

Expand
Knowledge
Build Theories
Explore Ideas

FUNDAMENTAL / BASIC / PURE RESEARCH

Curiosity
Today
A Brighter
Tomorrow

Research for a Deeper Understanding



Meaning

Research conducted primarily to **expand knowledge**, **develop theories**, and **understand fundamental principles**, without an immediate practical application.



Key Features

1



Knowledge for **knowledge's sake**.

2



Develops or refines **theories and principles**.

3



Focuses on **generalization**.

4



Primarily **theoretical**.

5



No immediate practical utility is required.

6



Provides a **foundation for future research and applications**.

"Building
Knowledge
for a
Better
Tomorrow"



Example

Studying how **human memory works** to develop a better theoretical understanding of memory.



From
Questions
to
Knowledge



Knowledge Today • Discoveries Tomorrow



MASTER THE NOTES? TAKE THE QUIZ

Knowledge
Applied
Problems Solved
Better Futures

APPLIED RESEARCH

Research for Real-World Solutions

From
Research
to Real
Change



Meaning

Research conducted to **solve a specific practical problem** or address a **real-world need** by applying existing knowledge or theories.

Identify
Problems

Find
Solutions

Apply
Knowledge

Create
Impact



Key Features

1



Focuses on **practical problems**.

2



Application-oriented.

3



Uses **existing theories/knowledge**.

4



Findings have **practical utility**.

5



Usually conducted in **real-world contexts**.

6



Aims to **improve practices, policies, products, or processes**.

Research
today
for a
better
tomorrow



Example

Testing a **new teaching strategy** to improve students' mathematics achievement.



Apply • Solve • Improve • Impact

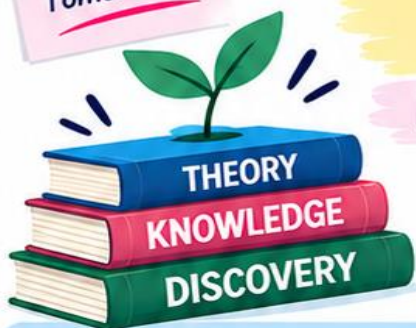


MASTER THE NOTES? TAKE THE QUIZ

FUNDAMENTAL vs APPLIED RESEARCH

Different Purposes, Complementary Roles

Build Knowledge for a Better Tomorrow



Apply Knowledge Create Solutions Make an Impact



Basis

Fundamental Research (Basic / Pure Research)

Applied Research



Main aim

Expand knowledge

Solve practical problems



Focus

Theory & principles

Application & solutions



Nature

Theoretical

Practical



Approach

Inductive approach
(from specific to general)

Deductive approach
(from general to specific)



Immediate application

Not necessary

Usually intended



Outcome

Theory, principles,
knowledge

Solutions, improvements,
applications



Context

Often academic/
laboratory

Often real-world



Key question

“What/Why/How?”

“How can we use it?”

Different Paths
Greater Possibilities

*Both types of research are important
and complement each other!*

Research Today
A Brighter Tomorrow

MASTER THE NOTES? TAKE THE QUIZ

Research
Today
A Better
Tomorrow

RESEARCH

Explore
Analyse
Understand
Create Change

A Systematic Inquiry for Generating Knowledge

PURPOSE / AIM

Based on the purpose of the research

Fundamental



Knowledge
generation



Theory/
Principle
development

Applied



Practical
problem
solving



Solution
/Action

Inductive



Specific →
General



Pattern/
Theory

Deductive



General →
Specific



Hypothesis/
Testing

Different Paths • Deeper Understanding • A Brighter Future

Knowledge
Leads to
Progress

Research
Empowers
Real Change

MASTER THE NOTES? TAKE THE QUIZ