

## MEC- 101 - Research Methodology-1

Paper	Research Methodology-1	Credit
<b>Unit-1</b>	<b>Fundamental of Research</b>	<b>1</b>
A	Research: Meaning, characteristics and Types	
B	Reviewing the literature- process and steps	
C	Formulating a Research Problem	
D	Steps of Research and Methods of Research	
E	Ethics in Research	
<b>Unit-2</b>	<b>Tools and Techniques of Data Collection</b>	<b>1</b>
A	Questionnaire	
B	Interview	
C	Scale- Attitude, Rating Scale	
D	Observations and participant observation	
E	Standardized Test	
<b>Unit-3</b>	<b>Variables and Hypothesis</b>	<b>1</b>
A	Nature, Meaning and types of variables	
B	Different research Methods and Variables	
C	Meaning and types of hypothesis	
D	Criteria for formulation of hypothesis and Testing a hypothesis	
<b>Unit-4</b>	<b>Quantitative Methods</b>	<b>1</b>
A	Descriptive Methods <ul style="list-style-type: none"> <li>• Survey</li> <li>• Developmental</li> </ul>	
B	Correlation Study	
C	Experimental	

### Suggested Reading:-

- Alison Lee and Susan Damby :*Reshaping Doctoral Education – International Approaches and Pedagogies*,RocelfledgeTalorandfrancis group
- Andy Hunt :Your Research Project - *How to manage it* (Routledge Publication)
- Burke Johnson, Larry Christensen :*Educational Research - Quantitative, Qualitative and Mixed Approaches* (Sage Publication)
- Carter V. Good :*How to do Research in Education* (Education Handbook Series)(Cosmo publications)
- John W. Best, James U. Kahn :*Research in Education - Tenth Edition*, PhiLearning Private limited, New Delhi - 110001
- Jonathan Grire: *The foundation of Research*, (Palgrave Macmillan Study Guide)
- Jottn W. Creswell :*Educational Research Planning, Conducting and Evaluating Quantitative and Qualitative Research*, 4th Edition Phi Learning Pvt. Ltd. - New Delhi - 110001
- L.R. Gay, Geoffrey E. Mills, Peter Airasian :*Educational Research -Competencies for Analysis & Applications* (Pearson Publications)

Maria Piantomida, Noreen B. Garman : *A guide for students and faculty – The Qualitative Dissertation 2nd Edition* , Forward By Frances Schoonmaker Corwin asage company  
Muniruddin Qureshi : *Educational Research*, (Anmol Publication Pvt. Ltd.).  
Rachod, Antonius: *Interpreting Quantitative Data with SPSS* (Sage Publication)  
Renata Phelps, Kath Fisher and Allan Ellis : *Organizing and Managing your Research A Practical Guide for Post Graduates*, (Sage Publication)  
Ritu Sharma, *Educational Research and Statistics* (Alfa Publications)