

# UNIVERSITY OF KERALA

## Ph.D. Course Work

### Syllabi common to Science, Applied Science and Engineering Faculties

#### PAPER I – RESEARCH METHODOLOGY

**Unit-I - Objectives and types of research:** Motivation and objectives – Research methods vs Methodology. Types of research – Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical.

**Unit-II - Research Formulation** – Defining and formulating the research problem - Selecting the problem - Necessity of defining the problem - Importance of literature review in defining a problem – Literature review – Primary and secondary sources – reviews, treatise, monographs-patents – web as a source – searching the web - Critical literature review – Identifying gap areas from literature review - Development of working hypothesis.

**Unit-III - Research design and methods** – Research design – Basic Principles- Need of research design — Features of good design – Important concepts relating to research design – Observation and Facts, Laws and Theories, Prediction and explanation, Induction, Deduction, Development of Models. Developing a research plan - Exploration, Description, Diagnosis, Experimentation. Determining experimental and sample designs.

**Unit-IV - Data Collection and analysis:** Execution of the research - Observation and Collection of data - Methods of data collection – Sampling Methods- Data Processing and Analysis strategies - Data Analysis with Statistical Packages - Hypothesis-testing - Generalization and Interpretation.

**Unit-V - Reporting and thesis writing** – Structure and components of scientific reports - Types of report – Technical reports and thesis – Significance – Different steps in the preparation – Layout, structure and Language of typical reports – Illustrations and tables - Bibliography, referencing and footnotes - Oral presentation – Planning – Preparation – Practice – Making presentation – Use of visual aids - Importance of effective communication –.

**Unit-VI - Application of results and ethics** - Environmental impacts - Ethical issues - ethical committees - Commercialisation – Copy right – royalty - Intellectual property rights and patent law – Trade Related aspects of Intellectual Property Rights – Reproduction of published material – Plagiarism - Citation and acknowledgement - Reproducibility and accountability.

## REFERENCES

1. Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. *An introduction to Research Methodology*, RBSA Publishers.
2. Kothari, C.R., 1990. *Research Methodology: Methods and Techniques*. New Age International. 418p.
3. Sinha, S.C. and Dhiman, A.K., 2002. *Research Methodology*, Ess Ess Publications. 2 volumes.
4. Trochim, W.M.K., 2005. *Research Methods: the concise knowledge base*, Atomic Dog Publishing. 270p.
5. Wadehra, B.L. 2000. *Law relating to patents, trade marks, copyright designs and geographical indications*. Universal Law Publishing.

## Additional reading

1. Anthony, M., Graziano, A.M. and Raulin, M.L., 2009. *Research Methods: A Process of Inquiry*, Allyn and Bacon.
2. Carlos, C.M., 2000. *Intellectual property rights, the WTO and developing countries: the TRIPS agreement and policy options*. Zed Books, New York.
3. Coley, S.M. and Scheinberg, C. A., 1990, "*Proposal Writing*", Sage Publications.
4. Day, R.A., 1992. *How to Write and Publish a Scientific Paper*, Cambridge University Press.
5. Fink, A., 2009. *Conducting Research Literature Reviews: From the Internet to Paper*. Sage Publications
6. Leedy, P.D. and Ormrod, J.E., 2004 *Practical Research: Planning and Design*, Prentice Hall.
7. Satarkar, S.V., 2000. *Intellectual property rights and Copy right*. Ess Ess Publications.

# **UNIVERSITY OF KERALA**

## **Ph.D. Course Work**

*Syllabi common to Common to all Social Sciences, Law, Psychology, Management, Commerce, Education, Communication and Journalism*

### **PAPER I – RESEARCH METHODOLOGY**

#### **Unit I - Concept of Research**

Meaning and importance of Research – Types of Research – Selection and formulation of Research Problem – Research Design

#### **Unit II - Research Methods**

- (a) Traditional Methods – Historical, Institutional, Legal, Philosophical, Comparative, Ethical methods etc.
- (b) Modern Methods – Survey of Literature, Sampling method, Questionnaire, Schedule etc, Interview method and Focus Group discussion, Observation Method, Case Study method, Content analysis, Delphi method, Statistical Method, Experimental method, Brainstorming Techniques etc.

#### **Unit III - Data Collection and Data Analysis**

##### **I. Types of data**

- (a) Primary, Secondary and Tertiary Data.
- (b) Construction and adaptation of instruments, Administration of questions and tests, Tabulation of data.
- (c) Data organization in SPSS and Excel
- (d) Graphical representation of data

##### **II. Analysis of Data**

- (a) Discussion and Interpretation of results.
- (b) Testing of Hypothesis: Logical and Statistical Techniques.

#### **Unit IV - Report Writing**

- (a) Organization of the Research Report  
Preliminaries, Contents of Report, Bibliography, Appendices
- (b) Style Manuals
- (c) Criteria for the evaluation of the Research Report.

## References

- Bagchi, Kanak Kanti (2007) **Research Methodology in Social Sciences: A Practical Guide**, Delhi, Abijeet Publications.
- Sharma, B.A.V., etal., (2000) **Research Methods in Social Sciences**, New Delhi, Sterling Publishers.
- B.A.V. Busha, C. H and Harter, S. D (1980) **Research Methods in Librarianship**, New York, Academic Press.
- Cooper, R. Donald and Pamela S. Schindler (2003) **Business Research Methods**, Delhi, Tata McGraw-Hill.
- Flyvbjerg, Bent (2001) **Making Social Science Matter: Why Social Inquiry Fails and How it can Succeed Again**, United Kingdom, Cambridge University Press.
- Ghosh, B.N. (1999) **Scientific Method and Social Research**, New Delhi.
- Gilbert, Nigel (1993) **Researching Social life**, New Delhi, Sage Publication.
- Goodde and Hatte (1952) **Methods in Social Research**, New York, McGraw – Hill.
- Gopal, M.H (1970) **An Introduction to Research Procedures in Social Sciences**, Bombay, Asia Publishing House.
- Henn, Matt; Mark Weinstein and Nick Foard (2006) **A Short Introduction to Social Research**, New Delhi, Vistaar Publications.
- Hunt, Morton (1989) **Profiles of Social Research: The Scientific Study of Human Interactlions**, Bombay, Popular Prakashan.
- Kothari, C.R (2004) **Research Methodology: An Introduction**, Delhi, New Age.
- Krishnaswami, K. N., Appa Ayyar Shivakumar and M. Mathiarajan (2008) **Management Research Methodology, Integration of Principles, Methods and Techniques**, New Delhi, Dorling Kindersely (India Pvt. Ltd.) Pearson Education.
- Krishnaswami, O.R (2000) **Research Methodology in Social Sciences**, Delhi, Himalaya Publications.
- Kumar, Renjith (2009) **Research Methodology: A Step by Step Guide for Research**, Delhi, Pearson Education.
- Kumar, Shekaran (2009) **Research Methodology for Busines : A Skill Based Approach**, New York, John Wiley Publishers.

# UNIVERSITY OF KERALA

## Ph.D. Course Work

### Syllabi for Malayalam

## PAPER I – RESEARCH METHODOLOGY

1. **Research** : Definition and Concept - Requirements for Research - Levels of Research - Limitations in Research - Difference between Literary Criticism and Literary Research - Thesis and Dissertation.
2. **Research Procedure** : a) **Selection of Topics** - Types of Source Materials - Collection of Materials - Sampling Procedure - Method of Preparing Notes - Carol System and File System - Method of Observations - References and Quotations - Analysis of Materials - Outlines of Thesis.  
b) **Variants in Methodology** : i Folkloristics, ii Linguistics, iii Textual Criticism  
iv Interdisciplinary studies
3. **Structure of Thesis** : Three parts of thesis, Introduction, Body of Thesis and Conclusions - Divisions of Chapters, Sub-headings - Numbering of Paragraphs - Foot notes/End Notes and References - Tables and Illustrations - Language of the Thesis - Objective description / Subjective Description - Appendix, Bibliography - Abbreviation - Lay out of the Thesis.
4. **Development of Literary Research in Malayalam and its Present Stage:**  
The beginning of Research - Contribution of early writers in research – Library history and research – Research in University level – an evaluation.

# **UNIVERSITY OF KERALA**

## **Ph.D. Course Work** **Syllabi - Music**

### **PAPER I – RESEARCH METHODOLOGY**

1. Research - Definition, concept, process of research and types of research
2. Research procedure - Selection of topics, types of source materials, hypothesis, data collection, Cataloging, Principles of Data bases
3. Research methods –
  - (a) Oral, textual, documentary analysis, questionnaire, interviews, historical data collections.
  - (b) Data on traditional singing, Recording & notation of songs of traditional Musicians.
  - (c) Manuscripts – published data of manuscripts from various manuscripts libraries, unpublished manuscripts, Collection from private sources, Electronic resources, Reviews, articles and Journals.
  - (d) Changes in the modern methods of singing from the traditional way of singing and collection of sample data and comparisons, Evaluation of old and new styles.
4. Structure of the thesis- Introduction, body of the thesis and conclusions - preface, Table of contents, acknowledgement, introduction, division of chapters, sub-chapters, footnotes, End-notes, Quotations, references, analytical study, Bibliography, appendix, Thematic indices.
5. Discographies, Year Books, Directories.

Ac.E1.A

# **SUBJECT : PHILOSOPHY**

## **Syllabus**

### **Paper I Research methodology**

#### **Part A**

#### **Unit I**

Meaning, Objective and Motivation of Research Types & Research design : Descriptive and Diagnostic. Exploratory and experimental Research Methods and Methodology. Nature and Scope of Philosophy and Research.

#### **Unit II**

Research Methods –(1) Traditional Method, (2) Scientific Method. Research Design, Data Collection, Primary and Secondary Data, Data analysis, editing, coding, classification tabulation, interpretation of data. Observation Method, Personal interview, Mail survey, Questionnaire Design Sampling, Case study Method, laboratory Research.

#### **Unit III**

Research in Philosophy. (a) Qualification for research in Philosophy, The Hermeneutic Approach Observational Research – Naturalistic Observation Case Studies, Theory Development and Testing in Observational and Archival Research; Capacity for high degree of generalization language of source and reporting, (b) Kinds of topic for research in philosophy thinker or text based topics, Concept based, Comparative, Meta-philosophical and inter-disciplinary, (c) Nature of

Philosophical Methods and reasoning Speculative, dialectical Analytical/Critical, Phenomenological.

#### **Unit IV**

Techniques of Research. (a) Classification of the meaning of the terms-report, project, thesis, dissertation, Monography. Essay, Research article, paper assignment, (b) How to go about choice of topic, Utility of Preliminary Synopsis Collection of Material, Preparation of working bibliography, methods of notemaking, scope of original contribution, (c) Presentation of the research product, (d) chapterisation – (1) Preface, Introduction, Main body, Conclusion, (2) Table of Content, indices, appendices, glossaries, bibliography, (3) Conventions regarding punctuation, annotation, titles, illustration, footnotes references, style of writing.

#### **Unit V**

Research Ethics – Honesty – intellectual Ownership and plagiarism, Responsibility and Accountability of the researcher. Situation that raise ethical issues. Freedom and privacy from coercion. Ethics in relation to other people. Role of Research participant.

#### **Books**

1. R. Panneer Selvam – Research Methodology.
2. Donalds. H. Mc Burney – Research Methods.



# Ph.D Course Work in Hindi

## Syllabus

### Paper I – Research Methodology

1. What is Research ? Words used in Hindi for ‘Research’ the meaning and appropriateness. Place of research in human development –use of research.

2. **Research and process of thinking**

Process of thinking and human progress. Types of thinking: Active & Passive thinking Reflective, analytical, rational, logical, speculative and creative thinking and the place of research. Scientific and philosophical thinking.

3. **Research Culture and Attitude**

The qualities required for a researcher – Quest for truth, keen observation, thinking and argumentation, intellectual, sincerity and objectivity, tolerance, industriousness and sense of duty, prior knowledge of the subject and interest in it – other qualities.

Qualities to be avoided – Dogmatism, hastiness, subjective thinking and argumentation, obstinacy etc.

4. **Types of Research**

Classification of Research activity according to research material, method of working. Aim and logical method.

5. **Procedural steps in Research**

Felt need of a problem or complexity in a subject, clear definition of the problem or area and purpose of the work, possible hypothesis, collection of material, taking notes and filing, analyses and evidencing, rejection of unacceptable hypothesis, final confirmed conclusion and presentation.

6. **Literary and Linguistics Research**

Types of literary as Linguistic research, purposes and importance of literary as linguistics research, peculiar teachers of literary as linguistic research. Research and criticism.

7. **Process of Literary and Linguistic Research – Steps and Methods**

Selection of subject, how to select a topic, problems involved in the nature of the subject.

Working Synopsis, its purpose, importance and nature, collection of material, types of material, primary, supportingsupplementary, marginal and foundation material, field material and textual material problem etc.

8. **Methods of collections of material** – interview, questionnaire, survey, documentation.

Methods of preparing notes – Ledger system, file system, tip-card system. Standard methods of preparing tip-cards and other notes, bibliography cards.

9. **Comparative Literary Research**

Types of comparative literary research, their purpose and uses, peculiar features of comparative research, problems of comparative research.

10 **Research Report** - Thesis or dissertation: its form and parts, ideal form and defects to be avoided, Presentation – ideal form of presentation and precautionary measures, merits and defects in presentation, language and style to be adopted.

**Reference Books –**

1. Anusandhan Pravidhi: Sidhant aur Prakriya-Dr. S.N. Ganeshan.
2. Shodh Prakriya evam vivaranika – Dr. Sarnam Singh.
3. Anusandhan – Dr. Satyendra.
4. Shodh Pravidhi – Dr. Vinayamohan Singh.
5. Sahityik Shodh Ke Sidhant aur Samasyayen.
6. Shodh Tatv aur Drishti – Dr. R.L. Khandelval.
7. Hindi Shodh Tantr Ki Ruprekha – Dr. Manmohan Sahgal.
8. Sahithya Sidhant aur Shodh – Dr. A.P. Diksht.
9. Hindi Anusandhan – Dr. Vijayapal Singh.
10. Tulnatmak Anusandhan aur Uski Samsyayen – Dr. Saragu Krishna
11. Introduction to Research – T. Hallaway.
12. The Strategy of Research – Sir George P. Thompson.

## **SYLLABUS**

### **Paper I Methodology of Research – Arabic**

- I. Primary Steps of Research: (1) Thesis or Dissertation. (2) Personality of the scholar. (3) Stages of University Learning. (4) Selecting research Topic. (5) General framework for developing proposals (6) writing proposals (7) changing the Topic or modifying its plan, (8) Thesis writing in the University. (9) Selecting guide. (10) Relationship with the guide.
- II. Research in the stage of Preparation & Compiling. (1) Methods and approaches (2) Preparing References. (3) Compiling References. (4) Reading Stage. (5) Compiling Information. (6) Modification of Research Plan. (7) The Modern Academic Library. (8) Library Research Sources. (9) The Central Information System. (10) Reference works. (11) The Online Catalogue of Library Services. (12) Internet Sources.
- III. Thesis Writing: (1) Elements of Writing. (2) Style of Writing. (3) Quotation. (4) Foot notes. (5) Symbols of Numbering and Punctuation. (6) Usages and Indications.
- IV. Indices: (1) Indices of Quranic Verses. (2) Hadith. (3) Poetry. (4) Personalities. (5) Sources and References.
- V. Research at the Final Stage: (1) Lay out of the Thesis. (2) Printing the thesis. (3) Declaration of Result.
- VI. Other Important Information Regarding Research: (1) Introduction & Definition of Research. (2) History of Research. (3) Basis Principles of research. (4) Research paper a form of Exploration. (5) Research paper a form of Communication. (6) Different Varieties of Research. (7) Conducting Research in Modern Information Systems and Techniques. (8) Plagiarism. (9) Interpreting Data. (10) Interpreting and Editing the Manuscripts. (11) Compiling a Working bibliography: a. Keeping Track of Sources. b. Creating a computer File for the Working Bibliography. c. Recording essential publication information. d. Noting other useful information. e. Verifying publication information. f. Converting the Working Bibliography to the Works – Cited List. (12) Evaluating Sources: a. Authority. b. Accuracy and verifiability. c. Currency.

### **Books for Reference:**

1. Kaifa Taktub Bahthan aw Risalathan – Dr. Salahudihn al – Hawari. Dar wa Maktaba Hilal – Lebanon – 2001.
2. Kaifa Taktub Bahthan Jamiian, Dr. Abdul Munim al Khafaji, Darul Jeel Bairut, 1998.
3. Manhaj al – Bahth al – Adabi, Dr. Ali Jawad Attahir, Al Muassasa al Arabia Bairut, 1998.
4. Introduction to Research – Tyres Hilway – Houghton Mifflin Company – Beston – 1964.
5. MLA Hand Book for Writers of Research Papers – Sixth Edition – Joseph Gibaldi Affiliated East – West press pvt. Ltd. New Delhi 2004.
6. Research Methods for Leisure and Tourism – A practical Guide – AJ. Veal – Prentice Hall England 2006.
7. Developing Effective Research Proposals, Keith .F. Punch, sage publications, London, 2000.

## SANSKRIT

### Syllabus for the course Work for the newly Registered Candidates for Ph.D. in Sanskrit

#### Paper I – RESEARCH METHODOLOGY

**Module I – General:** Scope and objectives of research in Sanskrit – Definition of research – Methods Traditional – Scientific – Historical – Philological – Difference among research paper – dissertation and thesis.

**Module II – Research Procedure:** Selection of Research problem innovative element – finalizing topic – collection of materials – preparing notes – card system – file system – using computer – shaping findings – floating findings – incorporating valid suggestions – outlines of thesis.

**Module III – Thesis Writing and Editing:** Language of thesis – style – brevity – analyzing topic – constituent elements – part division – chapter division – sub-headings – numbering paragraphs – footnotes and references – preface – contents – abbreviations – introduction – conclusion – appendices – Bibliography and critical edition.

**Module IV – Conventions:** Quotation – paragraphing – Transliteration – Sanskrit – English terminological problems – Thesis typing – type setting – types – fonts – italics – diacritical marks – bold and normal letters – use of computer and internet in research.

**Module V – Open defense:** Purpose – procedure – Post-Doctoral Research – M.Phil., Ph.D., D.Litt. – unending process: Projects – Funding agencies – Researcher and the society – Publication of thesis – incorporating suggestions of Examiners and participants of open defense – Revising format – book – title etc.

#### Reference Books:

1. Srimannarayana Murti M - Methodology in Indological Research, Bharatiya Vidya Prekasan Delhi
2. Anderson J, Henry H Durston and Millicent Poole – Thesis and Assignment Writing. Wiley Eastern Ltd. New Delhi, 1977
3. Katre, S.M. - Introduction to Indian Textual Criticism, Poona, Deccan College, 1954
4. Mass, Paul - Textual Criticism English tr. by Barbari Flower, Oxford, Clarendon Press, 1967
5. Rajannan, Busnagi - Fundamentals of Research Hyderabad, American Studies Research Centre, 1960
6. Ramachandran T.P. – The Methodology of Research in Philosophy, University of Madras, 1984

## **Ph.D. in RUSSIAN**

The main goal of this level is to prepare the learner for research programmes leading to a doctoral degree in Russian. In keeping with this goal, the major aims and objectives of the Ph.D. programme would be as under:

1. Consolidating and reinforcing the aims and objectives envisaged at the M.A. and M.Phil. Levels.
2. Introduction to research methodology particular to the area of research.
3. Introduction to techniques of documentation and write-up.
4. Emphasizing different approaches to research: interdisciplinary/ comparative.
5. Updating knowledge in areas of research through advanced courses pertinent to those areas.

### **SYLLABUS; RESEARCH METHODOLOGY – COURSECONTENT:**

1. Scientific Methods of choosing a research problem.
2. Analysing and defining a problem.
3. Methods of data collection
4. Scientific methods of enquiry
5. Making a hypothesis
6. Presentation of the findings
7. Interpretation and Report Writing
8. The Mechanics of Writing
9. The Format of the Research Paper
10. Documentation: Preparing the List of Works Cited
11. Documentation: Citing sources in the Text
12. Preparation of dissertation

### **PRESCRIBED BOOKS**

1. C.R.Kothari: Research Methodology – Methods and Techniques, Wishwa Prakasham, New Delhi, 2003.
2. Rise B. Axelrod and Charles R Cooper: The St. Martin's Guide to writing. Third Edition, New York, 1991.
3. Joseph Gibaldi: MLA Handbook for Writers of Research Papers, Fifth Edition. Affiliated East-West Press Ltd. New Delhi, 2008.
4. Pat Cryer: The Research Student's Guide to Success. Viv Books Private Limited, New Delhi, 1999.

# INSTITUTE OF ENGLISH, UNIVERSITY OF KERALA

## Ph.D. COURSE WORK

### PAPER I – RESEARCH METHODOLOGY

#### Course description

This paper intends to familiarize researchers with the principles, tools and techniques of research in English studies, to train them in collecting, classifying, organizing and analyzing materials in the writing of their research project; to familiarize them with the conventions governing the written presentation of research; and to train them to apply these conventions in their research work.

#### Topics for Study:-

1. Steps in research
  - Using the library
  - Collecting materials
  - Preparing a working bibliography
  - Evaluating sources
  - Taking notes
  - Avoiding plagiarism
2. The Art of Argumentation
  - Phrasing the proposition
  - Finding the issues
  - Framing the brief
  - Methods of Reasoning
  - Refuting opponents
3. Writing Drafts
  - Nature and Scope
  - Formal structure
  - Focus and emphasis
  - Style and Tone
  - Words and sentences
  - Paragraphs and chapters
4. The Mechanics of Writing
  - Parts of the dissertation
  - Abbreviations
  - Spelling and punctuation
  - Capitalization, underlining and italics
  - Quotations
  - Documentation
  - Bibliographies

### **Required Reading:-**

1. Richard Altick: The Art of Literary Research
2. George Watson: A Guide to Long Essays and Dissertations
3. MLA Handbook for Writers of Research Papers. 7<sup>th</sup> Edition

### **Recommended Reading:-**

1. Kate R. Turabian: A Manual for Writers of Term Papers, Theses and Dissertations
2. Elaine Hamilton: Writing Dissertations
3. Ann Hoffman: Research for Writers
4. George Thompson: Writing a Long Thesis
5. James Thorpe; ed.: The Aims and Methods of Scholarship in Modern Language and Literature, 2<sup>nd</sup> edition
6. Edward D. Seeber: A Style Manual for Students, 2<sup>nd</sup> edition

## **DEPARTMENT OF LINGUISTICS**

### **RESEARCH METHODOLOGY**

1. Purpose and objectives of research: Abilities of research workers – evaluation of earlier works identification of the research problem.

Setting up of hypotheses: Nature of role of hypotheses in scientific investigations – types, sources and characteristics of hypotheses.

2. Methods of data collection: Primary and secondary sources – use of libraries, indexes and by bibliographics, formal and informal settings for collection – main forms of data collection response – social surveys and their objectives – case study: nature and methods – sampling design – questionnaire purpose, types form and characteristics interview methods: objectives – types and techniques – analysis and interpretation – content analysis classification of data.
3. Methods and techniques of research: Nature and Rule – evaluation of different methods: historic, comparative descriptive and scientific observation and experimentation and confirmation of hypotheses. Types of statistical methods: sampling and stratification – generalization and confirmation – adoption of terminology.
4. Techniques of presentation: Preparation of thesis monographs, research papers overviews and review style and presentation outline, and body of the chapters, diagrams, graphs, tables and charts – footnotes symbols abbreviations, ellipses, bibliography, appendix and index. Preparation of drafts and final versions of the dissertation – typing printing and submission.

