# **CONTENTS**

Preface	i
Abbreviations	ii
Symbols, Definitions and/or Expressions	iv
Major Highlights of the Study	
List of Tables	X
List of Figures	xiii
Contents	xvi
Acknowledgements	
Executive Summary	
Explanatory Note for Table Limitations of the Study Reasons	L Lii
Chapter 1. Introduction	1-29
<ol> <li>Back Ground</li> <li>Objectives</li> <li>Present study</li> </ol>	
Chapter 2. Methodology	30-39
<ul><li>2.1 Objective 1Manpower (or total head counts) engaged in S&amp;T Disciplines</li><li>2.2 Objective 2 The Full Time Engagement (FTE) in S&amp;T Research Activities</li><li>2.3 Expenditure on R&amp;D Activities in S&amp;T</li></ul>	(MPFT)
Chapter 3. Data Extraction	40-44
<ul><li>3.1 The Required Variables</li><li>3.2 Method of Data Extractions</li><li>3.3 Deleted ID's from Extracted S&amp;T Data</li></ul>	
Chapter 4. Missing Data Handling	45-49
4.1 Method of Handling Missing Data on Expenses 4.2 Action on Missing Values for all Five Years	

## Chapter 5. Computations

50-68

- 5.1 Estimated Manpower Engaged in S&T Activities
- 5.2 Estimated Full time Engagement (FTE) in S&T Research Activities
- 5.3 Estimated Expenditure on R&D Activities in Science and Technology (ERD)
- 5.4 The Estimated FTE Equivalent Salary Expenditure on R&D Activities in S&T Disciplines (SERD)
- 5.5 Formula used for computing the Estimates from Data Extracted Files in EXCEL
- 5.6 Some Remarks and Calculation of FTE Equivalent Salary Expenditure on R&D Activities in S&T Disciplines (SERD)
- 5.7 Disciplines with High Students 'Enrollment'

## Chapter 6. Findings

69-76

- 6.1 Manpower (or Total Head Counts) Engaged in Science and Technology Activities
- 6.2 Full Time Engagement (FTE) in R&D Activities in Science and Technology
- 6.3 Variation of Expenditure on R&D Activities in Science and Technology (ERD)
- 6.4 The FTE Equivalent Salary Expenditure on R&D Activities in S&T Disciplines (SERD)
- 6.5 A Remark
- 6.6 Percentage of Students Enrolment in Categories of Disciplines

### **Appendix**

- **Table 1.1(a) to (e):** List of All Indian Universities / Institutions and their Types
  In 2011-12 to 2015161-164
- **Table 5.2a:** Total Number of S&T Students, Teachers and Manpower: Type,
  Year, Broad Discipline and Gender wise

  165-180
- **Table 5.3a:** FTE in R&D Activities in S&T Type-wise, Year-wise, Broad Disciplines
  Wise and Gender wise

  181-198
- **Table 5.5a:** FTE Equivalent Salary Expenditure on R&D Activities in S&T HEO's:

  Type, Year, Broad Discipline and Gender wise

  199-209
- Table 5.6a: Type-wise and Year-wise Students Enrolments in Various Disciplines 210-238

### **Contents In CD**

In Folder: M-21-135

In Sub Folder-1 Data File1: Student Teacher Data with Id No. and Name of HEO's Type, Disciplines and gender wise for all five study Years.

In Sub Folder-2 Data File2: Finance Data (4 items- Salary, LILB, Scholarship, RACT)
For all Type for all five study years.

In Sub Folder-3 Result File: For all 11 Types of HEOS'

- 1- Manpower, Research Manpower Type Year and Gender wise FTE, SERD for all five study years.
- 2- ERD for all five study years.

In Sub Folder-4 Whole FTR (Text + Graph + Table)