Shrimati Binzani Mahila Mahavidyalaya
Session – 2021-22

Details of the Certificate Course proposed:

Name of the course: Certificate Course in Research Methodology

Background: Today research is of immense importance in every field of life. Hence students need sound initiation in the world of research. Thus this syllabus is prepared to equip students with basics of research methodology and also provide them acquaintance with the main ingredients of Research. It is necessary to develop critical thinking and analytical skills in the students during their graduation days. This will help them to take up research as an area for further studies and career.

Objectives:

1. To know the meaning and objectives of research.
2. To understand the limitations of research in Social Science.
3. To understand the difference between research in Social Sciences and Physical Sciences.
4. To study the various types of research.

Duration: 30 Hrs

Eligibility: HSSC

Medium of Instructions: Hindi/Marathi

Batch Size: 30

Fee Structure: Free of Cost

Faculty:
1. Dr. Charuta Joshi (Course Coordinator) Asst. Professor, Dept. of Political Science, Smt. Binzani Mahila Mahavidyalaya, Nagpur

2. Dr. Deepa Balkhande (Course Co-Coordinator) Professor, Dept. of Psychology, Smt. Binzani Mahila Mahavidyalaya, Nagpur

Evaluation: Total 100 marks (50 Marks online Objective Written Test at the end of the course + 50 marks for research report)

Expected Course Outcome:

After completion of the course the students should be able to:

1. Develop critical thinking and analytical abilities.

2. Understand type of research to take up research assignments.

3. Frame questionnaire and prepare research report.

RESEARCH METHODOLOGY SYLLABUS

1. Foundations of Research: Meaning, Objectives, Motivation, Utility. Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method

2. Types of Research – Exploratory, Descriptive and Causal (or Experimental). Research Process.

3. Problem Identification & Formulation – Research Question – Investigation Question – Measurement Issues – Hypothesis – Qualities of a good Hypothesis.

4. Null Hypothesis & Alternative Hypothesis. Concept of Hypothesis Testing.

5. Research Design: Concept and Importance in Research – Features of a good research design – Exploratory Research Design – concept, types and uses.

6. Descriptive Research Designs – concept, types and uses. Experimental Design: Concept of Independent & Dependent variables.

7. Qualitative and Quantitative Research: Qualitative research – Concept of measurement, causality, generalization, replication.

8. Qualitative and Quantitative Research: Quantitative research – Concept of measurement, causality, generalization, replication. Merging the two approaches.

9. Measurement: Concept of measurement– what is measured? Problems in measurement in research – Validity and Reliability.

10. Levels of measurement – Nominal, Ordinal, Interval, Ratio.

11. Sampling: Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Sample Size, Non Response. Characteristics of a good sample. Non-probability Sampling Techniques – Purposive, Judgement, Snowball Sampling.

12. Probability Sample – Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling.

13. Determining size of the sample – Practical considerations in sampling and sample size.)

14. Data Analysis: Data Preparation – Univariate analysis (frequency tables, bar charts, pie charts, percentages).

15. Bivariate analysis – Cross tabulations and Chi-square test including testing hypothesis of association.

16. Interpretation of Data and Paper Writing – Layout of a Research Paper, Journals in Arts and Social Science.

17. Impact factor of Journals, When and where to publish ? Ethical issues related to publishing, Plagiarism and Self-Plagiarism.

18. Use of Encyclopedias, Research Guides, Handbook etc., Academic Databases. Databases in Public Domain.

19. Use of tools / techniques for Research: methods to search required information effectively, Styles of References like API.

20. Software for paper formatting like MS Office.

Time to time assignments will be given to the participants on the topics taught. Submission of Research Report after the completion of the Course will be compulsory.

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