**Module I: Introduction of Research**

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**(03 Credits: 90 Hrs.)**

* Research: Meaning and Characteristics. Why Research? Areas of Research.
* Objectives of Research: Exploration, Description, Explanation, Prediction, Influence.
* Research Paradigms/Approaches: Quantitative and Qualitative, Logical Positivistic and Phenomenological.
* Research Method, Methodology & Designs.
* **General Kinds of Research (Brief Introduction):-**
* Basic/Fundamental Research, Applied Research, Action Research; Orientational Research;
* **Quantitative Research:**
* Experimental Research (True and Quasi): Concept, Types, Internal & External Validity, Experimental Designs.
* Non Experimental Research/Descriptive Study
* Assessment Research
* Evaluation Research
* Descriptive Research

1. Interrelationship Study: Ex-Post Facto Research/Causal Comparative Study,
2. Co-relational Study
3. Developmental Study
4. Growth Study- Longitudinal and Cross Sectional Study
5. Trend Developmental Study

* **Qualitative Research:** Concept, Characteristics & Types
* Historical Research: Concept, Resources, Facts & Evidence, Criticism in Historical Researches
* Philosophical Research
* Case Study
* Grounded Theory
* Phenomenological Research
* Ethnographical Research
* Ethno-methodological Research
* Symbolic Interactionism
* **Mixed Research:** Concept, Characteristics & Types
* Epistemology, Knowledge and its Sources (Tenacity, Authority/Expert Opinion, Intuition, Empiricism (Experience), Rationalism (Reasoning- Inductive & Deductive), Scientific Approach: Basic Assumptions of Science, Scientific Methods- Exploratory and Confirmatory)
* Epistemology in Indian Tradition: Knowledge (*Jñāna*), Cognition (*Buddhi*), Apprehension (*Upalabdhi*) & Consciousness (*Anubhava*); Valid Means (*Pramaṇa*) of Knowledge (*Jñāna*):- Perception (*Pratyakṣa*), Inference (*Anumāna*), Comparison ([*Upamāna*](http://en.wikipedia.org/wiki/Upam%C4%81na)), Verbal Testimony (*śabda*), Postulation ([*Arthāpatti*](http://en.wikipedia.org/wiki/Arthapatti)), Non-cognition (*Anupalabdi*) & Logic (*Tarka*).
* Forms of Knowledge: Information & Facts; Concepts and Constructs; Hypotheses, Theories & Laws; Rules, Principles and Generalisation; Assumptions.
* Hypothesis: Concept, Characteristics of good Hypothesis, Types of Hypothesis (Research Hypothesis: Directional & Non-directional, Null Hypothesis, Alternative Hypothesis; Simple & Complex Hypothesis; Causal & Descriptive Hypothesis), Hypothesis Testing, Area of Acceptance, Area of Rejection, Level of Significance, Level of Confidence, Confidence Interval, Type I Error, Type II Error.
* Variables: Qualitative Variables (Organismic or Attribute Variables), Quantitative Variables (Continuous and Discrete Variables); Independent/Experimental Variables (Treatment/E-Type Variables, Attribute/S-Type Variables) Dependent Variables, Intervening Variables (Confounding Variables and Extraneous Variables).
* Universe, Population (Homogeneous & Heterogeneous, Finite & Infinite, Existent & Hypothetical), Sample, Sampling Units, Sampling Frame, Sample Units, Sampling Fraction, Response Rate, Sampling Method, Inferential Statistical Methods, Statistical Inferences, Parameters & Statistics, Sampling Distribution, Standard Error, Central Limit Theorem, Types of Sampling: Probability/Random (Unrestricted/Simple Random, Restricted: Systematic, Cluster, Stratified, Multistage), Non Probability/ Non Random (Incidental/Accidental/Convenience, Quota, Purposive/Judgmental, Snowball); Sampling in Qualitative Research; Basis of determining the Sample Size.
* Contemporary issues and Research, Politics of Research, Media and Research
* Paradigm shifts in the field of Research: Structuralism, Modernism, Scientism, Romanticism, Positivism, Post-structuralism, Post-modernism.
* Intra-disciplinary, Interdisciplinary, Multidisciplinary, Trans-disciplinary and Cross- disciplinary approaches in Research.
* Ethical issues in Research.