**TITLE OF THE THESIS**

*All capital, Time New Roman 16 Bold*



**by**

**Student Name**

**Registration Number**

*Time New Roman 16, Bold*

A thesis submitted in partial fulfillment of the requirements

for the degree of Master of Science in Computer Science

 *Time New Roman 16, Not Bold*

**Supervisor: Supervisor Name**

**Co-Supervisor: Co-Supervisor Name**

*Time New Roman 16, Bold*

**Department of Name of Department**

**ALHAMD ISLAMIC UNIVERSITY**

**Session: 2020-2021**

*Time New Roman 16, Bold*

*This page does not have page number*

# AUTHOR’S DECLARATION

I, Name and Registration Number, hereby declare that the thesis titled “Title of the study here”, has been submitted by me in the partial fulfillment of the requirements of the degree of Title of Degree. This thesis presents research carried out at ALHAMD Islamic University (AIU) and aims encouraging discussions and comments. The observations and viewpoints expressed are the sole responsibility of the author. It does not necessarily represent position of AIU or its faculty. I also understand that if evidence of plagiarism is found in my thesis at any stage, even after the award of the degree, the work may be cancelled and the degree revoked.

Further, this work has not been submitted by me previously for any degree, nor it shall be submitted by me in the future for obtaining any degree from this University, or any other university or institution. The incorrectness of this information, if proved at any stage, shall authorities the University to cancel my degree.

Student / Author Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name

Registration Number

Program & Session

# PLAGIARISM UNDERTAKING

I solemnly declare that research work presented in the thesis titled:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledge and that complete thesis has been written by me.

I understand the zero tolerance policy of the HEC and Alhamd Islamic University towards plagiarism. Therefore, I as an Author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of MS/MPhil/PhD degree and that HEC and the University has the right to publish my name of the HEC/University Website on which names of students are placed who submitted plagiarized thesis.

Student / Author Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name

Registration Number

Program & Session

# THESIS COMPLETION CERTIFICATE

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Registration No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Programme: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thesis Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

It is to certify that the above student's thesis has been completed to my satisfaction and, to my belief, its standard is appropriate for submission for Evaluation.

I have also conducted plagiarism test of this thesis using HEC prescribed software and found similarity index at \_\_\_\_\_\_\_\_\_\_\_ that is within the permissible limit set by the HEC for the MS/MPhil degree thesis.

I have also found the thesis in a format recognized by the AIU for the MS/MPhil thesis.

**Supervisor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Supervisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# ACKNOWLEDGMENT

To acknowledge people who have helped in completing this study.

**ABSTRACT**

The abstract should be brief, written in one paragraph and not exceed 300 words. An abstract is different from synopsis or summary of a thesis. It should state the field of study, problem definition, methodology adopted, research process, results obtained and conclusion of the research.

**Key Words:** Key words should be written below the abstract (not more than 5).

**Table of Contents**

[AUTHOR’S DECLARATION ii](#_Toc114648618)

[PLAGIARISM UNDERTAKING iii](#_Toc114648619)

[THESIS COMPLETION CERTIFICATE iv](#_Toc114648620)

[THESIS APPROVAL SHEET v](#_Toc114648621)

[ACKNOWLEDGMENT vi](#_Toc114648622)

[List of Tables ix](#_Toc114648623)

[List of Figures x](#_Toc114648624)

[List of Abbreviations xi](#_Toc114648625)

[CHAPTER 1 1](#_Toc114648626)

[INTRODUCTION 1](#_Toc114648627)

[1.1 Background of the Study 1](#_Toc114648628)

[1.2 Problem Statement/Identification 1](#_Toc114648629)

[1.3 Significance / Justification of the Study 1](#_Toc114648630)

[1.4 Objectives of the Study/Research Questions 2](#_Toc114648631)

[1.5 Limitation of the Study 2](#_Toc114648632)

[CHAPTER 2 3](#_Toc114648633)

[LITERATURE REVIEW 3](#_Toc114648634)

[2.1 Theoretical/Conceptual Framework (If Applicable): 3](#_Toc114648635)

[2.2 Hypotheses (if applicable): 4](#_Toc114648636)

[CHAPTER 3 4](#_Toc114648637)

[RESEARCH METHODOLOGY 4](#_Toc114648638)

[3.1 Research Design 4](#_Toc114648639)

[3.2 Data Collection & Variables of Study 4](#_Toc114648640)

[3.3 Sampling 5](#_Toc114648641)

[3.4 Research Analysis Tools 5](#_Toc114648642)

[CHAPTER 4 6](#_Toc114648643)

[EXPERIMENTS AND RESULT 6](#_Toc114648644)

[CHAPTER 5 7](#_Toc114648645)

[CONCLUSION AND RECOMMENDATIONS 7](#_Toc114648646)

[REFERENCES 8](#_Toc114648647)

[APPENDICES 9](#_Toc114648648)

# List of Tables

This page should list all the tables found in the thesis. The page number of the table must also be included. The table numbers should be arranged according to the chapters.

# List of Figures

Diagrams, photographs, drawings, graphs, charts and maps are included as figures. The list should be written similar as the List of Tables

# List of Abbreviations

List of abbreviations should be tied closely in the body of the report, and should not be included if there are less than five abbreviations in the document.

# CHAPTER 1

*All capital, Time New Roman 14 Bold*

# INTRODUCTION

The introduction identifies the specific problem of the study and describes the research strategy. It also states that why the problem deserves new research: For basic research, the statement about importance might involve the need to resolve any inconsistency in results of past work and/or extend the reach of a theoretical formulation. For applied research, this might involve the need to solve a social problem or treat a psychological disorder. When research is driven by the desire to resolve controversial issues, all sides in the debate should be represented in balanced measure in the introduction. Introduction part of the synopsis includes the following parts:

*Text: Time New Roman 12, Not Bold*

## 1.1 Background of the Study

The researcher has to provide the background of the topic and linked it with global, regional and local scenarios.

## 1.2 Problem Statement/Identification

The researcher has to be specific in identifying the problem/issue selected for the research. The researcher needs to stick to his problem identifying the secondary effects concerned with his research problem.

##

## 1.3 Significance / Justification of the Study

The documentation of the significance of the study should among other things address the following questions:

1. What are the specific, significant, unique/major contributions that the research work will make to the area/body of knowledge?
2. What will be the practical implications/use of the results/outcome?
3. How will the results/outcome of the study be implemented, including a statement on its possible impact and on what innovations will come about through its implementation (if any)?
4. What areas/directions of further/subsequent research work are likely to arise from the expected outcome/findings or results of the research study?
5. What will be improved or changed as a result of the research work?

## 1.4 Objectives of the Study/Research Questions

The objectives/questions of the study indicate the major aspects of the study to be undertaken. The objectives of the study to be achieved should be clearly mentioned and should be itemized.

##

## 1.5 Limitation of the Study

The researcher has to identify the limitation of his/her research study if applicable.

# CHAPTER 2

# LITERATURE REVIEW

A review of the relevant literature is another very important part of the synopsis, showing the work done previously in the area of proposed research is essential to plan further research effectively and in a proper way. The information given in the review should be supported by references.

A scholarly description of earlier work in the introduction provides a summary of the most recent directly related work and recognizes the priority of the work of others. Citation of and specific relevant earlier works are signs of scholarly responsibility and is essential to avoid the plagiarism. In the description of relevant same time, cite and reference only works pertinent to the specific issue and not those that are of only tangential or general significance. When summarizing earlier works, avoid nonessential details; instead, emphasize pertinent findings, relevant methodological issues, and major conclusions.

1. Refer the reader to general surveys or research syntheses of the topic if they are available.
2. Demonstrate the logical continuity between previous and present work.
3. Develop the problem with enough breadth and clarity to make it generally understood by as wide a professional audience as possible

|  |  |  |
| --- | --- | --- |
| **S.No** | **Name** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Table 2.1: Tables should be centered, Caption Time New Roman 11 bold at the bottom**

**Figure 2.1: Figures should be centered, Caption Time New Roman 11 bold at the top**

##

## 2.1 Theoretical/Conceptual Framework (If Applicable):

A Theoretical Framework /Conceptual Framework is a visual representation (or figure). It should include the dependent variable and the independent variable, and in case of moderating and intervening variables, include them too in model. This is the precise meaning that the variables or factors will have in your study and not the broader meanings that might be apparent in the literature review. Discuss the dependent variable in relation to each independent variable and in case of mediating and intervening variable presence, you might discuss how the mediating and intervening variables impact both the dependent and independent variables.

## 2.2 Hypotheses (if applicable):

Hypotheses must be formulated in light of the research questions and objectives of the study, which are to be tested for possible acceptance or rejection.

# CHAPTER 3

# RESEARCH METHODOLOGY

The Methodology section is very important because it documents how you plan to tackle your research problem. Describe the research that whether it is Exploratory, Descriptive, Causal or a Case study or other method. Depending on the nature and the underlying methodological approach which has been adopted for the research, the followings may be documented in this section:

## 3.1 Research Design

1. Indicate which research design has been adopted/used (if any) & is the research Quantitative or qualitative in nature in terms of the methodology?
2. Discuss and justify your choice of research method
3. Highlight and discuss the relevance of the adopted method to your study
4. Describe how the adopted method is applied

## 3.2 Data Collection & Variables of Study

In this section discuss the data set, its collection, and the variables that will be used from that data set in your research study. Clearly indicate whether you are going to use primary or secondary data. Also Indicate what does primary or secondary data mean (i.e. provide a theoretical. Secondary data might include documents, books, journals, periodicals, abstracts, directories, research reports, conference papers, market reports, annual reports, internal records of organization, newspapers & magazines, media, or other data sources and how you will determine which to include in the study. On the other hand, primary data sources might be surveys, interviews, observations and other sources.

## 3.3 Sampling

Sampling allows you to make conclusion about the research units you are studying by selecting the units that are the representative of the population. Your selected units from the population represent the sampling frame. In addition, identify clearly the approaches or method of the sampling to be used in the research study.

## 3.4 Research Analysis Tools

1. Which techniques, tools/instruments, approaches etc. have been adopted and used to develop/produce, present/demonstrate the expected results of the research.
2. Highlight and discuss the relevance of these techniques /tools / instruments /approaches to your study.
3. Describe how these techniques/tools/ instruments or approaches have been applied or used.
4. Mention the facilities/equipment’s available in the concerned Department, Center and Institute or required from any other source.

# CHAPTER 4

# EXPERIMENTS AND RESULT

In this section the scholar has to present his/her results and make some discussion to justify the results and its relevancy with his/her study objectives.

# CHAPTER 5

# CONCLUSION AND RECOMMENDATIONS

In this section scholar has to summarize the thesis. Produce results in a compact way and make some conclusion from the results and analysis of the thesis.

# REFERENCES

The title of references should be center aligned, bold face, 12pt time new Roman. This section should include all relevant references cited in the document. Only references cited in the text are to be included in the reference list. The students should use APA 6th manual for citation. Following are some examples provided on how to cite a study using APA 6th manual in text and references section. Furthermore, any source not mentioned below please refer to APA 6th manual for help.

**Article in Journal Paginated by Volume:**

Journals that are paginated by volume begin with page one in issue one, and continue numbering issue two where issue one ended, etc.

Harlow, H. F. (1983). Fundamentals for preparing psychology journal articles. *Journal of Comparative and Physiological Psychology*, 55, 893-896.

**Article in Journal Paginated by Issue:**

Journals paginated by issue begin with page one every issue; therefore, the issue number gets

indicated in parentheses after the volume. The parentheses and issue number are not italicized

or underlined.

Scruton, R. (1996). The eclipse of listening. *The New Criterion*, 15(3), 5-13.

**Article in a Magazine:**

Henry, W. A., III. (1990, April 9). Making the grade in today's schools. *Time*, 135, 28-31

**Article in a Newspaper:**

Unlike other periodicals, p. or pp. precedes page numbers for a newspaper reference in APA

style. Single pages take p., e.g., p. B2; multiple pages take pp., e.g., pp. B2, B4 or pp. C1, C3-

C4.

Schultz, S. (2005, December 28). Calls made to strengthen state energy policies. *The Country*

*Today*, pp. 1A, 2A.

**Examples:**

Abratt, R., & Russell, J. (1999). Relationship marketing in private banking in South Africa, *The International Journal of Bank Marketing*, 17(1), 5-19.

Efron, B. (1979). Bootstrap Methods: another look at the Jackknife, *Annals of Statistics*, 7, 1-26.

Furer, O., Ching-Liu, B.S. & Sudharshan, D. (2002). The relationship between culture and service quality perceptions, *Journal of Service Research*, 2 (4), 355-370.

# APPENDICES

The title of appendices should be center aligned, bold face, 12pt time new Roman. This section should include all relevant materials which support the document written. Appendices should be assigned alphabets, like Appendix-A. Appendix-A.1. Appendix-B.2 etc. All included appendices should be coated in the text body of synopsis.

**Instructions: Documents Description and Specification**

1. **Style**

The thesis documentation should be written clear and concise, and use following specifications.

1. Paper size: A4 (8.27" x 11.69).
2. Font style: Times New Roman.
3. Font Size: 12pt normal for writing in English and 16pt normal for writing in Urdu.
4. All Headings: 12pt bold for writing in English and 16pt bold for writing in Urdu.
5. Line Spacing: 1.5 space.
6. Margins: Left: 1.5 in, Right: 1in, Top: 1 in, Bottom: 1 in.
7. Include a page footer, insert page numbers centered
8. **Parts of a thesis**

MS/M.Phil should consist of following parts:

1. Title Page
2. Table of Contents
3. List of Tables
4. List of Figures
5. List of Abbreviations
6. Main Text Body
7. References
8. Appendices
9. **Tables, Figures and Equation**

All Tables, figures, and equations in the document should be center aligned, and numbered at chapter level. All Tables, figures, and equations should be centered and caption Time New Roman 11 bold at the bottom. For example, first table in the first chapter should be numbered as “Table 1.1”, and first figure of the first chapter should be numbered as “Figure 1.1”.

1. **Captions and Citation**
2. **Caption**

Captions of tables are required to be center aligned, and on the top of the respective table.

Captions of figures are required to be center aligned, and should be below the respective figure.

1. **Citation**

If you are using a figure, or table from some other sources such as published article and book, you should cite it in the footnote of the respective object, and should be listed in the references section.

1. **Plagiarism**
2. **Definition**

Presenting someone else’s idea, work, project, or words as your own. This also includes using someone’s exact words, figures, tables, etc or even modifying them but not providing citation or reference to the actual work.

1. **University and HEC Policy regarding Plagiarism**

Every MS/M.Phil/PhD synopsis/thesis should undergoes a plagiarism test. Plagiarism if proved in any time will be grounds for dismissal of your synopsis/thesis and in worst case denial of your degree.