

# Deccan College Postgraduate and Research Institute

Certificate course in Research Methodology  
(one term course)

## SYLLABUS



(Declared as Deemed to be University under Section 3 of U.G.C. Act  
1956)

**2016**

## **Contact Hrs. 44Credits-5**

### **Format of the course:**

- **Lectures for one week's duration**
- **Fortnightly assignments**
- **Written exam**
- **Presentation**

### **Objectives**

1. To introduce the learner to the concept of scientific research
2. To familiarize the learner with methodology, methods and techniques of research
3. To familiarize the learner with the various stages and procedures of Academic Research
4. To give the learner the hands on experience in conducting Research

### **Unit -1 Understanding the Research Process**

- What is scientific research
- Characteristics of scientific methodology
- Qualities of a good researcher
- General rules of Academic research
- Types of research
- Steps of scientific research

### **Unit -2 Problem identification and preparatory work**

- Exploratory field work and Identifying the Research area
- Narrowing on a specific topic: formulation and delimiting a problem
- Justification of the problem: Theoretical, Practical

- Defining Aims and Objectives

### **Unit-3 Bibliographic Research**

- What is literature Survey? Role of literature survey and Field work
- Overview and report of previous research
- Reading and note taking
- Reading maps
- Preparing entries: bibliography/references- Books, magazines, journals, websites, workshops, seminars.

### **Unit -4 Research Design**

- What is Research Design?
- Preparing a research design: Steps in research design
- Building up Conceptual framework and Research models
- What is hypothesis?
- Role of hypothesis, origin ,types of hypothesis and hypothesis testing in scientific research

### **Unit –5 Methodology, Methods, tools and Techniques**

- Traditional research methodologies (10)  
Historical, Philosophical, Comparative, Explanatory, Descriptive, Psychological, Statistical, Deductive and inductive, Metaphysical, legal institutional, functional etc.
- Methods of research: survey research, case studies, qualitative and quantitative methods, ethnographic method etc.
- **Tools and Techniques:** Observation, interviews, Questionnaire

## **Unit -6 Data processing and analysis and interpretation**

- Data processing: Classification and categorization of data
- Data analysis
- Data interpretation
- Using computers and technology for research

## **Unit -7 Report writing**

- Research ethics: Avoiding plagiarism, Quotations: short, medium, long, Internet Citations, Foot note, end note.
- Report writing
- Writing a research paper
- Publication: Instructions: spacing, numbering, heading, margin, ibid. etc.
- How to prepare a PPT presentation

**At the end of the course** a learner should know about different methods, techniques and Methodologies of scientific research he also should be able to make a presentation of his research paper (selected in consultation with Research guide) with a focus on (all) what he has learned during the course: selection of appropriate topic, bibliography entries, aims and objective, etc.