

CORE – X

RESEARCH METHODOLOGY

Semester	Subject code	Categor y	Lecture		Theory		Practical		Cred it
			Tota l hrs	Hrs/ wee k	Tota l hrs	Hrs / wee k	Tota l hrs	Hrs/ wee k	
IV		Core	90	6	90	6	0	0	6

COURSE OBJECTIVES

To enable the students to understand Research Methodology

COURSE OUTCOMES

On the successful completion of the course, students will be able to understand the key things about research

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	To understand the meaning of research and research process	K2
CO2	To analyze the importance of Review of Literature and role of computers in research	K4
CO3	To understand the significance of literature citations	K2
CO4	To understand the skill of writing a research report	K2
CO5	To apply the knowledge of computer in typing and formatting of a research report.	K3

MAPPING WITH PROGRAMME OUTCOMES:

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	M	M	M	M	M	M
CO2	M	M	M	M	M	M
CO3	M	M	M	M	M	M
CO4	M	M	M	M	M	M
CO5	M	M	M	M	M	M

S- Strong;

M- Medium;

L- Low

Unit -I: Research methodology; An Introduction

18 hrs

Meaning of research- Objectives of research- Motivation in research, Types of research-Basic and Applied research – Essential steps in research; Research process- Criteria of good research.

Unit-II: Review of Literature

18 hrs

Review of Literature – Need for Review of Literature - Research reading – consulting source material – Bibliography – index cards and reference cards. Role of computers in biological research, Plagiarism.

Unit- III: Literature Citations

18 hrs

Literature Citations; Different systems of Citing Reference – Name-Year System-Citation in the text, Name-Year System-List of References; Citation – Sequence System; Alphabet-Number System; Journal Abbreviations,

Unit- IV: Research Report

18 hrs

Introduction, Components of research report – Title – Authors & addresses – Abstract – Summary – Synopsis – Keywords – Introduction – Materials & Methods – Results – Discussion – Acknowledgements – General

Introduction and General Discussion – Summary and Conclusions –
Appendixes – References,

Unit-V: Research Formatting and Typing

18

hrs

Introduction – Paper – Margins – Paragraph indentations – Widow & Orphan lines – Spacing – Alignment – Hyphenation – Fonts – Pagination, Format of a thesis – Title page – Certificate page – Declaration page – Acknowledgement page – Table of contents – Abstract page – List of Tables – Figures – Abbreviations & symbols – Chapters – Quotations – Table – Summary – Appendixes – References – Figures.

DISTRIBUTION OF MARKS: Theory - 100% and Problems – Nil

TEACHING METHODOLOGY:

- ❖ Lectures
- ❖ Power point presentation
- ❖ Charts
- ❖ Models
- ❖ Group discussion
- ❖ Group assignments

TEXT BOOKS:

SL NO:	BOOK NAME	AUTHOR	PUBLISHER	YEAR OF PUBLICAT ION
01	Research Methodology and Statistical Techniques	Santosh Gupta	Laurier Books, Limited	2002
02	Research Methodology: For Biological Sciences	N Gurumani	MJP Publishers	2019

03	Introduction to Computers	Alexis Leon , Mathews Leon	VIKAS PUBLISHING	2009
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REFERENCE BOOKS:

SL NO:	BOOK NAME	AUTHOR	PUBLISHER	YEAR OF PUBLICAT ION
01	Research methodology	C.R. Kothari	New Age International Publishers	2004
02	Research methodology	P. Saravanel	Kitab Mahal Distributors	2015
03	How to write and publish a scientific paper.	Robert A. Day and Barbara Gastel	Cambridge University Press	2012
04	Thesis and Assignment Writing - 3rd Edition	Jonathan Anderson , Millicent Poole	John Wiley & Sons Inc	1998

WEB REFERENCE:

<https://www.bookdepository.com>

<https://www.researchgate.net>

<https://www.scribd.com>

<https://bbamantra.com › research-methodology>

SYLLABUS DESIGNER:

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