basic methods of conditioning.
- c. Training method: Strength, endurance, flexibility, agility and speed.

#### IV. Planning, Periodisation and Evaluation of Training:

- a. Importance of Planning.
- b. Principles of Planning.
- c. Systems of Planning.
- d. Periodisation and its types.
- e. Contents for various periods of training.
- f. Evaluation of training (criteria, techniques and presentation format)

## **REFERENCES:**

1. Seashel, Paul and Taylor John: Advanced Studies in Physical Education and Sports, Thomas Nelson and Sons Ltd., Nelson house, Surrey, U.K., 1996.
2. Bunn, J.W.: The Basketball coach, Guide to success, New York, Prentice Hall, 1961.
3. Bunn, John W.: Scientific principles of Coaching, E and EN. Span, London, 1986.
4. Dick, Frank W.: Sports Training Principles, 7 lighten place, lighten road, London NW 52QL, Henry Kimpten publisher, Ltd., 1980.
5. Fuoss, Donald E & R.J. Troppmann: Effective coaching, Macmillan publishing company, New York, 1985.
6. Hardayal Singh: Science of Sports Training, D.V.S. publication, 100 J.K. Girinagar, Kalkaji, New Delhi 1991.
7. Hardayal Singh: Sports Training General Theory and methods, Netaji Subhas National Institute of sports, Patiala, India, 1984.
8. Harre, Dictrich: Principles of sports training Berlin: Sportvelay, 1982.
9. Jensen, Ralph J.: The coach, W.b. Saunders company, Philadelphia, London, 1979.
10. L. Matyoyev: Foundation and Sports Training, Fizkultura, Sports publishers, 1977, Progress publisher (English translation) 1981.

## **Course III (Optional)**

### **Application of Yogic Sciences in Physical Education & sports**

#### **OBJECTIVES:**

1. To understand the concept and nature of Yoga along with its historical background.
2. To understand the common grounds of Yoga and Physical Education.
3. To gain knowledge regarding the application of Yoga to Physical Education and Sports.
4. To understand the Anatomy and Physiology of asana and pranayama's.
5. To gain knowledge regarding the effects of yogic exercises on the body and health.

#### **UNIT I**

##### **Introduction and History of Yoga:**

- a. Purpose, scope and limitations of the subject.
- b. Historical background of the development of Yoga.
- c. Concept of Yoga in the light of various definitions.

#### **UNIT II**

##### **Yoga, Physical Education and Integration of Personality:**

- a. Aims and objectives of Yoga and Physical Education on the basis of broad concept of Education as a common ground.
- b. Means of Yoga and Physical Education-their comparison, Salient points.
- c. Problem of Integration of personality dealt with in Yoga.

#### **UNIT III**

##### **Exercise, Yoga and Effect of Yogic Exercises:**

- a. Concept of exercise in Physical Education and its comparison with yogic exercise.
- b. Principles governing various exercises in Yoga like Asana, Pranayama, bandha, Mudra, Kriya and Meditation.
- c. Emotional stability and yogic exercises.
- d. Effects of various yogic exercises on different systems of the body.

#### **UNIT IV**

##### **Application of Yoga and its Anatomy and Physiology:**

- a. Application of Yoga in Sports and Physical Education.
- b. Therapeutical application of Yoga.
- c. Anatomy and Physiology of Asanas and Pranayamas.
- d. Yoga for stress management.

##### **REFERENCES:**

1. Aurobindo: The Synthesis of Yoga, Arbindo Ashram, Pondichery, 1972.
2. Bhole M.V.: Abstracts and Bibliography of Articles on yoga, Kaivalyadhama, Lonavla, 1985.
3. Bucher Charle S.S.: Foundations of Physical Education, C.V. Mosby Co. 1964.
4. Datey, K.K., Gharote, M.L. and Soli Pavri: Yoga and your Heart, Jaico, Mumbai, 1983.
5. De Vries, H.A.: Physiology of exercise for Physical Education and Athletics, staples press, London, 1967.
6. Gharote, M.L.: Applied Yoga, Kaivalyadhama, Lonavla, 1989.
7. Gharote, M.L.: Yoga applied to Physical Education, Mimamsa Vol. 18 No. 2 pp. 45-62.
8. Gharote, M.L.: Yogabhyas Margadarshan (Hindi), Publications, Lonavla, 1984.  
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