## NATIONAL WORKSHOP

# RESEARCH METHODOLOGY & DATA ANALYSIS (RMDA 2020)

**Duration: 19-23 December, 2020** 

Mode of Workshop: Online

### **INFORMATION BROCHURE**





DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
NATIONAL INSTITUTE OF TECHNOLOGY
HAMIRPUR – 177 005
HIMACHAL PRADESH, INDIA

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#### **ORGANISING COMMITTEE**

#### **Patron**

**Prof. Lalit Kumar Awasthi**Director, NIT Hamirpur

#### Chairman

#### **Prof. Piar Chand**

Head, Department of Humanities and Social Sciences, NIT Hamirpur

#### Convener, Coordinator & Treasurer

#### Dr Manoj Sharma

Assistant Professor Grade I, Department of Humanities and Social Sciences, NIT Hamirpur

#### **Organising Committee**

Dr Yogesh Gupta, Dr Saroj Thakur, Dr. Manoj Kumar Yadav, Dr Sunder Kala Negi

#### **ABOUT THE INSTITUTION**

National Institute of Technology, Hamirpur is one of the premium institutions of India. It was established in 1986 as Regional Engineering College, a joint and cooperative enterprise of the Government of India and Himachal Pradesh. The institute was declared as the Institute of national importance under the Act of Parliament in 2007. It offers Graduate, Postgraduate and Doctorate Education in Engineering, Architecture, Sciences, Humanities, Behavioral Sciences, Social Sciences and Management. The Institute emphasises on basic and applied research by maintaining close interaction with the relevant industries and organisations. The institute is located in the footsteps of Shivalik ranges and provides a panoramic view of snow-covered Dhauladhar ranges.

#### **ABOUT THE DEPARTMENT**

The Department of Humanities and Social Sciences has an interdisciplinary orientation and expertise in diversified fields of Communication Skills, Economics and Behavioral Science in order to cater to the needs of B.Tech, B.Arch. and PhD students of the institute. Faculty members possess a blend of academic and professional experience which facilitates disseminating of knowledge to the students through classroom sessions and independent student activities.

## ABOUT THE NATIONAL WORKSHOP ON RESEARCH METHODOLOGY AND DATA ANALYSIS (RMDA 2020)

Research is the systematic and objective process of gathering, recording and analysing data for taking appropriate & meaningful decisions. It connotes patient study and scientific investment, wherein the researcher takes a more careful look at data to discover all that could be known more deeply about the subject under study. Applied research facilitates managerial decision-making and reduces uncertainty. To keep pace with the recent advancement in any discipline, one has to be well versed with the latest developments in research methodology. Keeping in view the importance of research methodology, workshop on Research Methodology & Data Analysis (RMDA 2020) aims to explore the basic dimensions of research and the concomitant need for participants to rethink about the assumptions that underlie historic paradigms of research. The workshop is designed to offer the participants a hands-on approach to conduct research. On completion of the workshop, participants are likely to have developed the skills to review the literature, develop hypotheses, frame research design, identify sampling techniques and comprehend the role and relevance of the tools for data collection analysis and report writing. The five-day workshop will expose the participants to brief theoretical as well as practical inputs. The participants are expected to bring their research problem & data if they wish to work on specific problem during the workshop and at the end they will be able to analyse data independently.

#### **OBJECTIVES, CONTENTS AND EXPECTED OUTCOMES OF RMDA 2020**

#### **OBJECTIVES OF RMDA 2020**

- To provide an overview of Contemporary Research Methodology & Review of Literature.
- To provide the platform for discussion on the methodological requirements of research and to simulate & capture new approaches.
- To enable researchers, irrespective of their discipline, in developing the most appropriate methodology for their research studies.
- To make them familiar with the art of using different research methods and techniques.
- To provide the platform for discussion on the statistical requirements of the research.
- To train and inculcate the skills for Data Analytics.
- To guide participants for Publishable Technical Writings (including Research Ethics)

#### CONTENT OF RMDA 2020

- Conceptual Background of Research
- Review of Literature, Referencing in Writing using software
- Conceptualization of Variables and Measurement
- Research Problem: Qualitative and Quantitative Research
- Research Design, Identification of Research Topics, Hypothesis Formulation
- Tools & Techniques of Data Collection: Primary & Secondary, Data Collection Questionnaire Design & Testing
- Reliability and Validity of Measurement and Data
- Tabulation and Graphic presentation of data
- Univariate and Bivariate Techniques for data Analysis
- Multiple Regression Analysis: Variables in Multiple Regression, Scale of Measurement

- Factor Analysis: Exploratory and confirmatory factor analysis
- Methods and concepts of factor analysis
- Data Analysis using SPSS software (Hands-on Experience)
- Data Analysis using EViews software (Hands-on Experience)
- Presentation of Thesis, Dissertation, project Report etc.
- Problems faced during Research and their Remedies
- Writing Academic Research Papers
- Ethical and Copyright Issues (Plagiarism) in Research

#### EXPECTED LEARNING OUTCOMES

- Understanding of Research Concepts & Methodology.
- Choose the right statistical technique for different research questions.
- Analyse data using basic and advance statistical techniques in Statistical Software.
- Interpret analysis of output tables and report findings for publishing.

#### RMDA 2020 FOR WHOM

The PG Students, PhD Scholars, Academicians, Practitioners and Researchers from the related areas of Social Sciences, Behavioral Sciences, Management, Medical Science, Engineering and Science can attend the workshop if the content covered seems relevant.

#### IMPORTANT INFORMATION

#### REGISTRATION DETAILS

- Registration Fee: Rs 500 per person + Rs 5 need to be included in lieu of bank transaction charges
- Fee to be Paid using SBI collect: Himachal Pradesh II Educational Institutions II NIT Hamipur II Workshop STC FDP Conference
- Registration fee once paid will not be refunded in any case.

#### REGISTRATION LINK

#### https://forms.gle/apc2bQPGHrtS9wB58

#### LAST DATE TO APPLY

Last date to Apply  $10^{Th}$  December, 2020 Notification of Selected Participants  $12^{Th}$  December, 2020 Distribution of software with participants (free version only)  $17^{Th}$  December, 2020 Release of Workshop Schedule  $18^{Th}$  December, 2020

#### NUMBER OF SEATS IN RMDA 2020

Maximum intake for the National Workshop on Research Methodology and Data Analysis (RMDA 2020) is thirty (30) participants only which will be selected on first come first basis.

#### **CONTACT DETAILS**

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