



MALLA REDDY ENGINEERING COLLEGE

(A UGC Autonomous Institution, Approved by AICTE, New Delhi &
Affiliated to JNTUH, Hyderabad).

Maisammaguda (H), Medchal-Malkajgiri District, Secunderabad– 500100, Telangana State



Guidelines for Preparing and Submitting

B. Tech – Mini Project Report



Prepared by,

Internal Quality Assurance Cell (IQAC)

of

MREC, Secunderabad

MALLA REDDY ENGINEERING COLLEGE

Guidelines for Preparing and Submitting B. Tech Mini Project Report

1. ARRANGEMENT OF CONTENTS OF PROJECT REPORT

The sequence in which the report / thesis material should be arranged and bound should be as follows

- a) Cover Page & Title page
- b) Bonafide Certificate
- c) Acknowledgement
- d) Abstract
- e) Table of Contents
- f) List of Tables
- g) List of Figures
- h) List of Symbols, Abbreviations and Nomenclature (Optional)
- i) CHAPTERS
- j) Appendices
- k) References

2. PAGE DIMENSION / BINDING AND SIZE OF THE REPORT

The dimension of the project report should be in A4 size. The cover should be printed in black letters and the text for printing should be identical.

The final copy of the mini project report should be bound using flexible cover of the thick white art paper and preferably printed on one side.

The total number of pages of the thesis should not be less than 35 pages of typed matter reckoned from the first page of Chapter 1 to the last page of the Appendix

3. FORMATTING

| | |
|--|---|
| Font | Times New Roman (TNR), The preferred font size of the text in the report is 12 point |
| Margin | A margin of 3.25 cm is to be given on the binding edge (left) while on the other side (right, top and bottom) it is to be 2.5 cm. |
| Justification and Font Size for Chapter titles | Centre & Font: TNR 14, All CAPS, BOLD |
| Justification and Font Size for sub headings | Left & Font: TNR 13, BOLD |
| Justification for text | Square |

4. LINE SPACING

The line spacing in the main text should be one and a half (1.5). Single line spacing should be given for quotations, figure captions, table titles, figure legends, footnotes, and references.

Equations, tables, figures, and quotations should be set off from the main text with adequate space (not less than the normal line spacing adopted for the main text).

Two consecutive paragraphs should either be separated by spacing larger than the line spacing adopted for the text or the paragraph is started with an initial tab space.

5. PROJECT TITLE

The title should be short (word limit - 10-15 words, in no case exceeding 20 words) and typed in block letters (ALL CAPS). If title is longer than four inches, then title should be arranged in an inverted pyramid with double line spacing.

Project title should not contain symbols (including Greek symbols such as π , α , etc.), initials, formulas (including chemical formulas), subscripts, superscripts, numerical characters, acronyms or even abbreviations in brackets.

6. PAPER QUALITY

The copy of the thesis to be submitted to the central library should be durable. To ensure durability, paper should be acid neutral or acid-free. Thesis-quality paper (Acid free Bond Paper) is available in the market and typically weighs greater than 85 GSM (gram per square meter).

7. NON-PAPER MATERIAL

Digital or magnetic materials, such as CDs and DVDs, should be included in the thesis as a supporting material. They have to be given in closed packet in the back cover page of the thesis. Proper label should be given to non-paper material that should include name of student, date of submission and packeted at the back cover page.

8. MANUSCRIPT PREPARATION

The general text of thesis shall be typed in font style Times New Roman (TNR) and font size 12. Same quality of paper should be used for the preparation of the entire report / thesis.

The headings of all items 2 to 10 listed in section 1 should be typed in capital letters without punctuation and centered 50mm below the top of the page. The text should commence 4 spaces below this heading.

8.1 Cover Page & Title Page - A specimen copy of the Cover page & Title page for report/thesis are given in **Annexure I.**

8.2 Bonafide Certificate – The Bonafide Certificate shall be in 1.5 line spacing as per the format shown in **Annexure II.** The certificate shall carry the supervisor's signature and shall be followed by the supervisor's name, academic designation (not any other responsibilities of administrative nature), department and full address of the institution where the supervisor has guided the student. If Joint Supervisor is involved, a third column may be added after the Supervisor with the details as similar to that of Supervisor.

8.3 Acknowledgement – The acknowledgement shall be brief and should not exceed one page, typed in double line spacing. The student's signature shall be made at the right bottom above his / her name typed in capitals.

8.4 Abstract - Abstract should be an essay type of narration not exceeding 300 words outlining the research problem, the methodology used for tackling it and a summary of the findings, typed in 1.5 line spacing. A list of keywords should follow the abstract.

8.5 Table of contents - The table of contents should list all material following it as well as any material which precedes it. The title page, Bonafide Certificate and Acknowledgment will not find a place among the items listed in the Table of Contents. But, the page numbers in lower case Roman letters are to be accounted for them. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the Table of Contents for report / thesis is given in **Annexure IV.**

8.6 List of Table - The list should use exactly the same captions as they appear above the tables in the text and the caption shall follow, sentence case. One and a half spacing should be adopted for typing the matter under this head.

8.7 List of Figures - The list should use exactly the same captions as they appear below the figures in the text and the caption shall follow, sentence case. One and a half spacing should be adopted for typing the matter under this head.

8.8 List of Symbols, Abbreviations and Nomenclature - One and a half spacing should be adopted for typing the matter under this head. Standard symbols, abbreviations etc. should be used.

8.9 Chapters

The chapters may be broadly divided into 5 parts as below:

- i. Introduction (scope of the work and its importance)
- ii. Design / Implementation
- iii. Testing / Result and Analysis
- iv. Conclusion & Future Enhancement
- v. References- in standard IEEE format

The main text will be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

- Each chapter should be given an appropriate title.
- Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.

A chapter can be subdivided into *sections, subsections and sub subsection* so as to present the content discretely and with due emphasis.

General Instruction

- a) Check for grammatical and spelling mistakes
- b) Use high quality-colored figures, don't use snapshots or scanned images.

9. THE APPENDIX OR APPENDICES

Appendices are provided to give supplementary information, which is included in the main text may serve as a distraction and cloud the central theme.

- Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc.
- Appendices, Tables and References appearing in appendices should be numbered and referred to at appropriate places just as in the case of chapters.
- Appendices shall carry the title of the work reported and the same title shall be made in the contents page also.

10. REFERENCES

Reference to a journal publication:

- [1] J. F. Fuller and K. J. Roesler, "Influence of harmonics on power distribution system protection," IEEE Trans. on Power Delivery, Vol. 3, No 2, Apr. 1988, pp. 549-557.

Reference to a conference publication:

- [5] J. F. Fuller and K. J. Roesler, "Influence of harmonics on power distribution system protection," IEEE-PES Conference on Power Quality, held at IIT Bombay, 20-23 Dec. 2003, pp. 549-557.

Reference to a book:

[21] E. Clarke, Circuit Analysis of AC Power Systems, Vol. I. 2nd ed , New York: Wiley Publications, 1950, p. 81.

Reference to web sites

[22] [www. doe.hov.org/fundamental Series Item Power Quality and Harmonics.htm](http://www.doe.hov.org/fundamental_Series_Item_Power_Quality_and_Harmonics.htm) (as on 23- 3-07)

11. CITATION

Cite minimum of 30 references from different reference materials including current year (SCI, Scopus). Also check for citation of all figures, tables and equations.

References in Text

It is not necessary to mention an author's name, pages used, or date of publication in the in-text citation. Instead, refer to the source with a number in a square bracket, e.g. [1], that will then correspond to the full citation in your reference list.

- Place bracketed citations within the line of text, before any punctuation, with a space before the first bracket.
- Number your sources as you cite them in the report. Once you have referred to a source and given it a number, continue to use that number as you cite that source throughout the report.
- When citing multiple sources at once, the preferred method is to list each number separately, in its own brackets, using a comma or dash between numbers, as such: [1], [3], [5] or [1] - [5].

Examples of in-text citations:

- "This theory was first put forward in 1987 [1]."
- "Scholtz [2] has argued that..."
- "Several recent studies [3], [4], [15], [16] have suggested that...."
- "For example, see [7]."

12. TYPING INSTRUCTIONS

a) GENERAL

This section includes additional information for final typing of the thesis. Some information given earlier under 'Manuscript preparation' shall also be referred. The impressions on the typed/duplicated/printed copies should be black in colour. A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page. The last word of any page should not be split using a hyphen. One and a half spacing should be used for typing the general text. The general text shall be typed in Font Style Times New Roman (TNR) and Font Size 12. Double spacing should be used for typing the Bonafide Certificate and Acknowledgement.

b) CHAPTERS

The format for typing chapter headings, division headings and sub division headings shall be same as given in Table of Contents.

The word CHAPTER without punctuation should be centred 50mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left-hand margin.

The division and sub-division captions along with their numberings should be left-justified. The captions should start at 20 mm from left margin. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20mm from the left-hand margin. Within a division or sub-division paragraphs are permitted. The paragraph should commence 3 spaces below the last line of the preceding paragraph or caption, the first letter in the paragraph being offset from the left-hand margin by 20 mm.

c) NUMBERING INSTRUCTIONS

i) Page Numbering

The prefacing parts are numbered in *roman numerals* (i, ii, etc). The first page of the chapter-1 onwards will be numbered in *Arabic numerals* 1 2 3 etc. centered at the bottom of the page

ii) Numbering of Chapters, Divisions and Sub-Divisions

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub-divisions within a chapter. For example division / sub-division 5 under division 4 belonging to chapter 3 should be numbered as 3.4.5. The title for the division/sub-division shall start at 20mm from the left margin, following the number assigned to it.

Every chapter beginning with the first chapter should be serially numbered using Arabic numerals. Appendices included should also be numbered in an identical manner starting with Appendix 1.

iii) Numbering of Tables and Figures

Tables and Figures appearing anywhere in the thesis should bear appropriate numbers. The rule for assigning such numbers is illustrated through an example. Thus, if a figure in Chapter 3, happens to be the fourth then assign 3.4 to that figure. Identical rules apply for tables except that the word Figure is replaced by the word Table. If figures (or tables) appear in appendices then figure 3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into the next page this may be

done, but no line should be drawn underneath an unfinished table. A table continued into the next page should have a caption like, Table 2.1 (continued), placed centrally and underlined.

iv) Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering shall commence freshly for each Chapter or Appendix. Thus, for example, an equation appearing in Chapter 3, if it happens to be the eighth equation in that Chapter should be numbered (3.8), while referring to this equation in the body of the thesis it should be referred to as Equation (3.8). Use of equation editor tool for typing equations is highly recommended.

$$\Delta . E = \frac{\rho}{\epsilon_0} = 4\pi k\rho \quad (3.8)$$

13. NUMBER OF COPIES TO BE SUBMITTED FOR EVALUATION

| | | |
|---------------------------|--|---------------------|
| B.Tech. Project Report | (N+2), Where, N – No. of Students in the batch | |
| | To the supervisor | - 1 Copy |
| | To Department library | - 1 Copy <i>and</i> |
| | One copy to student | - N Copies |

Instructions:

From the following section on, whenever you see the **"RED FONT"**, either remove it after reading the instructions or replace it with the necessary data with **"BLACK FONT."** Follow whichever advice applies to you.

Format for Table :

Table 1.1 Title of the table (Times New Roman 11)

| Sl.No. | Speed in RPM | Power Output (kW) |
|--------|--------------|-------------------|
| 1 | 1450 | 10 |
| 2 | 1500 | 12 |

Format for Figure :

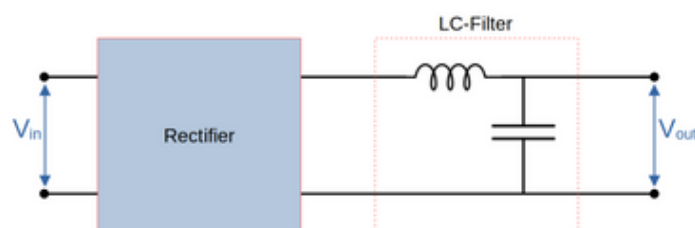


Figure 1.1 Title of the Figure (Times New Roman 11)

APPENDIX I : (A typical Specimen of Cover Page & Title Page)

A MINI PROJECT REPORT

On

TITLE OF THE REPORT

<Font: Times New Roman> <Bold, Centered> <1.5 line spacing>

Submitted by,

 <Italic>

NAME 1

ROLL NUMBER

NAME 2

ROLL NUMBER

NAME 3

ROLL NUMBER

NAME 3

ROLL NUMBER

*in partial fulfillment of the requirements for the award of the degree
of*

 <Font: TNR-Italic-Centered> <1.5 line spacing>

BACHELOR OF TECHNOLOGY

in

BRANCH OF STUDY

 <Font: TNR-Bold-Centered> <1.5 line spacing>

Under the Guidance of (12-TNR-Centered)

Dr. X. YYYY ZZZZ (14-TNR-BoldCentered)

Designation, Department (12-TNR-Centered)



DEPARTMENT NAME (14 –TNR - Centered)

MALLA REDDY ENGINEERING COLLEGE (14 –TNR - Centered)

(An UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH,
Hyderabad) Maisammaguda, Secunderabad, Telangana, India 500100

MONTH – YEAR

APPENDIX – II : (A typical Specimen of Bonafide Certificate)

MALLA REDDY ENGINEERING COLLEGE <TNR – 16, Bold>

Maisammaguda, Secunderabad, Telangana, India 500100



BONAFIDE CERTIFICATE <TNR – 16, Bold>

<Body Font Style Times New Roman – size -14>

This is to certify that this major project work entitled “**THE TITLE OF THE MINI PROJECT**”, submitted by **NAME 1 (Roll No.), NAME 2 (Roll No.), NAME 3 (Roll No.), NAME 4 (Roll No.)** to Malla Reddy Engineering College affiliated to JNTUH, Hyderabad in partial fulfillment for the award of **Bachelor of Technology** in **Name of the Programme** is a *bonafide* record of project work carried out under my/our supervision during the academic year 20XX – 20XX and that this work has not been submitted elsewhere for a degree.

SIGNATURE

<< Name>>

SUPERVISOR

<<Academic Designation>>

<<Department Name>>

Malla Reddy Engineering College
Secunderabad, 500 100

SIGNATURE

<< Name>>

HOD

<<Department Name>>

Malla Reddy Engineering College
Secunderabad, 500 100

Submitted for Major Project viva-voce examination held on _____

INTERNAL EXAMINER

EXTERNAL EXAMINER

**Scanned copy Certificate From Industry
(For Industry Project Only)**

IQAC

MALLA REDDY ENGINEERING COLLEGE (16-TNR-Bold)

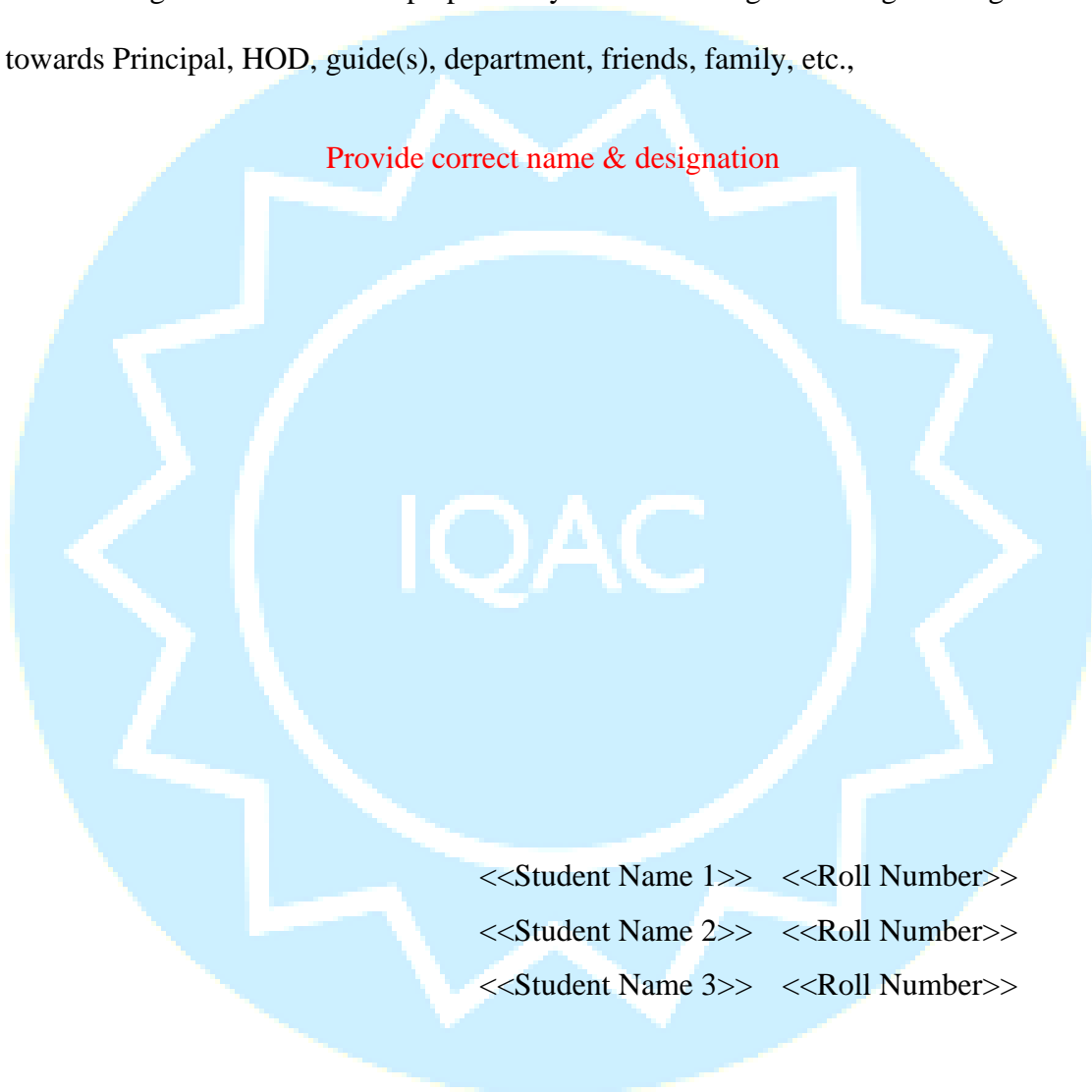
Maisammaguda, Secunderabad, Telangana, India 500100 (12-TNR)

ACKNOWLEDGEMENT (14-TNR-Bold)

<Content Font Style Times New Roman –Size - 12>, < 2 line spacing>

Acknowledgement should be prepared by their wordings showing their gratitude towards Principal, HOD, guide(s), department, friends, family, etc.,

Provide correct name & designation



<<Student Name 1>> <<Roll Number>>

<<Student Name 2>> <<Roll Number>>

<<Student Name 3>> <<Roll Number>>

ABSTRACT (14-TNR-Bold)

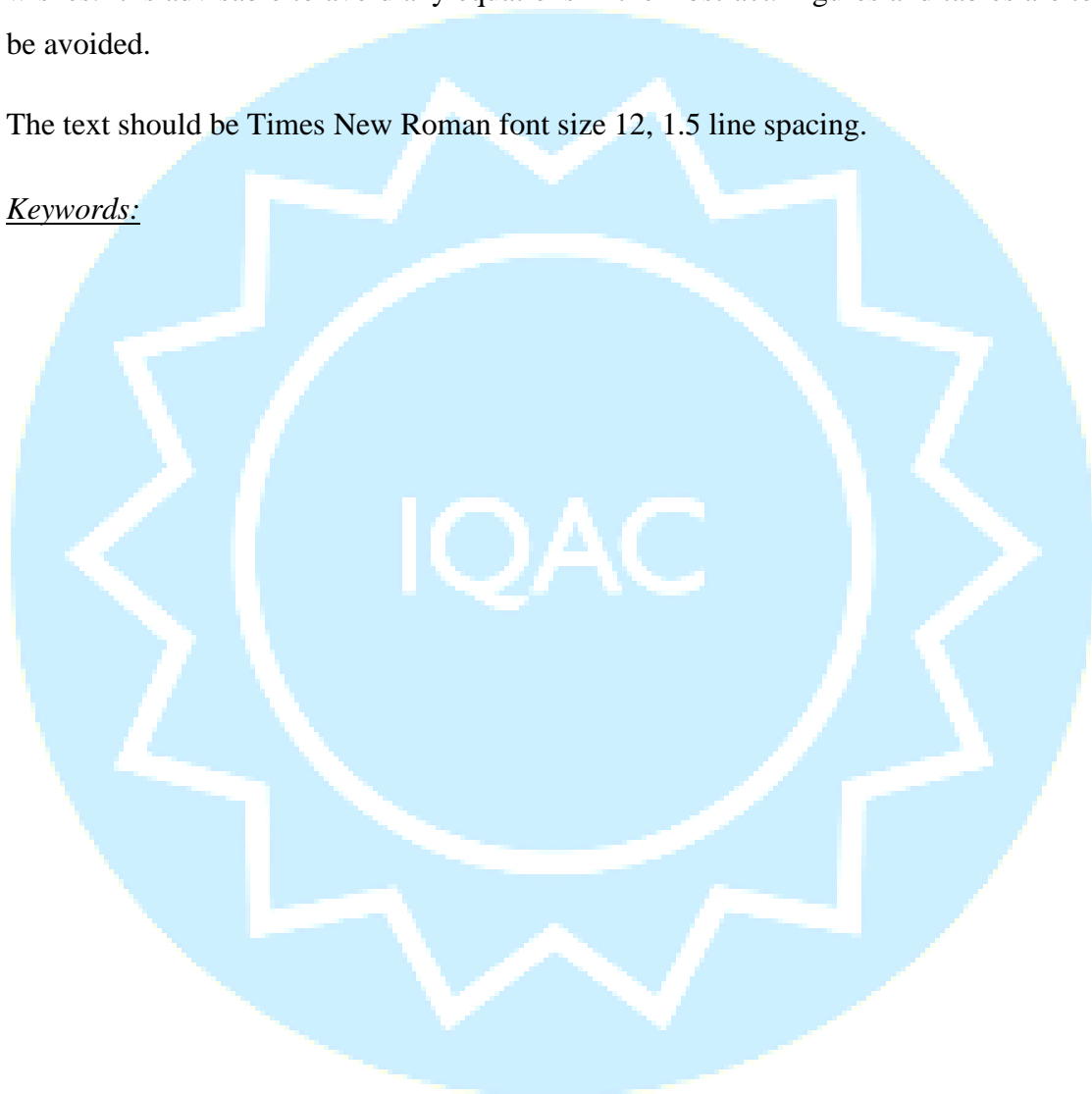
<Content Font Style Times New Roman –Size - 12> <1.5 line spacing>

Abstract of the report to be given here. Please restrict to a maximum of 300 words.

NOTE: The abstract should not have any citations, or abbreviations, nor should it be divided into sections. It can be divided into adequate number of paragraphs as the author wishes. It is advisable to avoid any equations in the Abstract. Figures and tables are to be avoided.

The text should be Times New Roman font size 12, 1.5 line spacing.

Keywords:



ANNEXURE-IV (A typical Specimen of Table of Contents),

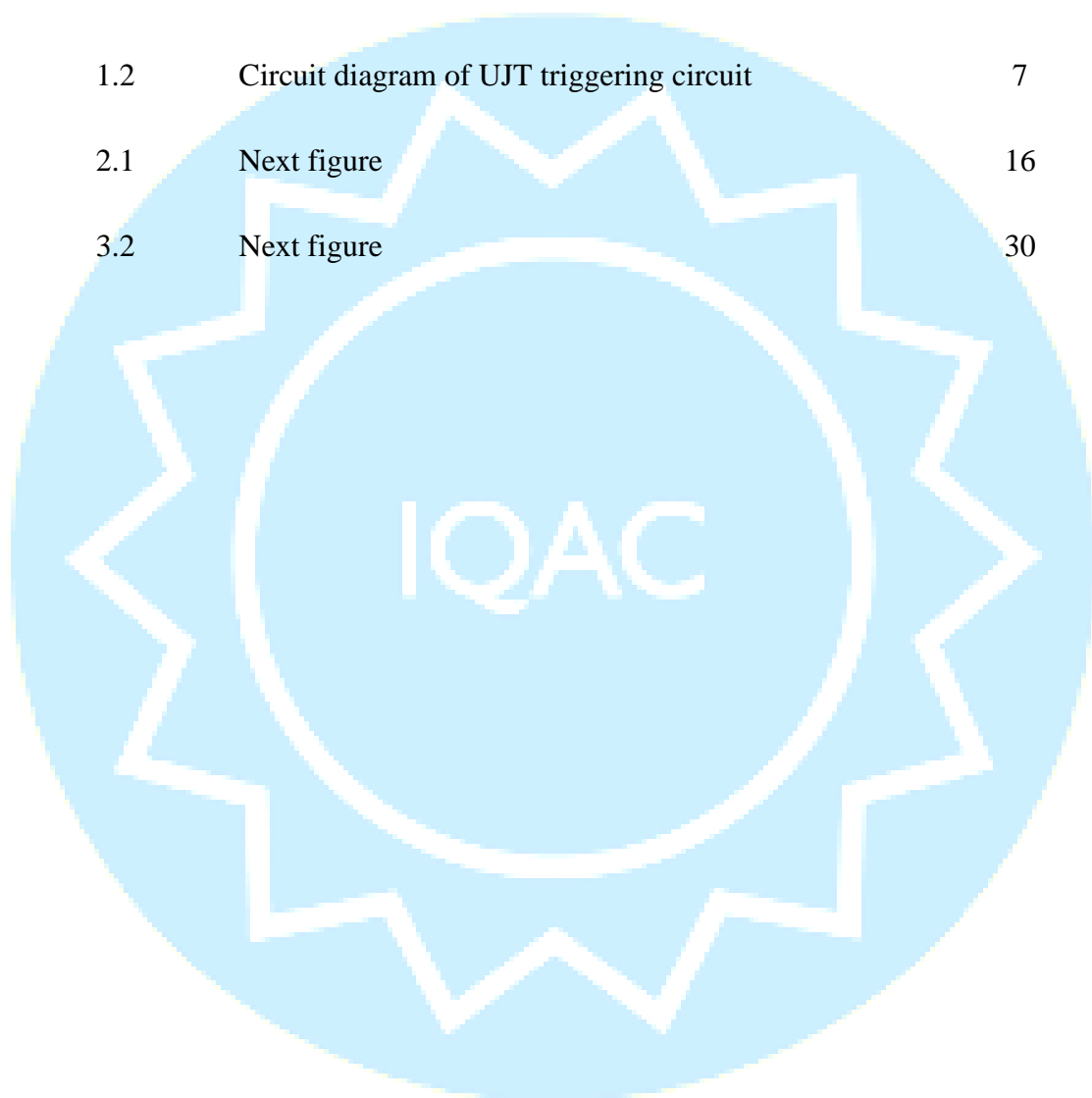
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| | | |
|----------|--|--------------|
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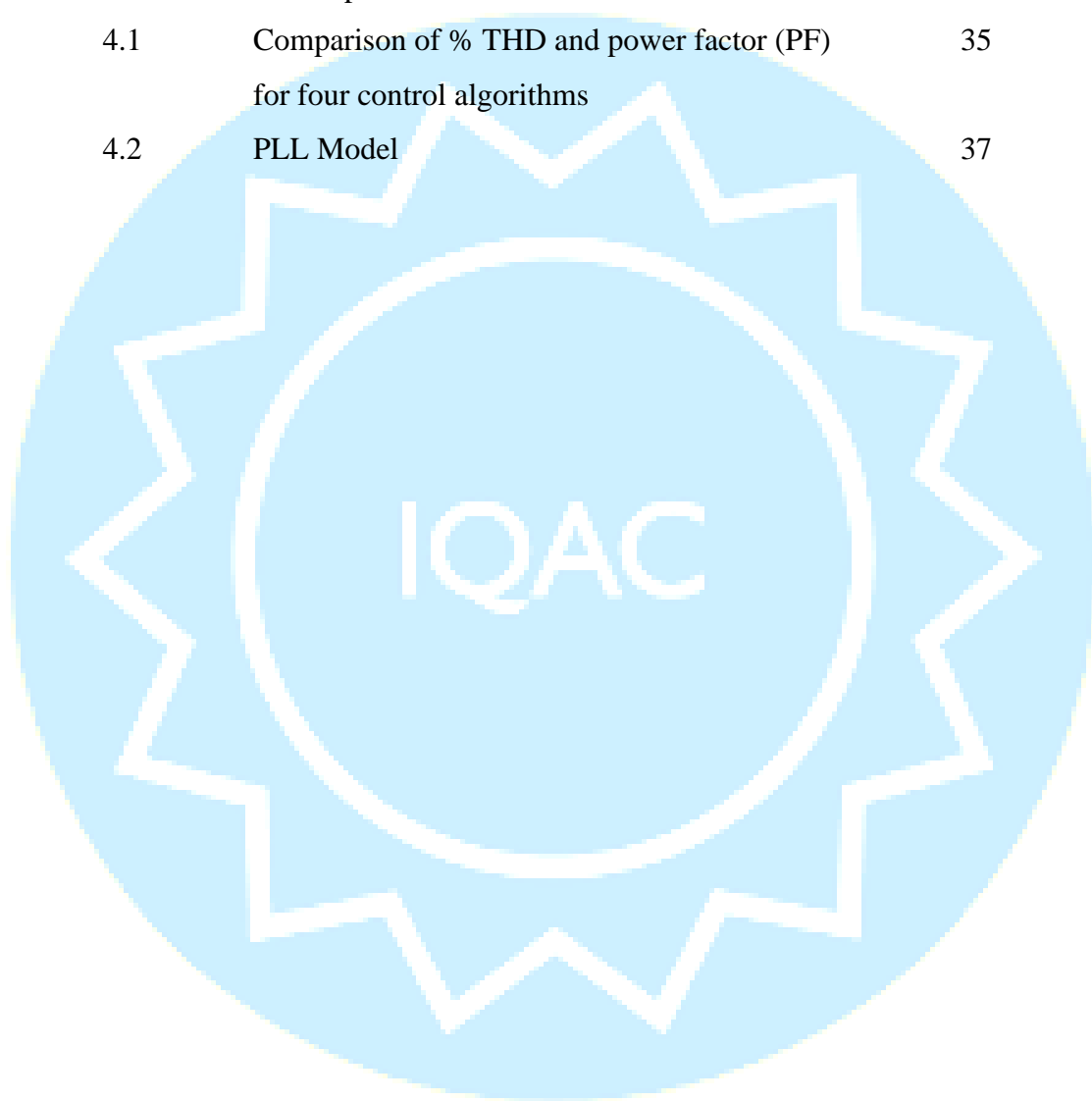
LIST OF FIGURES

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LIST OF SYMBOLS AND ABBREVIATIONS

| | | |
|----------------|---|--|
| AFC | - | Active Filter Current |
| AFPS | - | Active Filter Power Stability |
| APF | - | Active Filter Current |
| $\Delta I L_h$ | - | Additional Load current harmonic component |
| $\Delta\omega$ | - | Angular frequency change |
| CRC | - | Cascaded Resonant Controller |
| CVRC | - | Cascaded Vector Resonant Controller |

The logo for IQAC is a light blue circle containing a white gear-like shape with 12 teeth. Inside the gear, the letters "IQAC" are written in a large, white, sans-serif font.

IQAC

CHAPTER 1

INTRODUCTION

This is the first chapter of your thesis manuscript. Often it is titled, 'INTRODUCTION' but otherwise you may use any title that suits your purpose.

1.1. Replace this Text with Yours [This is a First-Level Subheading]

This template file has been set up to meet the formatting requirements for a thesis. It is not magic, but it does get some of the confusing stuff taken care of: the margins are correct; the table of contents is formatted correctly; the necessary parts are in the right order; the page numbers will appear in the right place and in the right form; it has an acceptable font face and size.

1.1.1. Replace this Text With Yours [This is a Second-Level Subheading]

It will be pretty obvious when you need to get rid of some text in this template. For example, this part of the introduction needs to go before you start typing.

Things to be Careful of

- Figure and Table numbering
- Numbering of references (superscript, Arabic numerals and in order)

The word CHAPTER without punctuation should be centred 50mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left-hand margin.

The division and sub-division captions along with their numberings should be left-justified. The captions should start at 20 mm from left margin. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20mm from the left-hand margin. Within a division or sub-division paragraphs are permitted. The paragraph should commence 3 spaces below the last line of the preceding paragraph or caption, the first letter in the paragraph being offset from the left- h a n d margin by 20 mm.

