



GYANODAYA UNIVERSITY

Gram – Suwakheda, Teh. Jawad, Dist. Neemuch (M.P.)

Research Entrance Syllabus

Subject (Paper -I): Research Methodology

Foundations of Research and Research Aptitude - Research: Meaning and Types. Methods of Research: Experimental, Descriptive, Historical, Qualitative, and Quantitative methods. Steps of Research - Developing Research Plan – Exploration, Description, Diagnosis, Experimentation, Determining Experimental and Sample Design.

Research Design and Methods - Types of research design, Qualitative and quantitative research methods, Interdisciplinary and multidisciplinary research design. Sampling. Data Interpretation - Sources, acquisition, and classification of Data - Quantitative and Qualitative Data. Methods of data collection - Graphical representation (Bar-chart, Histograms, Pie-chart, Table-chart, and Line-chart) and mapping of Data - Data Interpretation - Data and Governance.

Information and Communication Technology (ICT) - ICT: Use of computers in research, Internet and digital research resources Basics of Internet, Intranet, E-mail, Audio and Video-conferencing - Digital initiatives in higher education - ICT . Data management and documentation, Digital libraries, Open-access resources, Use of emerging digital and AI-assisted research tools

Research Ethics and Scientific Writing: Meaning, principles and importance of research ethics, Plagiarism. Structure and Components of Scientific Reports – Types of Report – Technical Reports and Thesis – Significance – Different steps in the preparation – Review of literature, Layout, Structure and Language of Typical Reports, Objectives and research questions, Illustrations and Tables – Bibliography, Referencing and Foot Notes. Preparation of the Project Proposal – Title, Abstract, Introduction, Objectives, Methodology – Time frame and Work Plan – References. Thesis and Article writing: Format and styles of referencing. Research paper and conference presentation