5 Days National Workshop on "Structural Equation Modeling: Advances in Research Methodology and Research Publications" Hybrid Mode (Online and Offline)

for

UG/PG Students / Researchers/ Faculty Members (3 July- 7 July 2023)



Organized by

Department of Humanities and Management Dr B R Ambedkar National Institute of Technology Jalandhar G T Road By Pass, Jalandhar 144011 (Punjab) Tel # +91-181-2690301, 3082000 http://www.nitj.ac.in

#### About the Institute

Dr B R Ambedkar National Institute of Technology (erstwhile Regional Engineering College), Jalandhar is an 'Institute of the National Importance' amongst the 31 NITs of the country under NIT Act 2007 amended as NIT Act 2012. The institution was established in the year 1987 as Regional Engineering College and it was given the status of National Institute of Technology on October 17, 2002 by the Govt. of India under the aegis of Ministry of Human Resource Development, New Delhi.

The institute has made strides since its inception. The institute offers 11 BTech. programs in undergraduate engineering, 10 MTech., 3 M.Sc. programmes, MBA programme and Doctoral programs in all departments.

#### **About the Course**

This five day National Workshop on 'Structural Equation Modeling: Advances in Research Methodology and Research Publications' is designed to train and develop faculty/ research scholars in the various area of research, so that they can act as resource persons in guiding and facilitating research knowledge. The workshop is likely to provide essential tools and techniques through hands on experience. With such aptitude, the knowledge of tools of research methodology would enhance the practicing skills of the participants, who in turn, can apply them for linking upcoming various challenges and self- generated new knowledge in respective field of research. The topics will be covered by the experts from NIT/IIT/IIM/International Universities, and other leading Institute of Eminence organizations.

#### Who should attend?

Any UG/PG students/ Researchers / Faculty Members / Industry persons can attend the program. In today's rapidly changing world, the ability to learn and adapt research tools and techniques is crucial factor for targeting excellent research outcome. As a researcher one needs to develop the necessary aptitude advance knowledge about research gaps, research tools and multi-model testing in multitude discipline

### **Course Outcomes**

At the end of the course, participants will have a good understanding of the model testing, validation and statistical tools.

### **Course Content**

# Day 1: Quantitative & Qualitative Research

- i. Introduction to the quantitative research
- ii. Research Concepts and its applications
- iii. Conceptual framework and theoretical foundation
- iv. Quantitative v/s Qualitative Research and its applications
- v. Data Collection methods and measurement scales

#### **Day 2: Systematic Literature Review**

- i. Review of literature
- ii. Process of Systematic Literature Review
- iii. How to design Hypothesis
- iv. Normality Check Skewness and Kurtosis, margin of error etc
- v. Hand on practice

# Day 3: Sampling and Validity

- i. Sampling, Probability sampling
- ii. Non-probability sampling

- iii. Sampling error
- iv. Select appropriate sampling techniques
- v. Convergent and Discriminate validity, Hands on practice

## **Day 4: Factor Analysis**

- i. Exploratory factor analysis
- ii. Confirmatory factor analysis
- iii. Validation of research instruments
- iv. Multi Hierarchy Regression Analysis
- v. Mediation Test, Hands on practice

#### **Day 5: Multi-Model Testing**

- i. Sequential Mediation Test
- ii. Multi-Model Testing and Validation
- iii. Targeting right journal
- iv. Plagiarism and challenges
- v. Hands on practice

#### **\*Registration Fee per participant**

(a) For External Faculty and Research Scholars @ Rs. 599 including GST
(b) For External UG & PG Students @Rs. 499/including GST
(c) For NIT J Faculty members and Research Scholars @Rs. 599/- GST exempted.
(d) For NIT J UG & PG Students @Rs. 499/-. GST exempted

IMPORTANT DATES Last Date of Registration: 15 June 2023 Program Date: 3 July – 7 July 2023 Organizing Committee Chief Patron

Prof. Binod Kumar Kanujia Director, NIT Jalandhar

# Patron

Dr. J. N. Chakraborty Dean (Research & Consultancy) Dr. B R Ambedkar National Institute of Technology

#### Patron

Dr. Jagwinder Singh Head, Dept. of Humanities and Management

#### Convener

Dr Nagendra Singh Nehra, Assistant Professor, Department of Humanities and Management Dr B R Ambedkar NIT Jalandhar Mobile: 8860214175; e-mail: <u>nehrans@nitj.ac.in</u>

For any queries please contact Dr. Nagendra Singh Nehra-8860214175

\*Registration fee is non-refundable. Registration on first come first serve basis.

Registration Link: https://www.nitj.ac.in/events\_registrat ion/workshop\_sem/login