



Shri Swami Vivekanand Shikshan Sanstha's
RAJE RAMRAO MAHAVIDYALAYA, JATH
Department of Economics,



SYLLABUS OF
CERTIFICATE COURSE IN RESEARCH METHODOLOGY
AND DATA ANALYSIS

Course Objectives:

- To acquaint students with the basic concepts of research and its methodologies.
- To study how to select and define appropriate research problem and parameters.
- To understand the sampling techniques as a method of data collection.
- To study how to use techniques of data analysis in research.
- To motivate and encourage students to undertake research.

Course Outcomes:

After successful completion of this course, the students will be able to:

- Get acquainted with the basic concepts of research and its methodologies.
- Select and define appropriate research problem and parameters.
- Understand the sampling techniques as a method of data collection
- Use techniques of data analysis in research

Syllabus Contents

Topic No.	Topic Name	Periods/Lectures (90 min each)
Module I	Introduction, Literature Review and Research Design	
1	Introduction of Economic Research: meaning, types and areas of research	2
2	Review of Literature: meaning, how to carry out a literature review	2
3	Research Design: meaning, steps and preparation of a research design	3
Module II	Objectives, Hypothesis, Sampling and Data Collection	
4	Objectives and Hypothesis in Research: Objectives of research, meanings and features of Hypothesis	3
5	Sampling Techniques in Research: meaning, types, criteria of good sampling	2
6	Primary and Secondary Data Collection: meaning, types, and sources	3
Module III	Classification, Tabulation and Data Analysis Techniques	
7	Classification and Tabulation of Data: meaning, and methods of classification and tabulation	2
8	Measures of Central Tendency:	3

	Meaning, types, Arithmetic Mean, Median and Mode	
9	Measures of Dispersion: meaning, types, range and Standard Deviation	3
Module VI	Data Analysis and Computer Applications in Research	
10	Measures of Association: meaning, types and Karl Pearson's Coefficient of Coorelation	2
11	Use of MS-Excel programme in Data Analysis: Practical on MS-Excel/Google sheet	2
12	Introduction to Data analysis softwares: Introduction of various data analysis softwares- SPSS, PSPP, STATA, SAS etc.	3
	Total Teaching (Each Lecture/Period is of 90 minutes)	30 Periods (45 Hours)

Assessment Criteria			
Sr. No.	Particulars	Total Marks	Minimum marks required
1	Final Examination (50 MCQs of 2 Marks each)	100	40
2	Attendance for Lectures	30	12
	Total marks	130	52

Grading Criteria			
Sr. No.	Total Marks in per cent	Letter Grade	Letter Grade Description
1	80.00-100.0	O	Outstanding
2	70.00-79.00	A+	Excellent
3	60.00-69.00	A	Very Good
4	55.00-59.00	B+	Good
5	50.00-54.00	B	Above Average
6	45.00-49.00	C	Average
7	35.00-44.99	P	Pass
8	00.00-34.99	F	Fail
9	Absent	Ab	Absent

ReferenceBooks :-

Sr. No.	Author	Title
1	Research in Education, 10th Edition	Best & Kahn
2	Research Methodology	C.R.KOTHARI
3	Methodology of Educational Research	LokeshKoul
4	Case Study Research	John Mcleod
5	Foundations of Behavioral Research	Fred N Kerlinger
6	Educational research	John W. Creswell
7	Understanding the research problem	Paul Oliver
8	Research Methods	RashmiAgrawal
9	Methodology of Research in Social Sciences	Krishnaswami&Ranganatham

10	Advance Educational Statistics	A A Ansari
11	Statistics in Psychology and Education	S K Mangal
12	Statistics in Psychology and Education	Henery E Garrett
13	Understanding Educational Research	Deobold Van
14	Research Perspectives in Education	William Talyor
15	Research Methods in Social Sciences	Sharma, Prasad, Satyanarayana
16	The Methodology of Educational Research	Good, Barr &Scates
17	Educational Research	Sharif Khan
18	Elements of Statistics for Psychology & Education	Leonard Horowitz
19	Conducting Educational Research	B W Tuckman
20	Methodology & Techniques of Social Research	Wilkinson &Bhandarkar
21	The making of Educational research	D G Samant
22	Research Methodology	V VKhazode
23	An Introduction to Qualitative Research	Uwe Flick
24	Introduction to Research in Education	Ary, Jacobs &Razavieh
25	Educational Research Methods	Nisbet&Entwistle
26	Fundamentals of Educational Research	Saxena, Mishra &Mohanty
27	Elements of Educational Research	Sukhia, Mehrotra&Mehrotra
28	Conducting Education Research	UshaRao
29	Research Methodology & Statistical techniques	Santosh Gupta
30	Scientific Methods & Social Research	B N Ghosh
31	Educational Research	J C Aggarwal
32	Implementation of Educational Research	S R Sharma
33	Research in Education	John L. Hayman
34	Appraising Educational Research	Millmon&Gowin
35	Methods in Social Research	Goode &Hatt
36	Methodology of Educational Research	R N Sharma
37	Qualitative Research for Education	Bogdan&Biklen
28	Research Methodology	R. Cauvery
29	Introduction to Educational Research	Ismail Thamarasseri
40	Psychological Testing	Robert Gregory
41	Research Methodology	Rao&Pasumarti
42	Research in History	D DChaturvedi
43	Research an Introduction	Robert Ross
44	Methodology & Techniques of Educational Research	Y K Sharma
45	Research in Education	Chandra & Sharma
46	Methods of Educational Research	Max Engelhart
47	Research in Emerging Fields of Education	Y P Aggarwal
48	Statistics in Educational Research	R P Pathak
49	Statistical Methods	S P Gupta
50	First Handbook of Psychological and Social Instruments	UdaiPareek& T V Rao
51	Second Handbook of Psychological and Social Instruments	D M Pestonjee

52	Action Research in Education	Mary McAteer
53	Action Research	UshaRao
54	Research Methods in Education	Cohen, Manion& Morrison
55	Designing and Managing a Research Project	Polonsky& Waller
56	Research Methods	Agrawal&Rao