

SEMESTER – II
PCCOG20 – RESEARCH METHODOLOGY

Year: I	Course Code:	Title of the Course:	Course Type:	Course Category:	H/W	Credits	Marks
Sem: II	PCCOG20	Research Methodology	Theory	Core	5	4	100

Course Objectives

To introduce to the students the concept of research, process of conducting research, methods and techniques of presenting research report

Course Outcomes (CO)

The learners will be able to

1. To understand the concept of research methodology
2. To collect and compile data for the purpose of research
3. To get in depth knowledge on sampling and sampling methods
4. To analyse and present the data using statistical tools
5. To construct research report

COs consistency with POs

CO	PO					
	1	2	3	4	5	6
CO1	H	H	H	H	M	M
CO2	H	H	H	H	H	H
CO3	H	H	H	H	H	H
CO4	H	H	H	H	H	M
CO5	H	H	H	H	H	M

(Low - L, Medium – M, High - H)

COs consistency with PSOs

CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
1	H	M	H	H	M	M
2	M	H	M	H	H	H
3	M	M	M	M	M	M
4	H	M	M	M	H	H
5	M	M	M	H	H	M

Low – L, Medium – M, High - H

Course Syllabus

Unit I: Introduction to Research (15 hours)

- 1.1 Research – Definition – Characteristics – Nature and scope - Social Science research – Usefulness of social science research (K1, K2, K3)
- 1.2 Approaches to Research – Historical Approach- Descriptive Approach – Case study Approach – Experimental Approach – Exploratory research Approach (K2, K3, K4)
- 1.3 Research Process – meaning – stages in research work- Formulation of Research Problem (K2, K3, K4)
- 1.4 Survey Of literature – determining the sources of information – screening and compiling the information-presenting the relevant information – review of concept – review of past studies (K1, K2, K3)
- 1.5 Research Design - Meaning – Content – features of Good research design – Types – Factors affecting Research Design (K1, K2 , K3, K4)
- 1.6 Hypothesis- Meaning – Definition – Need – Formulation of Hypothesis – Characteristics of Hypothesis - Types of Hypothesis – Test of Hypothesis – General problems in testing Hypothesis (K2, K3, K4)

Unit II: Nature and Collection of Data (15 hours)

- 2.1 Nature of Data – meaning – classification of Data : Primary and Secondary data – Source of information (K1, K2, K3)
- 2.2 Secondary data- sources- problems in using the data- selection of appropriate method of data collection (K1, K2, K3)
- 2.3 Interview technique – meaning – types – Merits and demerits of interview as a method of Data collection – How to make interview successful (K3, K4, K5)
- 2.4 Observation – Meaning – Definition – Types – Merits and Limitation – Steps to make Observation successful (K3, K4, K5)
- 2.5 Questionnaire Method – Meaning – Definition – Types of Questionnaire – Features of good Questionnaire- Pilot study – Merits and Demerits (K3, K4, K5)
- 2.6 Schedule Method - Meaning – Features – Distinction between Questionnaire and Schedule- Use of Schedules (K1, K2, K3)

Unit III: Sampling (15 hours)

- 3.1 Sampling – introduction – merits and demerits of sampling (K2, K3)
- 3.2 Law of sampling (K2, K3)
- 3.3 Essentials of sampling (K3, K4, K5)
- 3.4 Methods of Sampling (K2, K3)
- 3.5 Determination of Sample Size – Factors determining sample size (K2, K3)
- 3.6 Sampling and Non – sampling errors (K3, K4)

Unit IV: Statistical Techniques and Research Presentation (15 hours)

- 4.1 Statistical Analysis- measures of central tendency ((K3, K4, K5)
- 4.2 Measures of Dispersion (K3, K4, K5)

- 4.3 Skewness and Kurtosis (K3, K4, K5)
- 4.4 Simple Correlation – Karl Pearson’s Coefficient of Correlation – Spearman’s Rank Correlation Coefficient (K3, K4, K5)
- 4.5 Linear Regression Model (K4, K5, K6)
- 4.6 Diagrammatic and Graphical Representation – Interpretation of results – Percentages – Bar Diagrams – Pie charts (K2, K3, K4, K5)

Unit V: Research Reports (15 hours)

- 5.1 Research Reports (K1, K2, K3)
- 5.2 Structure and Components of Reports (K2, K3, K4)
- 5.3 Types of Reports (K1, K2, K3)
- 5.4 Features of Good Research Report (K1, K2, K3)
- 5.5 Foot Notes and Citation (K1, K2, K3)
- 5.6 Plagiarism and consequences of Plagiarism (K1, K2, K3)

Theory : Problems – 80:20

Textbook:

Kothari C. R – Research Methodology Methods and Techniques – New Age International Publishers, New Delhi, 2019

Book for Reference:

1. Ravilochanan P. – Research methodology – Margham Publications, Chennai, Revised Edition 2017.
2. Ranjith Kumar – Research Methodology – Sage Publications, New Delhi, Reprint 2015
3. Gupta S.L and Hitesh Gupta – Business Research Methods – Tata McGraw Hill Publications, New Delhi, Reprint 2012
4. David Dooly – Social Research Methods – Prentice Hall India Pvt, Ltd., New Delhi, Revised Edition 2016

Web Resources:

1. <https://www.scribbr.com/dissertation/methodology/>
2. <https://www.simplilearn.com/what-is-data-collection-article>
3. <https://www.questionpro.com/blog/types-of-sampling-for-social-research/>
4. <https://visme.co/blog/research-presentation/>
5. <https://financialcrimeacademy.org/characteristics-of-a-good-report/>