

Research Paper Writing By

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What is a Research Paper?

A research paper is a piece of academic writing based on its author's original research on a particular topic, and the analysis and interpretation of the research findings.

Structure of a Research Paper

A research paper form of written communication must follow the rules of a valid publication which are :

- **Title**
- **Authors**
- **Table of Contents**
- **List of Symbols**
- **Acknowledgements**
- **Abstracts**
- **Introduction**
- **Material and Method**
- **Discussion**
- **Results**
- **Conclusions**
- **References**

Title

The title of a research paper may be defined as the possible words that adequately describe the context of the paper.

An effective title should have__

- Clear indication of the context
- Neither too short nor too long

Name and Address of the Authors

- A full name and address should be considered obligatory, unless the writer of the paper wishes to publish it anonymously
- Spelling and the name of the authors should remain same in all of their papers

Table of Contents

In this section, we add the contents of the topics that we did in the project in the number wise order

For example,

1. Introduction

1.1 ____

1.2 ____

1.3 ____

List of Symbols

In the research paper you can use abbreviations that should be standard. Try write the full version at first place. Use only abbreviated form to represent the physical and chemical quantities units

Acknowledgements

Acknowledgements and references are the two additional sections in the paper

- If any individual gives you a significant technical help, you should acknowledge it in your work
- You should also acknowledge the financial assistance such as grants.

Abstract

- To briefly introduce the readers to the aims of the study, methodology, results, and findings
- It should be as concise as possible and should not exceed 3% of the total length of the paper
- It should not contain any figure or tables

Questions that an Abstract Answers

1. Why this project/ work is done?
2. What did you do and how?
3. What did you find?
4. What will you do with your finding?

Introduction

In introduction the previous knowledge or background information is provided to the readers.

An overview of the research paper

Literature Review

- To summarize what conclusions have been reached in the research literature and whether different writers agree or not
- To highlight main issue and controversies around the problem
- What is the present state of knowledge regarding the topic considered?
- How are the studies related to the one being processed?
- How will the proposed study contribute to the existing literature?

Materials and Methodology

In this section the authors describe the experimental designs, experimental techniques, or theoretical derivation and then provides enough details so that the competent worker can repeat the experiment

Results

This section forms the core of the paper. There are three ways to represent the result.

1. Choice of data
2. Choice of the form of data presentation
3. Presentation of data in tabular form

3.1 Give the heading of the column

3.2 Avoid presenting any irrelevant material and structural formulas inside the table

3.3 Avoid making the table complex by giving the extra results

Discussion

In this section, we interpret data and highlight the important features and their causes. Limitations and any source of errors are also mentioned here.

Conclusions

In this section no extra material should be introduced. This part includes the conclusion of the presented data.

The main function of this section is to make recommendations based on the result of the study.

References

By giving the references of the earlier researchers, the reader can find the original source.