

PRIMER FOR HDMC

RESEARCH METHODOLOGY

Introduction

1. The College of Defence Management is the nation's Centre of Excellence for Defence Management education. Its mandate is to disseminate contemporary management thought among senior military leaders to enhance strategic and operational effectiveness of the Armed Forces.
2. Within this framework, Research Methodology (RM) forms a critical component of the Higher Defence Management Course (HDMC). At the senior leadership level, RM is not merely an academic discipline but a decision-support tool for analysing complex defence problems, evaluating policies, and designing future-ready strategies in an increasingly uncertain and dynamic security environment.

Aim

3. This primer aims to orient participant officers to the objectives, scope, curriculum and pedagogical approach of Research Methodology as delivered in the HDMC.

Learning Objectives

4. The course is designed to develop an advanced understanding of research principles, concepts, tools and analytical techniques, with a clear focus on their application in strategic decision-making and defence management.

Terminal Objectives

5. On completion of the course, participants will be able to:-
 - 5.1 Apply research-based approaches to analyse strategic, operational, and organisational problems in defence management.
 - 5.2 Critically evaluate existing policies, doctrines, and programmes, and contribute to the formulation of new policies and strategic plans.
 - 5.3 Design and execute research frameworks for complex, real-world defence problems.

5.4 Present well-structured, evidence-based recommendations in the form of policy papers, concept notes, and strategic briefs.

5.5 Integrate contemporary developments in Research Methodology into professional practice.

Enabling Objectives (EO)

6. Participants will be able to:-

6.1 Apply fundamental and advanced research concepts to defence-related problem contexts.

6.2 Differentiate and appropriately employ quantitative, qualitative, and mixed-method research approaches.

6.3 Design robust research studies, including problem formulation, hypothesis development, and research design selection.

6.4 Apply appropriate techniques for sampling, data collection, and statistical/ qualitative analysis.

6.5 Interpret research findings to support decision-making under conditions of uncertainty.

6.6 Translate research outputs into actionable insights for policy and operational use.

Methodology of Conduct of Course

7. The course adopts a blended learning approach. The pedagogy includes:-

7.1 Div Room discussions by faculty and Guest Lecture by domain experts.

7.2 Guided workshops and syndicate-based problem-solving exercises.

7.3 Case studies drawn from defence contexts.

7.4 Peer learning and experience sharing.

7.5 Dissertation work by participant officers, undertaken with due guidance from mentor Directing Staff (DS).

8. The emphasis is on analytical thinking, critical evaluation and practical applicability rather than purely theoretical understanding.

Academic Coverage

9. The course broadly covers the following topics (Sessions and syllabus details placed at **Appendix A**):-

- 9.1 Foundations of Research and Scientific Inquiry
- 9.2 Research Process: Quantitative, Qualitative, and Mixed Methods
- 9.3 Problem Identification and formulation of Research Problem
- 9.4 Research Design and Planning
- 9.5 Data Collection, Measurement, and Analytical Techniques
- 9.6 Evidence-Based Decision Making in Defence Management

Knowledge Enrichment and Experiential Learning

10. Learning is reinforced through application-driven components, including:

10.1 Structured workshops on key research skills:-

10.1.1 Review of literature

10.1.2 Questionnaire design

10.2 Conducting research on contemporary topics - guided exposure to the complete research cycle - from formulation of the research problem to analysis, findings, and conclusions.

10.3 Syndicate projects involving real-world problem structuring and research design.

10.4 Exposure to contemporary analytical tools and decision-support frameworks.

11. These activities are designed to bridge the gap between theory and practice by enabling participants to apply research concepts in realistic and professionally relevant contexts.

Suggested Pre-Course Reading

12. Recommended reading list is as under :-

Ser	Reference	Author
12.1	Social Science Research: Principles, Methods & Practices	Amol Bhattacharjee
12.2	Business Research Methods	Bryman & Bell

Conclusion

13. The College of Defence Management remains committed to equipping participant officers with robust analytical and research capabilities. The overarching objective is to enable participants to employ sound Research Methodology in addressing complex defence challenges and to provide credible, evidence-based inputs to higher leadership for informed decision-making.

Appendix A
(Refers to para 9)

RESEARCH METHODOLOGY : COURSE CONTENT FOR HDMC

RM Sessions

Topic	No of Sessions
Central Briefing	0.5
Div Room discussions on RM Concepts & Process	24
Guest Lectures	02
Peer Learning Workshops (Review of Literature & Questionnaire)	02
Total	28.5
Sem I – 22.5 Sem II - 06 Sessions	

Block Syllabus

SI	Module	Content
1.	RM Fundamentals	Fundamentals of Research - Methods of knowing - Scientific Method
2.		Research Strategy - Definition - Philosophical Orientation - Types of Research Strategies
3.	Problem Formulation	Defining Research Problem - Components of Research Problem - Research Question & Objectives - Research Problem Statement
4.		Workshop on Review of Literature - Discussions on selected Research Articles
5.		Review of Literature (RoL) - Purpose of RoL - How to review literature - Outcome of RoL - Structure of output of RoL
6.		Research Hypothesis (RH) & Variables - Definition & Formulation of RH

		<ul style="list-style-type: none"> - Types of Hypothesis - Operationalisation of Constructs & Variables
7.	Research Design	Research Design 1/2 <ul style="list-style-type: none"> - Components of Research Design - Survey Designs
8.		Research Design 2/2 <ul style="list-style-type: none"> - Other popular designs
9.	Data Collection & Analysis	Sample Selection & Data Collection <ul style="list-style-type: none"> - Types of sampling - Types of data - Methods of Data Collection
10.		Questionnaire Design 1/2 <ul style="list-style-type: none"> - Attitude & its Measurement - Procedure for designing a Questionnaire - Common Errors
11.		Questionnaire Design (Workshop) 2/2
12.		Interview technique <ul style="list-style-type: none"> - Types of Interview - How to conduct Interview - Interview guide - Transcribing the interview
13.		Quantitative Data Analysis <ul style="list-style-type: none"> - Data preparation - Pilot survey analysis - Final survey analysis
14.		Qualitative Data Analysis <ul style="list-style-type: none"> - Thematic analysis - Content analysis
15.		Interpretation & Report writing
		Interpretation & Report Writing <ul style="list-style-type: none"> - Interpretation - Validity & Reliability - Writing of Report