**Certificate course in research methodology(2015)**

**Total Hours : 30**

**Objectives of the courses**

* To enable the Students to know about the information needs of a good research.
* To familiarise students about the different types of research
* To equip students how to choose a good research problem
* To introduce the concept of scientific research and research design.

Induction – 1 hr; Examination 2 hrs(Internal and External); Students Activities -5 hrs like seminar, Debate etc.; Evaluation and Certificate Distribution – 2 hrs

**Research 3 hrs.**

Definitions andmeaning of research - significance of research - Qualities of a researcher - Importance of knowing how to conduct research.

**Types Of Research 4 hrs.**

 Research methods versus methodology, Research approaches, Types of research- descriptive vs. analytical, applied vs. fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical – other types of research. Survey research and case study research.

**Research Process 3hrs.**

Steps of research process-Introduction of -formulating research problem-literature survey-developing hypothesis –preparing research design – collecting data – execution of project – Analysis of data – Hypothesis testing – generalisation and interpretation- and preparation of report.

**Research Problem and design 3hrs.**

 Conditions for a good research problem –How to arrive at a problem **Research design 7hrs.**

Introduction – sampling design-observational design – statistical design-operational design – features of research design – concepts relating to research design –dependent and independent variable-Extraneous variable-control-research hypothesis-Experimental and non-experimental hypothesis testing research – experimental and control groups-treatments-experimental and experimental units.

Types of research design -Exploratory research design - Descriptive research design- hypothesis testing research design – importance and characteristics of good research design.

The Expected outcome of the course are:-

• They got orientation in doing research and projects.

• They got Basic knowledge in making a paper publication.

• Equipped students how to choose a good research problem.

• Familiarized students about the different types of research.