RESEARCH AND REPORT WRITING

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Unit – I

Introduction: Significance of Report Writing in academics and research- Requirement of report writing- research goals. Various kinds of Reports and its presentations. - Characteristics of Academic and Research Reports / Presentations.

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Unit – I

Introduction: Significance of Report Writing in academics and research- Requirement of report writing- research goals. Various kinds of Reports and its presentations. - Characteristics of Academic and Research Reports / Presentations.

Learning Objectives

- To understand the significance of report writing in academic and research contexts.
- To identify the requirements and essential components of effective report writing**.**
- To explain different research goals and their role in structuring academic reports.
- To distinguish between various kinds of reports and their methods of presentation**.**
- To analyze the characteristics of academic and research reports and presentations**,** including clarity, coherence, and objectivity.

DEFINITION OF RESEARCH REPORT

Research is the systematic investigations into study of a natural phenomena or materials or sources or existing condition of the society in order to identify facts or to get additional information and derive new conclusions. It is a production process, which needs a number of inputs to produce new knowledge and application of new and existing knowledge to generate technology that ultimatelymay generate economic prosperity of a nation. Simply, a research paper/report is a systematic write up on the findings of the study including methodologies, discussion, conclusions etc. following a definite style. The research report writers in making the report good qualitative should remember the saying 'Try to express, not to impress'. More elaborately and precisely, a report or systematic write up on the findings of a research study including an abstract/executive summary/summary, introduction (Background with literature review, justification, objectives etc.) results and discussion, conclusions and recommendations, references etc. following a definite style or format may be called a Research Report.

Significance of Report Writing

In general, reporting writing is very helpful for making the record of documentation. With the help of reports, we can easily recognize our work. For example, reports play a vital role in schools and colleges for knowing how many students have joined in this year. Report writing also helps the director of the industry, business or any

organization in order to make quick decisions and planning of anything. The importance of report writing is that it also helps to communicate within the company that is workers, to discuss the problems of the business and to give investor details of everyday running.

A report can be good when it can be written in the manner of proper communication and written communication. There are also verbal reports and informal reports. Many kinds of report provide many types of profits. Report writing consists of the history and facts of a project or any kind of event. It is useful for recording a past history and an overall summary of decisions.

Report writing helps as a path to solve problems. Writing a report guides you in a way to modernize details about improvements and upcoming plans. For example, the progress of technology or any policy of government. There are many types of report writing such as research report writing. While writing the report of a research paper seems hard but don't worry as there are many online academic report writing services who can help you in any way. The significance of report writing can be highlighted below.

Requirement of report writing

What is report writing?

This form of writing is used in the general and social sciences, as well as business, so to be able to compile a good report is a very transferable academic skill. A report is written with a clear purpose and for a specific audience and, as with all types of academic writing, clarity and conciseness is key. Before you begin your report writing exercise, ensure that you are aware of any specific guidelines contained in your brief and also ensure that you use headings to guide your reader as you move from section to section. As with all types of academic writing, reports should be clear and concise. While the main areas to consider in report writing are described below, do remember that the first draft of any written assignment should not be the one that is submitted, and it is vital that you leave adequate time for editing and proofreading.

MEANING OF REPORT

Report is a summary of information. It is a communication from someone who has information to someone who wants to use that information. A report is a form of narrative or statement which presents facts relating to an event or state of business affairs which are necessary for an evaluation of progress and for decisions. It is a presentation of

facts and findings about an activity. It is objective, impartial presentation of facts. It may arise out of available factual data or through enquiry, investigation, survey, interview, experiment etc. A mere expression of opinion without supporting factual data is not a report. Office reports may be regarded as the vehicles of communicating information to those who need that information and will use it. They also provide valuable records. They serve as usual means of developing public relation and goodwill.

George R.Terry defined report as "A written statement on collection of facts, events, and opinions and usually express as summarized and interpretative value of this information. It may deal with past accomplishments, present conditions, or probable future developments." According to Johnson "A good report is a communication that contains factual information organized and presented in clear, correct and coherent language." Reports are used by members of management to plan, organize and control business operations. Each manager in an organization has to report to his senior for which he has accepted the responsibility.

Objectives of Report Writing

Office report has the following objectives: –

Objective of office reports is to communicate the information to those who need it.

- To facilitate planning and co-ordination by presenting factual information.
- To provide the information to shareholders, creditors, investors, customers and also general public.
- To facilitate the management to take appropriate course of action.
- To provide valuable records of documents to the office which can be used as future reference?
- To provide facts and results of an enquiry. To give the basis of measuring the performance of executives.

Importance of Report Writing

Report writing is very challenging, interesting and fun loving. It is not something separate from real work. It is necessary and integral part of work. It is quite valuable and useful because:—

- It helps to keep records. It is the source of information.
- It tells about future success and failures. It keeps on knowing what we are doing.

- It encourages the donors as it keeps them informed what happened to their donations.
- It helps other people know about the development of their project. Other people are encouraged to do their own project. Helps researchers to do their work. Helps to determine further actions.
- It is also important for evaluation purpose. Helpful to the govt. to know their performance to bring different changes in policies, programs etc

Report Writing (Tips and Guidelines)

Report writing is an art. It is that skill which can be studied and cultivated. It is an essential means of communication in the form of recommendation or information which is placed before the management for taking different decisions. A report which does not stimulate thought has no useful purpose. It does not justify the cost and efforts incurred on its preparation. It is necessary for maintaining transparency.

The tips and guidelines about report - writing are valuable to employees at all levels. These are as under:—

Avoid the use of passive voice.

Prepare the report after knowing your audience and need of readers. Write the report concisely (briefly) but comprehensively.

Write in simple language.

It should be well planned and well organized. It should follow the logical conclusion.

It may also give recommendation.

Benefits of Report Writing

It arranges and organizes the available information. It identifies any missing information. It makes the author to get more total and neutral view. It makes analysis and assessment easier. It classifies the relationship between activities and results. (Input and output). It assists the author to make a less biased self assessment. It provides the information for making recommendation

Preparation of Report Writing

Reports are necessary to communicate progress, indicate achievements and make relevant recommendations. They are useful for evaluation purpose and may assist in

making the necessary adjustments on an ongoing project. Report writing is actually a challenging and exciting activity. Therefore, a formal report generally has the following essentials:

Preparation Preparation of report involves many activities. It includes selecting an attractive report title, determining topics to the covered and listing points of the topics. Under preparation, writer has to acknowledge all those who offered assistance during the process. The acknowledgement should be as sincere as possible. After acknowledgment, writer creates a summary abstract, which communicates the scope of reports. An executive summary closely follows the summary abstract showing the purpose of the report background of the report and source of information.

Introduction

This stage communicates the main objectives of the reports. It covers a wide area including the background information, literature review, scope of study and research methodology used. The introduction phase should be very short and concise. It should, however, set the stage for a clearer and logical flow of report. A writer should understand the main objectives of the report before embarking on writing it in the first place. This will assist in ensuring that you do not go out of topic or experience writer's block, a situation where a writer suddenly runs out of ideas.

Writing the body The body is one of the most important parts of report since it holds all facts and relevant information, as regards of the problem. All information should be made available in a straight forward way without beating the bush. Although it is a report, it is advisable to use active voice as compared to the passive voice, since the former is clearer, more direct and has a natural role.

Conclusion This indicates the end of the report. It should be the summary of the whole report covering all aspects of the document and any underlying themes. Before writing the conclusion, it is advisable to make a draft first of the whole document and then note the main points to sum up. There should not be any inclusion of new information in the conclusion. The conclusion of report also involves listing the recommendations of the research. After studying the whole report and under standing the underlying problem, one is able to make recommendations on the possible solutions. Some reports also include list of references. A list of references shows the main sources

of information for the writer. The list facilitates easier verification of the information. Just in case you might need to edit the report, it would be easier to find the information you are looking for if you follow the list of references.

Characteristics of Academic and Research Reports Presentation

Clarity and Precision – The presentation should be clear, concise, and free from ambiguity to ensure that the audience understands the key findings. Logical Structure – The content must be organized systematically, typically following an introduction, literature review, methodology, findings, discussion, and conclusion.

Objective and Evidence-Based – Academic and research presentations should rely on factual data, evidence, and logical reasoning rather than personal opinions.

Use of Formal Language – The presentation should maintain a professional tone, avoiding informal language, slang, or personal biases.

Visual Aids and Data Representation – Graphs, charts, tables, and diagrams should be used to enhance understanding and support arguments effectively.

Citations and References – Proper citations should be included to acknowledge sources and avoid plagiarism.

Critical Analysis – The report should not just present data but also analyze, interpret, and discuss the implications of the findings.

Audience Awareness – The presentation should be tailored to the knowledge level of the audience, ensuring accessibility without oversimplification.

Time Management – Key points should be highlighted within the allocated time to keep the audience engaged.

Conclusive Summary – A strong conclusion summarizing key insights and recommendations enhances the effectiveness of the presentation.

CO1: Explain the importance and role of report writing in academic and research work.

CO2: Identify the essential requirements and structure of effective report writing.

CO3: Describe different research goals and their application in preparing reports.

CO4: Classify various types of reports and explain their methods of presentation.

CO5: Evaluate the characteristics of academic and research reports, including clarity, coherence, and objectivity.

PO: To develop students' ability to effectively communicate academic and research findings through well-structured reports, demonstrating clarity, critical thinking, and adherence to scholarly writing standards.

S. No	Question (5 Marks)	LOCF Mapping		
1.	What is the significance of report writing in academic research?	CO2	PO1	K2
2.	Explain the basic requirements of report writing.	CO2	PO1	K2
3.	What are research goals? Explain briefly.	CO1	PO1	K1
4.	Write a short note on different types of reports.	CO2	PO1	K2
5.	What are the key features of academic reports?	CO2	PO1	K2
6.	Explain the structure of a research report.	CO2	PO1	K2

S. No	Question (8 Marks)	LOCF Mapping		
1.	Analyze the importance of clarity, coherence, and objectivity in report writing.	CO4	PO1	K4
2.	Explain the role of report writing in academic success and professional development.	CO2	PO1	K2
3.	Examine the qualities of a good research report with suitable examples.	CO4	PO1	K4
4.	Discuss the characteristics of academic and research reports in detail.	CO4	PO1	K4
5.	Describe different types of reports and their presentation methods.	CO2	PO1	K2

Unit – II

Research Writing Types of Research Papers, Structure of research papers -Research Paper Formats -Abstract writing – Methodology -Results and discussions - Uses of plagiarism detection tools.

Learning Objectives

- To understand different types of research papers and their academic significance.
- To learn the structure and standard formats of research papers.
- To develop skills in writing abstracts, methodology, results, and discussion sections.
- To understand the importance of proper data presentation and interpretation in research writing.
- To gain awareness of plagiarism and the use of plagiarism detection tools in academic writing.

INTRODUCTION

Preparing the Text

Avoid plagiarism! It is worth repeating. Care should be taken in preparing the text. One has to faithfully adhere to the scientific methodology. One has to avoid plagiarism which means reproducing exact words, sentences and ideas of the source materials without acknowledging them in the reference. Usually there would be a tendency among anyone who is writing, a tendency of picking up ideas and sentences from any source without due acknowledgement. Recently in a world of internet and electronic sources, students tend to reproduce from the web pages, web articles and electronic sources. It has been also an observation that in the past, few students have just copied from previous assignments and papers of their seniors. All these practices come under plagiarism. A sincere research student should by all means avoid coping or showingasifitisone'sown.Scholarlysincerityinthisregardtellsuponthestudent's motivation in life and career.

The whole text should be in the student's own style and language. It is a must to make reference in footnote, whenever others' ideas are used in a form of Paraphrasing (i.e. ideas of the authors are presented in the words of the student) or in a form of Direct

Quotations (i.e. exact words and sentences of the authors; either in short three-lined quotations or longer quotations).Originalityin the content of the paper presented in one's own style and language and precision in methodological applications are taken into consideration in evaluating the scientific work. While writing, flow of thought, unity and coherence of thought are very much necessary. Getting feedback, comments and guidance before and after writing would help the student to polish and shape the idea and the writing skill.

DEVELOPING THE WRITING SKILL

First Draft

Follow your outline and write the full text carefully.

- Do not copy long quotations, but note their place in the paper and mark the reference.
- Keep writing without searching for the perfect word or phrase, but pay attention to the logic and the coherence of thought.
- Incorporate good passages from other writers.
- Limit your scope and exclude everything irrelevant.
- Show this draft, prepared in double-space, to your guide or friends for comments and criticism.

Second Draft

- Respond to criticisms and incorporate suggestions and corrections.
- Look for the appropriate words/phrases and accurate expressions, using a thesaurus.
- Add emphasis to important points and avoid irrelevant and unimportant materials.
- Show this copy, typed in double-space, to your guide to get further suggestions and corrections.

Final Draft

- Once again, answer criticisms and incorporate suggestions and corrections.
- Improve accuracy, clarity, forcefulness and readability.
- Change language style by using simpler wording, shorter sentences and paragraphs, active rather than passive voice, substituting positives for negatives, writing sequences in order.

- Prepare a precise introduction and a well thought out conclusion.
- Prepare a list of reference, appendix and index before generating the table of contents.
- Prepare a title page in the prescribed scientific format.
- Proofread your paper. Check spelling grammar, punctuation and the logical developmentof ideas. Go through carefully the citations, foot-notes and the reference.
- Submit the final draft to your guide and incorporate his/her suggestions for the improvisation of your paper.

Writing to communicate: Say what we mean to say clearly and consciously. Keep primary objective in writing and focus discussion accordingly. Provide overview of what will be discussed. Organize ideas from general to specific using headings and subheadings. Provide transitional phrase, sentences or paragraphs to help readers follow the flow of thought. Use Concrete examples to make abstract ideas understandable. Use appropriate punctuation.. Use tables and figures to present findings more adequately. Summarize what was said at the conclusion of the paper. Anticipate revision of draft of report.

THEMAINDIVISIONSOFAPAPER

In general, are search report consists of three parts-

- The preliminary,
- The text or the main body of their port,
- There ferrous material.

The core forms the middle part or the main body or text of the report. It is preceded by the preliminaries comprising the title page, acknowledgements, table of contents etc. The core is followed by the end part containing the appendices, bibliography etc.

Overview

• Your paper may not have all these divisions, but whatever parts it has, will follow in this order: Title Page, Acknowledgement, Table of Contents, Introduction, Main Body of the Text, Conclusion, Reference, Appendix, Index

Title Page for a Short Paper

Do not make a title page for a short paper unless specifically requested. In the top left corner of the first page list your name, roll number, your instructor's name, the course name followed by the code, and the date (only month and year). Do not use any punctuation after any of these entries.

• Begin your paper immediately after these entries with your title and subtitle (if there is one) centered and the title bolded.

• Do not use any punctuation mark after the title. A question mark or an exclamation mark may be used after the title only when necessary and appropriate.

• Begin pagination from the first page though you may choose to make the page number invisible on this page.

Style of presentation: Different disciplines adopt different styles. We propose two styles of presentation (Chicago Style & APA). You are free to choose one of these but be consistent.

Title Page for a Long Dissertation

• Make the separate title page for a long paper (dissertation or thesis having chapter divisions) and arrange the entries centered between margins in the following order.

The main title of your paper followed by the subtitle, if any (Only the main title may be capitalized and bolded).

- Your name followed by your roll number.
- Your Guide's name prefixed by his designation.
- The purpose of the paper.
- The date of submission (only the month and the year).
- The name of the institution followed by the name of the city (with pin code).
- The line spacing shall be set for 1.5 for the entire title page. Between each entry give 5 spaces by giving the enter command on the keyboard.
- Keep the same font type and size as in the body of the paper.
- As a rule the first letter of all the words in the title page will be in capitals except if the word is an article or a preposition.

Acknowledgement

- Acknowledgement normally follows the title page and precedes the table of contents.

The page number on this page shall follow the page number of the title page in Roman numerals.

- Avoid exaggeration and flowery words.
- Make sure to acknowledge your thesis guide, other professors and the library staff.
- You may also include your family, friends, bishop/superior, community where you live, etc. in the order that seems most appropriate for you.

Table of Contents

- It should include all divisions that precede it and follow it except the title page.
- Roman small numerals are given for the divisions that precede it and Arabic numerals are given to divisions that follow it.
- It can be generated automatically in MS Word. In order to do so, the different levels of headings are to be defined correctly.
- Generate the Table of Contents only just before taking the print of the final copy because any change made after may result in the indication of wrong page numbers.
- Before taking the printout, type in title case "Table of Contents" or merely "Contents," and center this heading.

Introduction

- Introduction is written after having completed the body of the text.
- It introduces the topic undertaken for the study and spells out the reason for undertaking this study.
- It will also speak of the different methods employed for the study.
- It will seek to justify why the chapters are divided the way they are divided, thus offering a justification for thematic coherence.
- If it is a long dissertation the Introduction will run through a few pages.
- The page number in Arabic numerals begins with the first page of the Introduction, which will continue till the last page of the paper.

Main Body of the Text

- The text should contain everything necessary for a reader to understand the author's views.

- Longer papers (dissertation or thesis) are divided into numbered chapters.
- Begin each chapter on a new page.
- he length of the chapter may vary as each chapter is a thematic unity.
- Short titles are preferable. The title of the chapters should bring out the theme. Center the title of the chapter below the chapter number.
- It is preferable not to have more than three levels of subtitles.
- Do not use full stop, comma or semicolon after titles or subtitles. A colon may be used to separate the subtitle from the title. Use an exclamation mark or question mark if the title requires it.

Use of Numerals

- Spell out numbers written in one or two words and represent other numbers by numerals (one, thirty-two, fifteen hundred, two million, but 2 1/2; 102, 275).
- Spell out the number if the sentence begins with a number.
- Fractions and compound numbers below one hundred should be hyphenated (one-third, thirty-six).
- For large numbers you may use a combination of numerals and words (4.5 million, 2 trillion).
- Express related numbers in the same style (5 of the 250 delegates; from 1 billion to 1.2 billion;
- 15 feet by 90feet (or 115'x 90') but not five out of 250 delegates; one billion to 1.2 billion.
- If your project calls for frequent use of numbers (a paper on scientific matters or a paper involving statistics), use numerals for all numbers connected with statistics or scientific data.

Always use numerals for the following:

- With abbreviations or symbols (6 lbs., 4:29 p.m. (or P.M.), $9, 3%, 4").
- In address (201 Lattice Bridge Road).
- In dates (1 April 1993).
- In decimal fractions (3.5, 7.8).

In page or volume references (page 16, volume 6).

Numbers and letters occurring in enumeration in the text are enclosed in parentheses. For example, (1), (a). When each item in an enumeration begins a new line or paragraph, numerals or letters may be followed by a right parenthesis. For example, 1).

For an enumeration without subdivisions, Arabic numerals followed by full stops are preferred; the full stops are always aligned.

Use capitals of Roman numerals for individuals in a series (Henry VI, Pope Benedict XVI).

Large round numbers may be written as follows: Four billion dollars (or $4 billion); 16,500,000 (or 16.5 million).

- Regardless of the original source, numbers referring to the following are given in Arabic numerals:
- Divisions of a book (Volume, Parts, Chapters, Act, Scene) Illustrations, tables, or figures
- In documentation you may use appropriate abbreviations for the divisions of the book (p. 30, vol. 2, Ch. 5, Fig. 3).
- In footnotes, indexes, etc., where page range is to be shown, follow the convention given below:
- Full numbers to be given for numbers through 99 (p. 78–83).
- For larger numbers, give only the last two figures if it is in the same hundred (pp. 102–10; 1997–98).
- If it is in another hundred, add more figures as needed (1497–506; 1996–2003).
- Use a combination of figures and words for numbers when such a combination will keep your writing clear:
- Unclear: The club celebrated the birthdays of 6 90-year-olds who were born in the city. (This may cause the reader to read 690 as one number.) Clear: The club celebrated the birthdays of six 90-year-olds who were born in the city.
- Regarding the use of date, there are differences between British and American English.
- The following table shows some typical formats. Whichever format you choose, be consistent.

- The common way of referring to years is as follows: 1066 CE, 1900 BCE, 1971–72 or 1971–1972, the eighties or the 1980's or the 1980s.
- Spell out centuries in lower case letters (twentieth century). Hyphenate if it is used as an adjective (twentieth-century thought; nineteenth- and twentieth-century writings).
- Time may be written as follows: 8:00 AM (or a.m.); eight o'clock in the morning; 4:30 PM (or p.m.); half-past four in the afternoon; 12:00 noon; 12:00 midnight.
- Residence numbers in addresses are written thus: 16 Tenth Street; 350 West Street.
- In abbreviating, always use accepted forms. In appropriate contexts, you may abbreviate, keeping in mind clarity. Spell out the term if the abbreviation may puzzle the readers.

Punctuation

The comma and the full stop are always placed inside the quotation marks, whether they are part of the quotation or not. The colon and semicolon are always placed outside the quotation marks. The exclamation mark or the question mark is placed inside the quotation marks when it is part of the quoted matter; otherwise, outside.

Example: Does he precisely show "evil leading somehow to good"? The question asked was: "Can evil ever lead to good?"

Indicating Errors in the Original

Do not make corrections to the original text you are quoting even if the mistakes are evident.

An evident error (in spelling, grammar, logic) in the original is pointed out by enclosing sic (thus used) in brackets immediately after the error (sic). This is to assure the reader that the faulty spelling or logic was in the original.

Use of Capitals and Italics

The first word of a quotation is not capitalized if it is related grammatically to what precedes, even though in the original it begins a sentence (The Psalmist's call to "taste and see that the Lord is good"). This rule should be followed for both kinds of quotations, i.e., continuous with text or set off.

If the quotation starts after an introduction, do not capitalize the first word. This is applicable even to block quotations. Words not italicized in the original may be italicized for emphasis. This change may be indicated to the reader by a notation enclosed in brackets placed immediately after the italicized words or in the footnote.

Example: “I am not (italics added) one of the desk-pounding types that like to stick out his jaws.”

Conclusion

- In a long dissertation, the conclusion will run through a few pages.
- It highlights the finding of your study, relating to the questions you have raised in your introduction.
- It also specifies other issues resulting from your study, which open up the possibility for further research.
- Though it brings together the loose ends of the paper, it is not meant to be a summary of the preceding chapters.
- Finally, the conclusion is not conclusive. This means that you do not seek to offer dogmatic proofs to the question(s) under investigation. Nor do you pretend that you have resolved the issue finally. Protect yourself from intellectual dogmatism.

ACKNOWLEDGING THE SOURCE MATERIALS

Reference

Reference should contain all the cited works, either directly quoting a passage or giving a summary idea of the work. It does not include works related to the subject matter which you have not made use of.

It is usually arranged in alphabetical order according to the surname (last name) of the author.

If your study is author-based, then you may divide your reference into Primary Sources (referring to the works of the author) and Secondary Sources.

No other classification such as books, articles, etc., is allowed.

Encyclopaedias and dictionaries do not feature in the reference.

Religious books like the Bible, Koran and Bhagavad-Gita are not included in the reference unless the study is made on a section of these religious works and you want to mention the different versions and translations you have made use of in your study.

Generally it is said a citation is a reference to a published or unpublished source. More precisely, a citation is an abbreviated alphanumeric expression, e.g. (Pandikattu 1998), which is embedded in the body of the text that denotes an entry in the bibliographic references section of the work in order to acknowledge the works of other authors.

Generally the combination of both the in-body citation and the bibliographic entry constitutes what is commonly thought of as a citation. It may be noted that bibliographic entries given at the end of the text do not constitute citation and acknowledgement of the sources the author is indebted to.

A prime purpose of a citation is intellectual honesty: to attribute to other authors the ideas they have previously expressed rather than give the appearance to the work's readers that the work's authors are the original and that he or she alone is responsible for the ideas in the book.

The forms of citations generally subscribe to one of the generally accepted citation systems. such as the Harvard, MLA, American Sociological Association (ASA), American Psychological Association (APA), and other citation systems, as their syntactic conventions are widely known and easily interpreted by readers. Each of these citation systems has its respective advantages and disadvantages relative to the trade-offs of being informative (but not too disruptive) and thus should be chosen relative to the needs of the type of publication being crafted. Editors will often specify the citation system to use (Wikipedia 2010). Bibliographies and other list-like compilations of references are generally not considered citations because they do not fulfill the true spirit of the term: deliberate acknowledgment by other authors of the priority of one's ideas.

Footnotes and Endnotes are more detailed forms of citations. They are used to give credit to sources of any material borrowed, summarized or paraphrased. They are intended to refer readers to the exact pages of the works listed in the Works Cited, References, or Bibliography section.

The main difference between Footnotes and Endnotes is that Footnotes are placed numerically at the foot (end) of the very same page where direct references are made, while Endnotes are placed numerically at the end of the essay on a separate page entitled

Endnotes or Notes. It is much easier to refer to footnotes, but endnotes do not disturb the smooth flow of the text in an article.

If you are still using a typewriter, a superscript number is typed half a space above the line after the last word of the citation, e.g., "The Information Superhighway is giving way to a Commercial Superhighway."[1] If you are using a word processor, you can access the superscript function. To type a Footnote citation, the same superscript number is put at the beginning of the Footnote at the bottom of the same page where the citation occurs. In word processing this step is easy, since it takes place automatically.

When mentioning a work for the first time, a full and complete Footnote or Endnote entry must be made. When the same work is mentioned later, the full details need not be repeated.

CITATION

The writer must acknowledge indebtedness to an author or source, not only for material quoted verbatim, but for every fact, judgment, theory, or principle taken from other sources. This applies, therefore, to paraphrase or summary as well. Common facts known to every intelligent reader need no acknowledgement. Failure to acknowledge the source is called plagiarism. It invites severe penalties since it amounts to cheating or robbing.

All quotations should correspond exactly with the originals in wording, spelling and punctuation. Hence there is need for care. No matter how brief the quotation, the description of the context should usually be given in order to avoid misleading or unwarranted interpretation of the author quoted. While quoting, a quotation should never be given a sense different from that which it had in its original context.

For example, it is wrong to say the following: The Bible says, "There is no God" (Ps 14:1).

Quote authors who have something special to say about the topic under consideration (authors who give a new theory, express it in a striking way, or raise serious objections). Quote only the pertinent passages of an author who is an authority in the field. Second-hand quotations are permissible only if it is impossible to verify them in the original source.

Format

A quotation can be placed in the text or in the footnote or in the appendix. It is placed in the text if it is very important for the paper. It is placed in the footnote if it is merely a confirmation of an idea in the text. If the author has many passages, only the most appropriate quote is placed in the text; other passages are cited in the footnote. Footnote is the appropriate place for the original text whose translation is inserted into the body of the paper.

General Tips

Quotations, direct or indirect, should be kept to a minimum lest the paper may give the impression of being a mere compilation of quotations. A direct quotation must be as brief as possible and contain only the really pertinent matter. A careful paraphrase or an exact summary is better than a long quotation. Such a paraphrase or summary must not be enclosed in quotation marks. The number of the footnote is placed at the end of the paraphrase or summary.

Do not simply drop quotations into your paper and leave it to the reader to make connections. You must integrate the quotation into the paper with the help of signals, assertions and connections.

Example: Ross, in her study of working-class women (signal), makes it clear that economic status determined the meaning of motherhood (assertion). Among this population (connection), “to mother was to work for and organize household subsistence.”

Short Quotations

If the quotation is short (fewer than one hundred words or approximately five typed lines of prose), enclose it within double quotation marks and incorporate it into your text. When a brief incorporated quotation ends a sentence in the text, it is always followed by a full stop. If a brief quotation is used within a sentence, the original punctuation is replaced by the punctuation proper to the sentence.

Long Quotations

Use long quotations only when it is necessary to do so. Long quotations are not enclosed in double quotation marks but indented. If there is a double quotation in the original source, convert it into a single quotation mark if it is a brief quotation, but maintain the double quotation marks if it is a long quotation.

If you are using the author-date format instead of footnotes, provide the surname of the author followed by a colon, a space and the specific page. If you are giving footnotes to the citations instead of the parenthetical citation, provide the superscript number in the text and the complete reference in the footnotes. In quotations from works in foreign languages, it is helpful and advisable to give a translation, at least in the footnotes.

Ellipsis

The omission of words or sentences within a quotation is always indicated by ellipsis. For an ellipsis within a sentence, use three dots placed in square brackets […]. If there are ellipsis marks in the quoted author's work, do not put brackets around them; brackets around ellipsis marks are meant to distinguish the ellipsis you added from the ellipsis marks in the quoted author's work.

Do not use ellipsis (…) to begin an indented quotation. However, while quoting many paragraphs, if words are omitted at the beginning of paragraphs other than the first, indicate the omission using ellipsis after the paragraph indentation.

The omission of one complete paragraph or more in a prose quotation or of a line or more in a verse quotation should be indicated by a single line of spaced full stops. Enclose any foreign matter (change, addition, correction or personal comment) inserted into a direct quotation with brackets, i.e., [ ], not parentheses, i.e., ( ), to indicate that it is not part of the original text. If some words required for easy reading are missing, insert them in brackets at the appropriate place.

WRITING FOOTNOTES

The following points are discussed in this section: Footnotes in Chicago Style.

Introductory Remarks

The research paper will have to be well documented. Proper documentation saves the researcher from the accusation of plagiarism and the consequent penalties.

Frequently Used Abbreviations in Documentation

Acknowledging the Sources

To acknowledge a source in a paper, place a superscript number immediately after the end of a sentence containing the quotation, paraphrase or summary. If a single paragraph of your paper contains several references to the same author, it is permissible

to use one number after the last quotation, paraphrase or summary to indicate the source for all of the material used in that paragraph.

Place notes at the bottom of each page, separated from the text with a typed line 1.5 inches long. Indent the first line of each entry one-half inch (or five spaces) from the left margin; do not indent additional lines in an entry. Begin the note with the Arabic numeral. Footnotes should be numbered consecutively, beginning with 1, either throughout the chapter or the work.

Format

Author's first name and then last name. Full title of the work with subtitles, if any. Location of publication, publisher and the year of publication in parentheses. Page(s) from which information is taken, avoiding the abbreviations "p." and "pp." before page numbers. Use commas to separate items.

The first time you cite a source, the note should include publication information for that work as well as the page number on which the passage being cited may be found. After the first citation, for subsequent references to a source already cited, give only the author's last name, a short form of the title, and the page or pages cited. The short form of the title of a book is italicized; the short form of the title of an article is put in quotation marks. Use commas to separate items.

If the subsequent references follow immediately after a reference, use the abbreviation "Ibid." Ibid means "same as above." It is used only when the note is from the same source as the one directly above. A page number is included if the second reference is from the same source as the one directly above, but the page from which it is taken is different from the first.

In the author-date system, sources are cited in the text, usually in parenthesis. It includes the author's last (family) name, the year of publication of the work, and a page number (Cox 1997, 166). Full details appear in the bibliography usually titled "References" or "Works Cited."

Examples of Footnote or Endnote

2. G. Wayne Miller, *King of Hearts: The True Story of the Maverick Who Pioneered Open Heart Surgery* (New York: Times, 2000) 245.

Bibliography example:

Miller, G. Wayne. *King of Hearts: The True Story of the Maverick Who Pioneered Open Heart Surgery*. New York: Times, 2000.

Use of ibid. and op. cit.

Gibaldi does NOT recommend the use of these old-fashioned abbreviations: ibid. (from the Latin *ibidem* meaning "in the same place") and op. cit. (from the Latin *opere citato* meaning "in the work cited").

For Footnote or Endnote citations, if you should see the term ibid. being used, it just means that the citation is for the second mention of the same work with no intervening entries:

3. Ibid. 12–15.

More commonly, author and page number or numbers are now used instead of ibid., e.g.:

4. Miller 12–15.

For second or later mention of the same work with intervening entries, where previously op. cit. was used, now only the author and page number or numbers are used:

5. Miller 198.

Use of Superscript

[Tab] or indent Footnote and Endnote entries 5 spaces from the left margin. Leave one space between the superscript number and the entry. Do not indent second and subsequent lines. Double-space between entries. Number Footnotes and Endnotes consecutively using a superscript, e.g., 7.

For Endnotes, you must use the same superscript number (as in your text) at the beginning of each Endnote in your Endnotes list. Start your list of Endnotes on a new page at the end of your essay. Remember to put the Endnotes page before the Bibliography, Works Cited, or References page.

Do not confuse Footnote and Endnote citations with explanatory notes that some authors refer to as "Endnotes." These notes are not considered citations but are used to add comments, explanations or additional information relating to specific passages in the text.

WRITING BIBLIOGRAPHY IN TURABIAN AND APA STYLES

Here we deal with two main styles for writing bibliography which is a must for any academic articles or books. “Turabian style” is named after the book’s original author, Kate L. Turabian, who developed it for the University of Chicago. Except for a few minor differences, Turabian style is the same as *The Chicago Manual of Style*. However, while *The Chicago Manual of Style* focuses on providing guidelines for publishing in general, Turabian’s *Manual for Writers of Research Papers, Theses, and Dissertations* focuses on providing guidelines for student papers, theses and dissertations.

American Psychological Association (APA) Style is a set of rules developed to assist reading comprehension in the social and behavioral sciences. Designed to ensure clarity of communication, the rules are intended to move the idea forward with a minimum of distraction and a maximum of precision. It is the most often used style in science.

Introductory Remarks

- Typically Chicago papers include a bibliography, an alphabetically arranged list of cited or consulted works. This list should not include books that have not been seen or consulted just to make an impression.
- Start the bibliography on a new page and center the title “Bibliography” about one inch from the top of the page. Number the bibliography pages consecutively with the rest of the paper.
- Invert the name of the authors (last name followed by first) and alphabetize the bibliography by the last names of the authors (or editors, compilers or translators). When a work has no author or editor, alphabetize by the first word of the title other than the articles *a, an,* or *the*.
- Book: Single Author
- A single-author entry precedes a multiauthor entry beginning with the same name.

HOW TO WRITE AN ABSTRACT

Humanities scholars and students are not usually taught to write abstracts like scholars in the natural and social sciences. That is because in the humanities, full pieces of discourse are preferred to short condensed summaries. But in many cases you will need to write an abstract for your work, and a lot of what scholars in other disciplines know can help you.

What is a descriptive abstract?

A descriptive abstract is the summary of work you have already completed or work you are proposing. It is not the same thing as the introduction to your work. The abstract should give readers a short, concise snapshot of the work as a whole—not just how it starts. Remember that the readers of your abstract will sometimes not read the paper as a whole, so in this short document you need to give them an overall picture of your work.

If you are writing an abstract as a proposal for your research—in other words, as a request for permission to write a paper—the abstract serves to predict the kind of paper you hope to write.

What is different about a conference paper (or informative) abstract?

A conference abstract is one you submit to have your paper considered for presentation at a professional conference. Its length will be specified by the conference organizer but will rarely be more than 500 words (just short of two double-spaced pages). In an ideal situation it is written after the actual paper is completed, but in some cases you will write an abstract for a paper you have not yet written—especially if the conference is some time away.

Because the conference review committee will usually read the abstract and not your actual paper, you need to think of it as an independent document aimed at that specific committee and connecting solidly with the theme of the conference. Examine the call for papers carefully; it will specify the length of the abstract, special formatting requirements, and whether the abstract will be published in the conference bulletin or proceedings. Abstracts that do not meet the specified format are usually rejected early in the process, so pay attention to each conference's rules.

What is different about a thesis proposal or prospectus?

A prospectus, which is a formal plan for your research, usually is the first part of a thesis or dissertation or a major research project that you will write. This persuasive document must convince your director, committee or graduate advisor that your topic and approach are sound so that they will give you permission to begin the actual research (and sometimes so you can gain funding for that research).

How wedded are you to the abstract you submit?

An abstract is a promissory note. That is, you are promising that you can and will produce the work described in the paper. Particularly in the case of a conference abstract, the organizers will make up a session based on the contents of the abstract.

Uses of Plagiarism Detection Tools

1. Ensuring Originality – These tools help students, researchers and writers check the uniqueness of their content and avoid unintentional plagiarism.
2. Academic Integrity – Educational institutions use plagiarism detectors to uphold academic honesty and prevent unethical practices in assignments, research papers and dissertations.
3. Quality Check for Publications – Journals and publishers use these tools to verify that submitted research papers maintain originality before publication.
4. Legal Protection – Identifying plagiarized content helps avoid copyright infringement issues and legal consequences.
5. Improving Writing Skills – Writers can learn proper citation methods and improve their paraphrasing techniques by reviewing flagged content.
6. Detecting Self-Plagiarism – Helps researchers ensure they do not reuse their own previously published work without proper citation.
7. Enhancing Credibility – Ensuring content is plagiarism-free builds trust and credibility among readers, reviewers and academic institutions.

Course Outcomes

CO1: Identify various types of research papers and their purposes.

CO2: Explain the structure and format of a standard research paper.

CO3: Demonstrate the ability to write abstracts and methodology sections effectively.

CO4: Analyze and present research findings through results and discussion.

CO5: Apply ethical practices in research writing using plagiarism detection tools.

PO: To equip students with the skills to produce structured, ethical, and high-quality research papers, demonstrating academic integrity and effective scholarly communication.

S. No	Questions (5 Marks)	LOCF Mapping		
1.	What are the different types of research papers?	CO1	PO1	K1
2.	Explain the structure of a research paper.	CO2	PO1	K2
3.	What is an abstract? Write its importance.	CO1	PO1	K1
4.	Write a short note on research paper formats.	CO2	PO1	K2
5.	Explain the methodology section in a research paper.	CO2	PO1	K2

S. No	Questions (8 Marks)	LOCF Mapping		
1.	Explain various research paper formats with examples.	CO2	PO1	K2
2.	Analyze the role of plagiarism detection tools in academic writing.	CO4	PO1	K4
3.	Discuss the importance of ethical practices in research writing.	CO4	PO1	K4
4.	Explain the process of writing a complete research paper.	CO2	PO1	K2
5.	Examine the role of proper citation and referencing in avoiding plagiarism.	CO4	PO1	K4

Unit III

Report Writing Writings project proposals - Lecture notes - Progress reports- Utilization reports - Scientific Reports – Analyse One Government report from the Library.

Learning Objectives

- To understand different forms of report writing such as project proposals, lecture notes, and scientific reports.
- To develop skills in preparing structured progress and utilization reports.
- To learn the techniques of writing clear and effective academic and professional reports.
- To understand the format and purpose of scientific and government reports.
- To develop analytical skills by evaluating a government report from library sources.

Report Writing: Writing Project Proposals

WHAT IS A REPORT

"A business report is any factual, objective document that serves a business purpose." Written records are a part of all official work. Actions need to be documented. A report is a formal written document on a particular function or operation carried out at the workplace. A report is a presentation and summation of facts and figures either collated or derived. It is a logical and coherent structuring of information, ideas and concepts.

The report is segregated into various sections for better comprehension. Understanding the importance of these sections, coupled with logical conjoining of the various parts, results in a well-written and presented report. A report becomes the basis for any future action. It also serves as a source of reference for whatever is done in the future related to a particular event or operation.

Companies receive a number of reports daily, weekly or monthly (depending on need) such as sales reports, production reports and finance reports for making various organisational decisions. Reports can also be delivered orally, such as Annual Reports at Company Meetings or Project Reports in a presentation format to colleagues or superiors.

FEATURES OF A REPORT

A report is characterized by the following features:

1. A report is a detailed explanation of desired information.
2. It is written in a defined order so that the reader can understand it fully.
3. It is based on objective facts. It ignores personal bias of the report writer as the report forms the basis of decision-making.
4. It is written for a specific purpose.
5. It contains conclusions, recommendations and suggestions that facilitate decision-making.

IMPORTANCE / PURPOSE OF REPORTS

Reports are an important component of the business world. An effective report can enhance the future prospects of any company and a poorly written report can harm the future prospects of a company. Problem-solving and decision-making in a company are largely dependent on reports prepared by different departments and people in the organization.

Reports help and serve the following important purposes:

1. Monitor and control operations
2. Implement policies and procedures
3. Comply with government regulations
4. Document progress

WHAT IS A THESIS?

The word "thesis" is derived from the Greek word "tithenai" meaning "to place or to put forth" something. In modern times, “theses” (plural for “thesis”) refers to “a long piece of writing on a particular subject that is done to earn a degree at a university” (Merriam-Webster, n.d.).

Graduate students in many colleges have to write a thesis on a topic of their specialization or major during their final year at the college. Since it involves sound knowledge of the subject and research skills, it can be a formidable task to complete the research thesis if it is not done systematically.

NEED FOR REPORTS / THESES

Reports are essential for the success of organizations or institutions. There are various reasons for business organizations, educational institutions and national or

international organizations to prepare or seek reports. According to Forsyth (2013), some of the important reasons for the preparation of reports are to:

- inform
- recommend
- motivate
- prompt or play a part in debate
- persuade
- impress
- record
- reinforce or build on existing situations or beliefs
- instruct

Looking into the wider scope of report writing, one should also understand that the majority of reports have more than one reason and are thus effectively used for decision-making in organizations.

For example, at the individual level, a progress report can be used to inform the progress of a student, recommend a promotion to the next grade, motivate the student and at the same time help in giving directions for a future corrective course of action, if any. In a broader sense, the student's progress and employability and job skills would help the government to frame educational policies that enhance their knowledge and skills necessary for socio-economic development.

Writing reports is thus a crucial part of research. All the efforts made by the student or researcher can be highlighted and communicated to the concerned authorities only through writing effective reports or theses.

TYPES OF REPORTS

There are several types of reports that are used in formal and informal contexts. Reports can be both oral and written.

Oral reports can save a lot of time as the information is conveyed directly to the concerned person. An example of an oral report could be a student reporting to the teacher or the entire class regarding his or her project progress. In most cases, it requires a lot of concentration on the part of the listener and cannot be listened to again (unless it is recorded) if more clarity on the content is needed.

Oral reports are useful as long as they are short and simple and are directed at an audience ready to receive them.

Informational Reports

Informational reports include facts and figures in an organized manner without any investigation and recommendations. For example, annual reports of a business enterprise include the overall performance of the enterprise in the previous year, its financial condition in the present and also the prospects of the enterprise in a clear, visually appealing format along with much other necessary information for the stakeholders.

Other reports like activity reports, progress reports and conference reports come under this category. The information given should be specific, complete and useful for the reader to make desired decisions.

Interpretive Reports

Interpretive reports, along with information report data, contain details of evaluation, analysis, interpretation and recommendations. Reports like market analysis, feasibility reports and investigation reports give detailed information about the problem, interpret the problem and recommend corrective actions that need to be taken by the management.

This helps the management or reader to make informed decisions.

TYPES OF THESES

The thesis can be of different types depending on the content and purpose of the research. Based on the content, research theses can be divided into two major types (University of Nebraska at Kearney, 2008). They are:

(i) Qualitative theses

(ii) Quantitative theses

Some theses (mostly doctoral) can include the essence of both qualitative and quantitative research, but post-graduate or master's theses may generally focus on any one of the above types.

Course Outcomes

CO1: Identify and differentiate various types of reports including project proposals and scientific reports.

CO2: Prepare structured lecture notes, progress reports, and utilization reports.

CO3: Demonstrate the ability to write clear and organized professional reports.

CO4: Analyze the structure and content of scientific and government reports.

CO5: Evaluate a government report critically using academic standards.

Programme Outcome

PO: To equip students with the ability to produce, analyze, and present various forms of professional and academic reports with clarity, accuracy, and critical insight.

S. No	Question (5 Marks)	LOCF Mapping		
1.	What is a project proposal? Explain its purpose.	CO1	PO1	K1
2.	Write a short note on lecture notes.	CO1	PO1	K1
3.	What is a progress report?	CO1	PO1	K1
4.	Explain the meaning of a utilization report.	CO2	PO1	K2
5.	What are scientific reports?	CO1	PO1	K1

S. No	Question (8 Marks)	LOCF Mapping		
1.	Discuss the characteristics and structure of scientific reports.	CO4	PO1	K4
2.	Analyze the importance of report writing in academic and professional fields.	CO4	PO1	K4
3.	Explain how to prepare an effective progress report.	CO2	PO1	K2
4.	Discuss the steps involved in analyzing a government report.	CO4	PO1	K4
5.	Examine the differences between scientific reports and general reports.	CO4	PO1	K4

Unit IV

Ethics and research- fabrication- plagiarism- misrepresentation

Learning Objectives

- To understand the importance of ethics in academic and research work.
- To identify unethical practices such as fabrication, plagiarism, and misrepresentation.
- To develop awareness of academic integrity and responsible research conduct.
- To learn methods to avoid plagiarism and ensure originality in research writing.
- To understand the consequences of unethical practices in research.

INTRODUCTION

Ethics are the standards or the norms of behaviour which guide the moral choices about relationships and behaviour concerning others. Ethics in research aims to ensure that nobody is suffering or harmed from the research activity and its consequences. Nevertheless, unethical activities are everywhere, including nondisclosure agreement violations, participating member confidentiality misconduct, misinterpreting results, misleading people, invoicing irregularities to prevent legal liability, etc.

Surveys continually reveal that financial organizations recognize ethics as a problem. Responsible research anticipates ethical difficulties and attempts to modify the configuration, procedures, and guidelines during the planning process rather than after the fact. Integrity from the researcher, project manager, and research sponsor is needed for ethics in research.

Research ethics controls the codes of behaviour for research scientists. It acts as a reference for conducting research responsibly. Human subjects or contributors are involved in the study, raising unique and multidimensional ethical, legal, communal, and managerial concerns. Ethical considerations are unambiguously involved in investigating ethical issues arising when individuals participate in a study. The research ethics committee or the Institutional Review Board (IRB) determines whether the research done by the researcher is unique and free from plagiarism.

PRINCIPLES OF RESEARCH ETHICS

The principles of research ethics are as follows:

a) **Honesty:** Honesty is being truthful with recipients and participants and being honest about the study results and research methods. It also means being truthful with other stakeholders, both directly and indirectly.

b) **Integrity:** This means assuring sincerity and truthfulness and keeping promises and agreements. Researchers should not make broken promises or raise unrealistic hopes.

c) **Objectivity:** Attempting to avoid bias in experimental design, data analysis, interpretation of data, critical analysis, and other aspects of research.

d) **Informed consent:** Informed consent happens when a person is permitted to participate in a study intentionally, voluntarily, and sensibly. It is linked to the individual's personal and independent right to participate in research. Participants should be informed about the study objectives, their involvement, and potential advantages.

e) **Beneficence:** This refers to maximizing the respondents' benefits. It is a morally acceptable obligation to maximise potential benefits and minimize possible harm to participants.

f) **Protecting the subjects:** This means minimizing the research's risk or harm. Privacy and autonomy must be maintained.

g) **Responsible publication:** Publications must be responsible, and there should be no duplication or plagiarism. The submitted research should not have been presented or published earlier anywhere.

h) **Confidentiality:** Keeping confidential information and personnel records protected. It contains information such as:

- The research's initiation and goal
- The discussion's goal
- The research procedure
- The research's expected benefits and drawbacks (if any)
- Utilization of studies
- Their function in investigation
- The ability to refuse or withdraw
- Methods that will be used to protect the user's anonymity and privacy

i) **Non-discrimination:** Avoid discrimination based on age, caste, sex, religion, race, or ethnicity. Everyone should be treated equally, and there should not be human rights violations.

j) **Openness:** Researchers should be open to feedback, comments, or suggestions.

k) **Carefulness and respect for intellectual property:** Researchers must be cautious of potential errors and biases and give credit to others' intellectual property. When referring to someone else's article or writing, always paraphrase and avoid plagiarism.

ADVANTAGES OF RESEARCH ETHICS

The goals of research are encouraged by research ethics.

- It builds trust between the researcher and the respondent.
- It safeguards the dignity, rights, and well-being of study participants.
- It makes scientists responsible and answerable for their behaviour.
- Ethics encourages the development of social and moral values.
- It promotes study objectives such as comprehension, integrity, and error avoidance.
- Ethical benchmarks uphold values essential to collaborative work, such as trust, accountability, mutual respect, and objectivity.

LIMITATIONS OF RESEARCH ETHICS

a) **Psychological risks:** The questionnaire given to respondents may create changes in the behaviour of the participants.

b) **Social, legal, and economic risks:** For example, respondents may face discrimination or stigma if personal information gathered during research is accidentally released.

c) Certain ethnic or indigenous groups may experience discrimination or stigma due to research, especially if members of those groups are identified as having a higher-than-usual risk of catching a specific disease.

RESEARCH ETHICS

Introduction

Research, however novel its discoveries, is only of value if it is carried out honestly. We cannot trust the results of a research project if we suspect that the researchers have not acted with integrity. Although it might be easy enough to take

shortcuts or even to cheat, it is not worth it. Not only will your research be discredited when you are found out, but you will also suffer severe penalties and humiliation.

It is a simple matter to follow clear guidelines in citation that will prevent you from being accused of passing off other people's work as your own, which is called plagiarism. In fact, referring to or quoting other people's work is considered a virtue because it demonstrates that you have read widely about your subject and are knowledgeable about important scholars and their ideas.

Working with human participants in research always raises ethical issues about how they are treated. People should be treated with respect, which has many implications for how researchers deal with them before, during, and after the research. Educational and professional organizations that oversee research projects have strict ethical guidelines that must be followed. However, these issues can become complicated and may not always have clear solutions. Therefore, it is important to consult with others, especially advisers appointed for that purpose.

Even if human participants are not involved, there is still the question of honesty in the way data is collected, analysed, and interpreted. By explaining exactly how conclusions are reached, researchers can avoid accusations of concealment or false reasoning.

There are two aspects of ethical issues in research:

1. The individual values of the researcher relating to honesty, frankness, and personal integrity.
2. The researcher's treatment of other people involved in the research, relating to informed consent, confidentiality, anonymity, and courtesy.

Although the principles underlying ethical practice are fairly straightforward and easy to understand, their application can be difficult in certain situations. Not all decisions can be clear-cut in the realm of human relations.

ORGANIZATIONS AND ETHICS COMMITTEES

All organizations involved in research with human participants have established codes of practice for their researchers. Typical examples of such guidelines can be found on the web pages of the British Educational Research Association

(www.bera.ac.uk/guidelines.htm) and the British Sociological Association (www.britsoc.co.uk/index). Universities also have their own codes of practice.

Ethics committees oversee research conducted within their organizations with regard to ethical issues. They formulate research ethics codes of conduct and monitor their application in research carried out by members of their institutions. Applying for ethical approval usually involves completing formal application forms.

Honesty in your work

Honesty is essential not only for clear communication but also to establish trust and credibility in research outcomes. This applies to all researchers regardless of their field of study. Honesty must be maintained in every stage of research.

Intellectual ownership and plagiarism

Unless otherwise stated, what you write is considered your own work, and the ideas are assumed to be yours unless indicated otherwise. The most serious offence against honesty in research is plagiarism. Plagiarism occurs when someone directly copies another person's work into a report or thesis and presents it as their own.

Using the thoughts, ideas, or work of others without acknowledging the source is unethical, even if the material is paraphrased. It is also unethical to claim sole authorship of work that is actually the result of collaboration.

Acknowledgement and Citation

In any field of research, scholars depend on the ideas, theories, and concepts of others. To avoid accusations of plagiarism, researchers must acknowledge the sources of such ideas within their text. This process is called citation.

Citation methods generally involve brief references within the text and a complete list of references at the end of the document. These references provide full publication details of the source materials. Sources may include books, journals, conferences, lectures, interviews, and television programmes.

Researchers should also acknowledge the assistance of others and any collaboration, usually in the form of an acknowledgement section at the beginning or end of the research report.

SITUATIONS THAT RAISE ETHICAL ISSUES

Social research and other forms of research that study people and their relationships must be particularly sensitive to ethical issues. Because such research may affect the rights and feelings of individuals, researchers must follow ethical standards carefully to avoid causing harm.

1. Research aims
2. Use of language
3. Presentation pattern
4. Dealing with participants

CARRYING OUT THE RESEARCH

Potential Harm and Gain

The basic principle of ethical research is to avoid causing harm and, if possible, to produce benefits for the participants and the wider research community. Researchers must assess the possible risks and benefits of their research methods and outcomes.

They should choose methods that minimize risks and avoid revealing information that could harm the reputation, dignity, or privacy of participants.

PLAGIARISM

Introduction

Plagiarism is not a new issue. However, the easy availability of electronic materials on the internet has increased concerns within the academic community. There is potential for students to copy and paste material from online sources or purchase essays from dishonest websites.

Good practices in dealing with plagiarism are also good practices for effective learning, teaching, and assessment. Repeating the same assessment questions every year, limiting student creativity, and relying heavily on examinations may reduce opportunities for genuine learning.

Educational institutions have both legal and moral responsibilities to prevent plagiarism and address it appropriately if it occurs.

What is plagiarism?

Plagiarism is difficult to define universally because academic disciplines and institutions may have different conventions. However, in general terms, plagiarism

occurs when someone presents another person's work, ideas, or thoughts as their own without proper acknowledgement.

Plagiarism does not only apply to written work such as essays, reports, dissertations, or laboratory results. It can also occur in plans, projects, designs, music, presentations, or any work submitted for assessment.

Why is it a problem?

Plagiarism is considered cheating and a form of academic misconduct. It undermines the values of academic integrity and damages the credibility of educational qualifications.

It also discourages students who work honestly, as they may feel that others gain unfair advantages. The widespread availability of information on the internet has increased concerns about plagiarism, especially with large student groups where detection becomes more difficult.

Students from diverse educational and cultural backgrounds may also have different understandings of plagiarism and may need guidance about proper academic practices.

How do we avoid plagiarism?

Many students claim to understand plagiarism but do not know how to avoid it. Therefore, they need proper training in referencing, information skills, and time management.

Clear guidelines should be provided through course handbooks, assessment instructions, and study skills resources. Teaching students about plagiarism should be integrated into their coursework so that they clearly understand academic expectations.

Course Outcomes

CO1: Explain the concept and importance of research ethics.

CO2: Identify different forms of academic misconduct such as fabrication, plagiarism, and misrepresentation.

CO3: Apply ethical principles in conducting and presenting research.

CO4: Demonstrate the ability to avoid plagiarism through proper citation and referencing.

CO5: Evaluate ethical issues and consequences related to research misconduct.

Programme Outcome

PO: To develop ethical awareness and integrity among students, enabling them to conduct and present research responsibly and adhere to academic standards.

S. No	**Question (5 Marks)**	**LOCF Mapping**		
1.	What is meant by research ethics?	CO1	PO1	K1
2.	Define fabrication in research.	CO1	PO1	K1
3.	What is plagiarism?	CO1	PO1	K1
4.	Explain misrepresentation in research.	CO2	PO1	K2
5.	What are the consequences of plagiarism?	CO2	PO1	K2

S. No	**Question (8 Marks)**	**LOCF Mapping**		
1.	Examine different types of research misconduct with examples.	CO4	PO1	K4
2.	Explain the impact of plagiarism on academic credibility.	CO2	PO1	K2
3.	Discuss ethical responsibilities of a researcher.	CO4	PO1	K4
4.	Analyze how proper citation and referencing help maintain research ethics.	CO4	PO1	K4
5.	Explain methods to avoid plagiarism in academic writing.	CO2	PO1	K2

Unit –V

Best practices- formulating the focus of the research- possess and develop cultural knowledge- importance of socially beneficial research

Learning Objectives

- To understand best practices in conducting academic and research work.
- To develop skills in formulating clear and focused research problems.
- To recognize the importance of cultural knowledge in research.
- To understand the role of research in addressing social issues.
- To promote responsible and socially beneficial research practices.

RESEARCH FORMULATION

There are several sources of inspiration for good research ideas. Still, as a beginning exercise, it is perhaps most helpful to select a topic, problem, issue, group, individual, or a set of behaviours and attitudes in which you have some personal interest. Whatever topic a researcher chooses, personal interest plays a vital role. As a postgraduate student, the topic you have chosen to study or research may lead to further exploration or provide you with the scope for professional development and employment. So, several factors play a crucial role in selecting the research topic. There are scientific research methods to convert the topic into a researchable form. In this unit, we will discuss a viable topic, formulate relevant research questions, develop objectives, develop a hypothesis, identify essential variables, and conceptualize the different stages of research.

DEFINING THE RESEARCH PROBLEM

Conceptualization is necessary once your topic has been chosen and a more specific research problem formulated. The researcher will need to discover:

1. Which concepts are most appropriate to the chosen topic?
2. Which variables follow these concepts, and how are they defined?
3. How do the variables relate to one another?
4. What are the specific sources of data?

Ideally, in inductive scientific inquiry, each task is accomplished gradually after research is initiated. The answers emerge as the investigator proceeds. By contrast, the more deductive the strategy for inquiry, the more likely it is that all four issues will be tackled together at an early stage in research design before the investigator goes into the field.

There are two significant types of reasoning: deduction and induction. The difference between the two depends on the researcher's strength and claim on a particular research problem and how they conclude based on their ideas. According to Singleton and Straits (1999), “When a person uses deductive reasoning, they are making a deductive argument; they claim that the conclusion absolutely must be true if all the premises are true. When a person argues inductively, they claim that the conclusion is probably true but not necessarily true even if all the premises are true.”

FACTORS AFFECTING THE SELECTION OF THE TOPIC

The selection of a topic is the first step in doing research. Any problem that affects society could be the topic of research in environmental sciences. It could be an issue about which we desire more knowledge, such as the situations in which people adopt risky behaviours due to adverse climate change. It could also be a practical issue like reducing climate change vulnerabilities by sensitizing the masses in society. The following factors play a crucial role in selecting topics in environmental science research.

The researcher chooses a topic to advance scientific knowledge in the existing discipline. The organization of disciplines helps the researcher choose the field of interest and select a specific topic. For example, in environmental studies, learners can choose topics that trace the history of food production and the impact of climate change on food production. Topics like food security and insecurity due to climate change, the significance of crop diversity, and changes in lifestyles among young people and their impact on sustainability can also be chosen.

Researchers can study various facets of the environmental movement in the present context, examine society's environmental problems, explore biodegradable and non-biodegradable waste disposal, and innovate alternatives to plastics, disposable plastics, and electronic waste.

The focus and development of environmental science research are closely connected to societal problems and human issues in general. Inequality due to lack of resources, the significance of using existing resources sustainably, the contribution of women and forest dwellers in the sustainable use of forest resources, and the exploration of alternative resources are some areas of research in environmental science.

Personal interest and motivation also play crucial roles in selecting research topics. Research requires a lot of time, money, and hard work. Research fellowships or financial assistance are often limited. Formulating a research problem requires extensive reading and critical thinking, especially when identifying gaps in existing scholarship.

Social factors also influence the selection of research topics. These include the availability of funds, the popularity of the topic, and academic prestige. For example, international agencies, national institutions, and organizations like the United Nations have played an important role in highlighting environmental issues.

The **1972 United Nations Conference on the Environment in Stockholm** was the first world conference to recognize environmental protection as a global concern. After this conference, the United Nations Environment Programme (UNEP) was established to coordinate environmental activities within the United Nations system.

conferences and initiatives also encouraged research related to environmental issues. For example, the Nairobi International Women's Conference in 1985 addressed issues related to women and environmental crises.

During this period, much research focused on environmental problems. At present, climate change is one of the most significant topics attracting attention from social and natural scientists. Gender issues are also integrated into climate change research, examining how climate change affects women and their livelihoods.

The international scientific community considers climate change one of the greatest threats of the 21st century. Organizations such as the Intergovernmental Panel on Climate Change (IPCC) work to analyze climate data and propose solutions to mitigate global warming.

Researchers often choose climate change topics because of the seriousness of the problem and the availability of research funding. Existing disciplines such as Economics,

Women's Studies, Gender Studies, and Development Studies also integrate climate change into their research agendas.

Researchers are encouraged to explore different dimensions of environmental problems and propose strategies to prevent ecological disasters.

Apart from individual skills and interests and social needs, other factors also influence the choice of research topics. These include the availability of reliable data, access to laboratories for experimental research, expertise in designing research plans, and the level of development of a particular academic discipline.

Initially, personal interest may guide the selection of a topic. However, the topic must also contribute to existing theoretical knowledge and address important social issues.

Whenever a researcher chooses a topic, it must be reformulated in researchable terms in a research proposal. This involves translating the topic into clearly defined and specific research questions that can be studied scientifically.

Both selecting a research problem and preparing a research proposal require a literature review. By analyzing existing literature, researchers can identify gaps in knowledge and develop new research questions. During the literature review process, the researcher determines the scope of the research, the researchable problem, the specific questions, and the units of study.

SELECTION OF TOPICS AND FORMULATING RESEARCH QUESTIONS

initiate exploratory research, it is necessary to identify the subject of investigation. To move beyond exploration toward description and explanation, the researcher must specify the research problem by formulating clear research questions.

For example, suppose a researcher wants to understand the causes of climate change and its impact on ecosystems. In that case, the problem can be converted into research questions such as:

- What are the reasons for climate change today?
- What will happen if forests continue to be destroyed in the name of development?

After consulting relevant literature on climate change, the researcher can further refine these into researchable questions such as:

- What are the drivers of environmental degradation?

- What are the consequences of the reduction in forest area over time?
- How do environmental changes affect the relationship between humans and nature?

Formulating a research problem helps narrow the topic into manageable proportions. It also suggests appropriate research designs, variables, and methods for data collection.

Sometimes the purpose of the research determines the research design. We can identify the purpose of research by asking why the research is being conducted and who will benefit from it.

In some cases, the objective of research is simply to explore a phenomenon or contribute to knowledge. In such situations, the researcher has considerable flexibility in defining concepts and operationalizing variables.

However, in applied social science research or deductive inquiry, the purpose is often more specific. The researcher may test a hypothesis or evaluate human behaviour based on certain criteria. In such cases, the research purpose strongly influences the research design.

Formulating relevant research questions is an important step in both qualitative and quantitative research. Research questions help in collecting the appropriate type and amount of data required to address the research problem.

According to Alan Bryman (2008), research questions are essential because they guide the entire research process.

CRITERIA FOR EVALUATING RESEARCH QUESTIONS

The following points provide guidance for formulating research questions:

- Research questions should be clearly stated and simple in form.
- They must be researchable.
- The researcher should ensure that the questions are original and meaningful.
- Research questions should neither be too broad nor too narrow.
- They should be convertible into research objectives.
- From the objectives, hypotheses and research methodologies can be developed.
- Research questions should have connections with existing theories and research literature.

- All research questions should be interrelated to support the overall argument of the study.

Unrelated research questions may create confusion and weaken the research study.

CROWD INVOLVEMENT IN RESEARCH

Traditionally, scientific research was conducted mainly in laboratories and academic institutions. However, recent trends encourage the involvement of the general public in research activities. This participation is sometimes referred to as “crowd-based research” or “citizen science.”

The public may contribute to data collection, research observations, and sometimes the formulation of research questions. Researchers develop frameworks to improve the quality of research questions generated by participants by providing them with scientific knowledge and training.

Recent studies in environmental sciences show that public participants can generate useful research questions. However, many such questions are simple restatements of existing problems. Research has also demonstrated that providing basic scientific knowledge improves the quality of research questions generated by participants.

These findings contribute to discussions about distributed knowledge production and the organization of modern scientific research.

TYPES OF LITERATURE REVIEW

There are several types of literature reviews used in research.

Context Review:

This type of review connects a specific study with the broader body of knowledge. For example, a study on mangrove forests may examine their role in disaster management and coastal protection.

Historical Review:

In this review, the researcher traces the development of a topic over time to understand previous research and identify methodological trends.

Integrative Review:

This review summarizes the current state of research on a topic and highlights agreements and disagreements among scholars.

Methodological Review:

This type of review examines different research methods used in previous studies and analyzes how various methodologies influence research outcomes.

Self-study Review:

In this review, the researcher applies personal experience and familiarity with the topic to analyze existing literature.

Theoretical Review:

This review focuses on theories and concepts related to the research topic. The researcher identifies relevant theoretical frameworks that help explain the research problem.

form of literature review is **meta-analysis**, where researchers collect and statistically analyze findings from a large number of existing studies on a particular topic.

Researchers can find relevant literature through books, scholarly journals, dissertations, government reports, and policy documents.

DEVELOPING CULTURAL KNOWLEDGE AND THE IMPORTANCE OF SOCIALLY BENEFICIAL RESEARCH

Developing Cultural Knowledge

Cultural knowledge refers to understanding and appreciating the traditions, customs, beliefs, and social behaviours of different communities. It promotes diversity, inclusivity, and mutual respect.

Ways to Develop Cultural Knowledge:

1. Education and reading about history, literature, and anthropology.
2. Travel and exploration of different regions and cultures.
3. Intercultural communication with people from diverse backgrounds.
4. Participation in cultural events such as festivals and exhibitions.
5. Use of media and technology, including documentaries and digital learning platforms.
6. Learning languages to gain deeper cultural understanding.

Benefits of Cultural Knowledge:

- Promotes tolerance and reduces stereotypes.
- Encourages social harmony and peaceful coexistence.

- Supports global business and international cooperation.
- Helps preserve and appreciate cultural heritage.

IMPORTANCE OF SOCIALLY BENEFICIAL RESEARCH

Socially beneficial research aims to address social challenges and improve human well-being. It provides knowledge, solutions, and innovations that contribute to the development of society.

Key Areas of Socially Beneficial Research:

1. Healthcare and medicine, including disease prevention and treatment.
2. Environmental studies related to climate change and sustainability.
3. Education and social welfare, including studies on literacy and poverty.
4. Technology and innovation, such as ethical artificial intelligence and renewable energy.
5. Public policy and governance to improve decision-making and administration.

Why Socially Beneficial Research Matters:

- It improves the quality of life.
- It helps policymakers make informed decisions.
- It addresses social inequalities and injustice.
- It promotes economic and technological development.

Course Outcomes

CO1: Explain best practices in research methodology and academic writing.

CO2: Formulate clear and well-defined research problems and objectives.

CO3: Apply cultural awareness in designing and conducting research.

CO4: Analyze the role of research in solving societal problems.

CO5: Evaluate the importance of socially responsible and ethical research practices.

PO: To develop students' ability to conduct meaningful, culturally informed, and socially responsible research that contributes to academic knowledge and societal development.

S. No	Question (5 Marks)	LOCF Mapping		
1.	What are best practices in research?	CO1	PO1	K1

2.	What is meant by formulating a research problem?	CO1	PO1	K1
3.	Explain the importance of research focus.	CO2	PO1	K2
4.	What is cultural knowledge in research?	CO1	PO1	K1
5.	Write a short note on socially beneficial research.	CO2	PO1	K2

S. No	**Question (8 Marks)**	**LOCF Mapping**		
1.	Discuss the significance of socially beneficial research.	CO4	PO1	K4
2.	Examine how research can address social issues.	CO4	PO1	K4
3.	Explain the characteristics of a good research problem with examples.	CO2	PO1	K2
4.	Discuss the relationship between research and societal development.	CO4	PO1	K4
5.	Analyze the importance of cultural sensitivity in research practices.	CO4	PO1	K4

References Books

4. A Step-by-Step Guide to Writing Academic Papers by Anne Whitaker September 2009
3. On Writing a Thesis by C P Ravikumar, IETE Journal of Education, 2000
4. Microsoft Office 2016, by Joan Lambert and Curtis Frye, Microsoft Press, Washington 98052-6399
5. LATEX for Beginners, Edition 5, March 2014 Document Reference: 3722-2014