



# Thesis Writing Guideline

---

The Research & Community Service Office

11/4/2023

Table of Contents

SECTION I: THESIS WRITING GUIDELINE..... 6

1.	Thesis structure and content .....	6
1.1.	Definition .....	6
1.2.	Structure.....	6
1.3.	Declaration of thesis status .....	2
1.3.1.	Viva voce examination panel.....	3
1.3.2.	Title.....	3
1.3.3.	Declaration.....	3
1.3.4.	Dedication (optional).....	3
1.4.	Acknowledgements (optional) .....	4
1.5.	Abstract.....	4
1.6.	Table of contents .....	4
1.7.	List of tables .....	4
1.8.	List of figures.....	5
1.9.	List of symbols and abbreviations .....	5
1.10.	List of appendices.....	5
	APPENDIX L.....	5
1.11.	Text.....	5
1.11.1.	References in the text .....	6
1.11.2.	Tables in the text.....	7
1.11.3.	Figures in the text.....	7
1.11.4.	Photographs .....	8
1.11.5.	Newspaper and other clippings .....	8
1.11.6.	Maps and aerial photographs .....	8
1.11.7.	Mathematical equations.....	8
1.12.	References.....	8
1.13.	Appendices (optional).....	9
2.	Size and format.....	10
2.1.	Paper quality and size .....	10
2.2.	Margin .....	10
2.3.	Page numbering .....	10
2.4.	Numbering of chapters and sub-chapters .....	12
2.5.	Typing.....	12
2.6.	Spacing and format.....	13
2.7.	Printing of documents.....	13
2.8.	Letterings and drawings .....	14
2.9.	Maximum number of pages.....	14
2.10.	Binding .....	14
2.10.1.	Cover color and letterings.....	14
2.10.2.	Cover .....	15

2.10.3.	Spine.....	15
2.10.4.	Trimming.....	15
3.	Format of references.....	16
3.1.	Introduction.....	16
3.2.	Author (Date) System.....	16
3.3.	Citing references in the text.....	16
3.3.1.	Writing cited information .....	17
(a)	Emphasis on the writer.....	18
(b)	Emphasis on the idea .....	18
3.3.2.	Writing the reference list.....	19
3.4.	Number System.....	27
3.4.1.	Citing references in the text .....	27
3.4.2.	Writing styles .....	27
	REFERENCES .....	30
	APPENDIX A1 .....	30
	APPENDIX A2 .....	31
	APPENDIX A3 .....	32
	APPENDIX A4 .....	33
	APPENDIX B.....	34
	APPENDIX C1 .....	35
	APPENDIX C2 .....	36
	APPENDIX C3 .....	37
	APPENDIX D1 .....	38
	APPENDIX D2 .....	39
	APPENDIX E.....	40
	APPENDIX F.....	41
	APPENDIX G1a .....	42
	APPENDIX G1b .....	43
	APPENDIX H .....	44
	APPENDIX I.....	47
	APPENDIX J.....	48
	APPENDIX K.....	49
	APPENDIX L.....	50
	APPENDIX M.....	51
	APPENDIX N .....	52
	APPENDIX O .....	53
	APPENDIX P1.....	54
	APPENDIX P2.....	55
	APPENDIX R.....	56

APPENDIX S.....	58
Section II: Potential Advisors List .....	60
1. Objectives of Academic Advising.....	60
2. Selection of Advisors.....	60
3. Role of Academic Advisors.....	60
4. Role of Associate Deans of Students' Affairs .....	61
5. Evaluation .....	62
6. Improvements.....	62
7. Potential Advisors.....	63

# SECTION I: THESIS WRITING GUIDELINE

## 1. Thesis structure and content

### 1.1. Definition

The specific use of the word “thesis” in this guide refers to the academic writings submitted in fulfillment of the requirements for the award of the doctoral degree or the masters by research degree. The word “thesis” is also used in general to refer to the master’s project report and research dissertations, which are the documents, submitted in partial fulfillment of the requirements for the award of the degree of masters by coursework or mixed-mode, as well as the undergraduate project reports.

### 1.2. Structure

A thesis is made up of several sections, arranged in the sequence shown in Table 1.1.

Table 1.1: Sequence of contents

NO.	SECTION	REQUIREMENT	EXAMPLE (APPENDIX)	REMARKS
1	Blank Page	-	-	-
2	Declaration of Thesis Status	Required	A1/ A2/ A3/A4	Unnumbered
3	Examiners’ Declaration	Required	B	Unnumbered

Table 1.1 (continued)

NO.	SECTION	REQUIREMENT	EXAMPLE (APPENDIX)	REMARKS
4	Title	Required	C1/ C2/ C3	Unnumbered but considered as (i)
5	Student's Declaration	Required	D1 /D2	Lowercase Roman numeral (ii)
6	Dedication	Optional	E	Lowercase Roman numeral
7	Acknowledgements	Optional	F	Lowercase Roman numeral
8	Abstract	Required	G1a/ G1b/ G2a G2b	Lowercase Roman numeral
9	Contents	Required	H	Lowercase Roman numeral
10	List of Tables	Required	I	Lowercase Roman numeral
11	List of Figures	Required	J	Lowercase Roman numeral
12	List of Symbols and Abbreviations	Required	K	Lowercase Roman numeral
13	List of Appendices	Required	L	Lowercase Roman numeral
14	Text	Required	M	Arabic numeral starting with the page number
15	References	Required	P1/P2	Arabic numeral continued with text
16	Appendices	Optional	-	Arabic numeral continued with text

### 1.3. Declaration of thesis status

The status of a thesis must be declared by completing the Thesis Status Form as shown in **APPENDICES A1-A4**. If a thesis is to be classified as confidential or limited, a letter seeking this classification must be obtained from the organizations concerned and submitted to the Dean of the Centre for Graduate Studies, the Dean of the Faculty or related academic centers. The approval letter must state the reasons for and duration of the classification. The typical duration for this classification is three years.

Where an author classifies a thesis as unlimited, the College shall assume that the thesis is non-confidential. Copies of the thesis can be made and used by Select College.

### **1.3.1. Viva voce examination panel**

The names of the members of the viva voce examination panel shall be included as shown in **APPENDIX B**. This page is not applicable for the master's project report or the undergraduate project report.

### **1.3.2. Title**

The title page must contain the following information in the following order:

- (i) Title of the thesis;
- (ii) Full name of the student;
- (iii) Statement on the purpose of the thesis submission;
- (iv) Name of the faculty or centre where the student is registered;
- (v) Name of the College; and
- (vi) The month and year the thesis was written and accepted. Theses for the Master's degree by research and the Doctor of Philosophy degree must be approved by the the relevant committee.

(Please refer to **APPENDICES C1-C3**)

### **1.3.3. Declaration**

The declaration page contains a statement declaring the originality of the thesis. It must be signed by the author. Please refer to **APPENDICES D1-D2**.

### **1.3.4. Dedication (optional)**

The dedication message must be concise, must not exceed one paragraph and must not contain any numbers, graphs or figures. Please refer to **APPENDIX E**.

#### 1.4. Acknowledgements (optional)

Acknowledgements must be written on a single page only. Its purpose is to record the author's appreciation for individuals or organizations that provided their assistance either directly or indirectly in the preparation of the thesis. Please refer to **APPENDIX F**.

#### 1.5. Abstract

The abstract is a short summary of the thesis. It should describe the rationale and objectives (problem statement), the methodology, as well as the findings and conclusion of the study undertaken. The abstract must not be longer than 250 words for a Master's thesis or Master's project report and not longer than 350 words for a Doctoral thesis written in English. Do not include any literature review, unexplained abbreviations, limitations or suggestions for future research in the abstract. It must be written with a spacing of one and a half (1½) lines. Please refer example abstract for engineering at **APPENDIX G1a** and **APPENDIX G2a** and example abstract for social science at **APPENDIX G1b** and **APPENDIX G2b**.

#### 1.6. Table of contents

The table of contents must begin on a new page. The information is organised by chapter, topic and page number. Every chapter, topic and page number shown in the table of contents must correspond to the same chapter, topic and page number in the thesis. Sub-titles may be displayed up to three levels only. Please refer to **APPENDIX H**.

#### 1.7. List of tables

This page contains a list of all tables presented in the thesis. Information such as table numbers, table captions and the corresponding page numbers where the tables



appear must be shown clearly in the list. The list must be ordered by chapter. Please refer to **APPENDIX I**.

### 1.8. List of figures

All illustrations included in the text such as maps, charts, drawings, graphs, pictures and photos are considered as 'Figures'. The list of figures contains all the figure numbers, titles and the corresponding page numbers on which they appear. The list of figures must be ordered by chapter. Please refer to **APPENDIX J**.

### 1.9. List of symbols and abbreviations

This page lists down all the symbols, abbreviations, nomenclature and terminology used in the text. The order of writing them is as follows:

- Roman letter - alphabetical order
- Greek letter - alphabetical order
- Superscript - alphabetical order
- Subscript - alphabetical order

Please refer to **APPENDIX K**. For further information on spelling and abbreviations, students are advised to refer to the latest edition of the Oxford Advanced Learner's Dictionary published by Oxford University Press.

### 1.10. List of appendices

This page lists down the appendices included with the thesis. Please refer to **APPENDIX L**.

### 1.11. Text

Text in the thesis must be organized in titled chapters. The titles must reflect the content of the chapter. Every chapter must begin on a new page. Chapters can be divided into sub-chapters with corresponding sub-titles. Titles and sub-titles must be

Numbered. Please refer to **APPENDIX O**.

There is no restriction on the total number of chapters in a thesis. Generally, a thesis will have the following basic structure.

(a) Introduction

This chapter describes the aim, objectives and scope of the research as well as the structure of the thesis.

(b) Literature review

The literature review is a critically written and comprehensive account of the published works on a topic by accredited scholars and researchers. It is directly related to the thesis, providing information on theories, models, materials and techniques used in the research.

(c) Methodology

This important chapter explains in detail the samples, instruments, materials, procedures and data gathering methods used in the research.

(d) Data analysis and results

This chapter explains the data analysis techniques and results through written text, figures, tables, and/or other means.

(e) Discussion and conclusions

In this chapter, the writer discusses the results and research findings by comparing them with the previous research work mentioned in the literature review chapter. Conclusions are drawn based on the research findings and their implications.

### **1.11.1. References in the text**

When an information or idea is taken from a source, the author of the source must be acknowledged in the text. References cited in the text must be written according to the style prescribed in **CHAPTER 3: FORMAT OF REFERENCES**.

### **1.11.2. Tables in the text**

All tables must be numbered using Arabic numerals. Table numbers must be linked to the chapter number. For example, the third table appearing in Chapter 4 is numbered, “Table 4.3”. The caption for a table is placed 1.5 lines above the table and written in Times New Roman font, size 12 without a period at the end and left justified with single line spacing between lines. The text in the table must be written using Times New Roman font, size 10 and single line spacing between lines. If a table extends beyond the end of a page, its continuation on the next page must, for example, be labeled, “Table 4.3 (continued)”. As an example, please refer to Table 1.1 on pages 1-

2. If a table is taken from a particular source, the source must be stated at the end of the caption. Please refer to **APPENDIX N**. A table can only be presented after it is cited in the text. All tables that appear in the text must be listed in the list of tables as shown in **APPENDIX I**.

### **1.11.3. Figures in the text**

All figures must be of high quality and numbered using Arabic numerals. Figure numbers must be linked to the chapter number. For example, the third table/graph/chart/etc appearing Chapter 4 is numbered, “Figure 4.3”. The caption for a figure is placed 1.5 lines below the table/graph/chart/etc and written in font size 12 without a period at the end with single line spacing between lines. If a figure extends beyond the end of a page, its continuation on the next page must, for example, be labeled, “Figure 4.3 (continued)”. If a figure is taken from a particular source, the source must be stated at the end of the caption. Please refer to **APPENDIX N**. A figure is best placed immediately after it is cited in the text. All figures that appear in the text must be listed in the list of figures as shown in **APPENDIX J**. Illustrations in diskettes, on slides or in other similar mediums must be placed inside a specially made pocket attached on the inside back cover of the thesis. Illustrations with large dimensions, such as plans and maps, must be reduced in size to fit into a single page. Illustrations must comply with the following conditions:

#### **1.11.4. Photographs**

Photographs used as illustration must be affixed in the text using high quality glue or other better techniques.

#### **1.11.5. Newspaper and other clippings**

A clear and high quality photocopied version of the actual clipping must be used instead of the original.

#### **1.11.6. Maps and aerial photographs**

Maps and aerial photographs intended to be included in a thesis must have obtained prior written permission from Ethiopian Map Institutions (Director General of National Mapping). Illustrations must be scanned and printed using a high resolution color printer.

#### **1.11.7. Mathematical equations**

Mathematical equations must be numbered using Arabic numerals. Equation numbers must be written at the end of the equation and linked to the chapter number. For example, the numbers (4.3) and (4.4) are given to the third and fourth equations respectively that appear in Chapter 4, as follows:

$$y^2 = 3x^2 + 3xy + C \tag{4.3}$$

$$z = 10x^6 + 9y^5 + 8^4 + 7y^6x^5 + 6y^5x^4 + 5x^4 + 4y^4x^3 + 3y^3x^2 + 2y^2x + yx \tag{4.4}$$

### **1.12. References**

References are the sources referred to when preparing a thesis and cited in the text of the thesis. Thesis writers are required to list down all cited materials in the list

of references (refer to **APPENDIX P1** and **APPENDIX P2**). The list of references must be prepared according to the format prescribed in **CHAPTER 3: FORMAT OF REFERENCES**.

### 1.13. Appendices (optional)

The appendix section gives an author the opportunity to include materials that can provide additional information in the text to support the study. These materials include tables, charts, computer programmes and questionnaires. Here are some guidelines for the appendix.

- (a) Research data, tables, examples of questionnaires, maps, photos and other materials that are too long to be included in the text or are not directly required to comprehend the text can be included as appendices. Generally, tables and graphics that are more than two pages long should be put in the appendix section.
- (b) Appendices are labelled as APPENDIX A, APPENDIX B, etc depending on the type and quantity of the materials. Appendices can also be given specific titles.

## 2. Size and format

### 2.1. Paper quality and size

Only high quality A4 size (210 mm x 297 mm) white simili paper, weighing 80 grams, may be used for the thesis.

### 2.2. Margin

The margins should be 4 cm from the left, 2.5 cm from the top, 2.5 cm from the right and 2.5 cm from the bottom, on every page including the cover.

### 2.3. Page numbering

Number the pages according to the sequence given in Table 1.1. The page number must be written at the top right corner, 1.5 cm from the top and 2.5 cm from the right, measured from the last digit of the page number. The page numbering system must conform to the following rules:

- (i) The preface of the thesis, starting from the title page, must be numbered using lower case Roman numerals (i, ii, iii and so on); the text pages and the rest of the thesis must be numbered using Arabic numerals (1, 2, 3, and so on).
- (ii) The first page of the thesis, the title page, is an unnumbered page 'i'.
- (iii) The first page of Chapter 1 is unnumbered but is considered as page '1'. The same applies to the first page of all the following Chapters, where the first

page is unnumbered but taken into account for the purpose of numbering the subsequent pages.

## 2.4. Numbering of chapters and sub-chapters

Chapters and sub-chapters must be numbered using Arabic numerals. Chapters are numbered CHAPTER 1, CHAPTER 2, CHAPTER 3, and so on. Sub-chapters are nested, but its numbering is not indented, up to a maximum of 4 levels as in the example shown below:

CHAPTER 2 First level (Chapter number)  
2.1 Level 2 (sub-title);  
2.1.1 Level 3 (sub-sub-title);  
2.1.1.1 Level 4 (sub-sub-sub-title)

If a chapter title or sub-title at any level exceeds a single line, the spacing between the lines must be the same as that of the text. Subsequent sub-chapters beyond the fourth nesting level must be numbered using alphabets. The distance between the title number and the title is one (1) cm irrespective of its nesting level (refer to **APPENDIX R**).

## 2.5. Typing

The thesis should be typed out on a computer in Times New Roman font, size 12, and using Microsoft Word version 6.0 or later, except for tables and figures (refer to 1.14.2 and 1.14.3). Words in a language that is different from the language of the thesis must be typed in italics. The spacing between text lines should be 1.5 lines. Text should be typed on one side of a paper only.

Chapter titles should be typed with capital letters and centered between the left and right margins. Each chapter must begin on a new page. Chapters and sub-chapters should be titled. Titles should be typed in **bold** without underline. Only the first letter of the first word of a sub-title should be in uppercase.

## 2.6. Spacing and format

Students must adhere to the following text spacing guidelines:

- (i) The spacing between the upper margin and a chapter number is 2.5 cm.
- (ii) The spacing between the chapter number and the chapter title is 4 lines.
- (iii) The spacing between the chapter title and the first line of text is 2 lines.
- (iv) The spacing between a sub-title and the last line of the preceding text is 2 lines.
- (v) The spacing between a sub-title and the first line of the following text is 2 lines.
- (vi) There should be no spacing between paragraphs.
- (vii) Start a sub-title, including its numbering, from the left margin.
- (viii) Start the first line of text of the first paragraph below the sub-title without any indent, beginning from the left margin; the following paragraphs should be indented 1.27 cm from the left margin.
- (ix) Do not start the first sentence of a new paragraph at the bottom of a page if the space available can only fit one line.
- (x) The text should be left justified except for the first line of the first paragraph in a section. (Refer to (viii) above). The author is responsible for removing any excess space between words.
- (xi) The spacing between the last line of text and a Table, Figure or Illustration should be 1 line.
- (xii) The spacing between a period (.) and the first letter of the next sentence of the same paragraph is at least one (1) character.
- (xiii) The spacing after a comma (,) is at least one (1) character.

## 2.7. Printing of documents

Theses must be typed out using a computer and printed using a laser printer or a printer with an equivalent print quality.



## 2.8. Letterings and drawings

Letterings and drawings should be clear so that copies made will be of satisfactory quality without any loss of information.

## 2.9. Maximum number of pages

The maximum number of pages for a thesis is as follows:

Undergraduate Project Report:	should not exceed <b>100</b> pages
Master's Project Report and Thesis:	should not exceed <b>200</b> pages
Doctor of Philosophy Thesis:	should not exceed <b>300</b> pages

These limits **do not include tables, diagrams and other illustrations except appendices**. Students who intend to write a thesis that exceeds the given limit must obtain a written approval from the Dean of the Centre for Graduate Studies or the Dean of the Faculty (for undergraduate reports) by submitting an application through their supervisors.

## 2.10. Binding

All theses must be bound. A thesis must be temporarily bound (spiral binding) for the purpose of examination, and may only be hard-bound after obtaining the approval of the Graduate Studies Committee or other committee(s) for the related programme.

### 2.10.1. Cover color and letterings

For submission to the College, theses must be permanently bound with buckram covers and gold letterings using regular Times New Roman font, size 18. The colour codes for the cover are as follows:

(i)	Doctor of Philosophy Thesis:	Black (585)
(ii)	Master's Thesis:	Moss Green (557)
(iii)	Undergraduate Project Report:	New Blue (550)

### **2.10.2. Cover**

The thesis cover must be of A4 size (210mm x 297mm). The title, author's name and the words 'Select College' must be written in capital letters on the front cover of the thesis, as shown in **APPENDIX S**.

### **2.10.3. Spine**

The abbreviated name of the College, "SC", the author's name, the month and the year the thesis is approved\* and the level of study must be stated on the spine, as shown in **APPENDIX T**.

\*Date of status confirmation for undergraduate Project Report/Master's Project Report/Master's Thesis/Doctoral Thesis (Refer Appendix A1-A4)

### **2.10.4. Trimming**

The thesis can only be trimmed by 2.5 mm on each side of the A4 paper during binding.

## 3. Format of references

### 3.1. Introduction

Sources that are referred to in a thesis, whether published or not, must be stated. The source of information must be acknowledged in the text as well as in the reference list. Proper acknowledgement is important because it will help others locate and verify the original sources. Furthermore, proper citation can avoid allegations of plagiarism. Acknowledgements in the text must be linked to the list of reference using the “Author (Date)” system or the “Number (IEEE) Format”.

### 3.2. Author (Date) System

The system is also known as the American Psychological Association (APA) system.

### 3.3. Citing references in the text

A reference can be written in a sentence itself or at the end of a sentence.

- (a) In the Author (Date) style, the year of publication must be placed in brackets after the name of the author. For example;

According to Mohamed (2005), a large proportion of scheduling problems in the various sectors, such as economic and engineering, can be classified with a class of problems known as constrained optimisation.

- (b) If a reference is not cited in the sentence itself, the author’s name and year of

publication must be written within brackets. For example;

Therefore, research on effective solution methods for constraint optimisation has become the focus of current research (Mohamed, 2005).

- (c) If a source of reference is authored by two people, state both authors' names. For example;

Maintenance scheduling has been researched for a long time, for example in the generation of power by Kralj & Petrevic (1995)...

- (d) If a reference contains three authors, state all three names the first time it is referred to in the text. For the second and subsequent times it is mentioned, state only the first author's name followed by "*et al.*" and year. For example;

A study by Alias, Black & Gray (2002) shows that engineering students have lower spatial visualisation ability than required. Since this ability is important in solving engineering problems, it needs to be improved among engineering students (Alias *et al.*, 2002).

- (e) For a reference with four or more authors, state only the name of the first author followed by "*et al.*" and year.
- (f) Use lowercase letters (a, b, c) to differentiate between two or more publications published in the same year by the same author. For example;

An example of an application that uses a constraint programming language is ILOG Solver by Puget and Albert (1994a). In addition, Puget and Albert (1994b) also found that the use of object is widespread, especially within artificially intelligent programming.

- (g) Secondary sources may not be cited. Thesis authors must refer to the original reference source. An example of a secondary source is given below:

Ali (in Abu, 2000) emphasized that ....

### 3.3.1. Writing cited information

There are three main ways to acknowledge the source of an idea or information cited in the text, namely (a) quotation, (b) paraphrasing and (c) summarizing. The examples that follow are based on the following excerpt:

Biological time is not only scientifically important, but it also greatly affects the productivity and health of a nation. The cost to the nation's health of working out of phase with our biological clocks is probably incalculable at present. In the short term, poor sleep, gastrointestinal problems, higher accident rate, and social problems are evident. (p. 1000)

Source: Rajaratnam, S. (2001). Health in a 24-hr society. *Lancet*, 358, pp. 999 – 1005.

### 3.3.1.1. Quotation

Words of an author may be quoted exactly by the writer to support an argument. When a direct quotation from a source is taken, it should run into the text with double quotation marks if it is reasonably brief (three (3) or less sentences) with the end-of-sentence period in the normal place.

#### (a) **Emphasis on the writer**

To give emphasis to the writer, the author's name is written at the beginning of the sentence. For example;

Rajaratnam (2001) concluded that, "The cost to the nation's health of working out of phase with our biological clocks is probably incalculable at present." (p. 1000). Furthermore...

#### (b) **Emphasis on the idea**

To emphasise the idea, the author's name is written at the end of the sentence. For example;

A lot of discussion has been made on the cost of working out of phase with our biological clocks. "The cost to the nation's health of working out of phase with our biological clocks is probably incalculable at present" (Rajaratnam, 2001, p. 1000). Therefore, ...

A quotation containing more than three sentences must be set off from the text as a paragraph on its own with 1 cm indent, placing the period at the end of the quoted text with no period after the reference citation page number. Single spacing should be used for block quotations. For example;

According to a renowned scholar (Rajaratnam, 2001),

Biological time is not only scientifically important, but it also greatly affects the productivity and health of a nation. The cost to the nation's health of working out of phase with our biological clocks is probably incalculable at present. In the

short term, poor sleep, gastrointestinal problems, higher accident rate, and social problems are evident. (p. 1000)

#### **3.3.1.2. Paraphrasing**

The paraphrasing method is used to acknowledge information taken from the original author by rewording the original text without altering its meaning nor providing the writer's own interpretation. For example;

Rajaratnam (2001) argues that while the notion of biological time is of scientific importance, it is also economically and socially significant at a national level. He points to the health, productivity and social problems which may be attributed to individuals working "out of phase" with their internal clocks.

#### **3.3.1.3. Summarising**

The writer may summarise cited text in his/her own words to present the key points of an author's arguments or ideas, without altering the meaning. For example;

In his conclusion, Rajaratnam (2001) points to the possible economic and social costs incurred by a nation, when individuals work "out of phase" with their biological clocks.

### **3.3.2. Writing the reference list**

All sources of reference that are cited in the thesis must be listed at the end of the text under the title "**REFERENCES**". Do not use the word "BIBLIOGRAPHY" because it indicates a list of all sources that was referred to including those not cited in the text. The reference list must be in alphabetical order. Two or more sources by one author must be listed in chronological order. For example a 2002 publication by Suradi must be listed before his 2007 publication.

### 3.3.2.1. Writing the names of authors

In general, an author's surname (family name) or patronymic name (father's name) is written first followed by the initials of his/her other names. This is a common system used in academic writing internationally. Examples of how to write an author's name are as follows:

- (i) Name : John Neville Pavlovic  
Written as : Pavlovic, J. N.
- (ii) Name : Mohd Noor Abdullah  
Written as : Abdullah, M. N.
- (iii) Name : Syed Muhammad Naquib Al-Attas  
Written as : Al-Attas, S. M. N.
- (iv) Name : Malik ibn Anas  
Written as : Ibn Anas, M.
- (v) Name : Tan Beng Keat  
Written as : Tan, B. K.
- (vi) Name : Raymond Tan Beng Keat  
Written as : Tan, R. B. K.
- (vii) Name : Srinivasan Venkataraman  
Written as : Venkataraman, S.
- (viii) Name : S. N. Gupta  
Written : : Gupta, S. N.
- (ix) Name : Pretam Singh  
Written as : Singh, P.
- (x) Name : Yasunori Matsufuji  
Written as : Matsufuji, Y.

### 3.3.2.2. References from different types of sources

In thesis writing, references can be made to various types of sources. The following examples can be used as a guide in writing the different types of sources in the reference list.

### 3.3.2.3. Books

The major elements that must be included when an article is taken from a book are as follows:

Author (Year). *Title of book*. Edition. Location: Publisher.

An example of a reference by one author;

Race, P. (2002). *How to Get a Good Degree: Making the Most of Your Time at University*. Buckingham: Open University Press.

An example of a reference by two or three authors;

Creame, P. & Lea, M. R. (2003). *Writing at University*. 2<sup>nd</sup> ed. Maiden: Open University Press.

Delamont, S., Atkinson, P. & Parry, O. (2004). *Supervising the Doctorate: A Guide to Success*. 2<sup>nd</sup> ed. Maidenhead: Society for Research into Higher Education & Open University Press.

For publications that have more than one author, the word “and” and “dan” is replaced by the symbol “&”. If the book has an editor, the name of the editor must also be written.

The general format is as follows:

Editor (Ed.) (Year). *Title of book*. Location: Publisher.

As an example;

Martin, A.M. (Ed.) (1991). *Peat as an Agent in Biological Degradation of Waste*. London: Elsevier.

The page numbers are required if the editor edits part of the book.

As an example;

Lees, R. H. (Ed.) (1974). *Chemical Nomenclature Usage*. Chischester: Ellis Horwood. pp. 314-362.

### 3.3.2.4. Articles from books

The major elements that must be included when an article is taken from a book are as follows:

Author (Year). Title of article. in Author. *Title of book*. Location: Publisher. Page numbers.

For example;



Sarmani, S. (1987). Pencemaran Radioaktif. in Mohamad, A. B. (Ed.).  
*Perspektif Persekitaran*. Petaling Jaya: Fajar Bakti. pp. 71 -87.

### 3.3.2.5. Articles from journals

The major elements that must be included when an article is taken from a journal are as follows:

Author (Year). Title of article. *Title of journal*, vol. no.(issue no.), page numbers.

For example;

Mikac, N. & Branica, M. (1994). Complexation of trialkyllead with  
 diethyldithiocarbonate. *Electroanalysis*, 6(2), pp. 37 – 43.

### 3.3.2.6. Corporate documents

The general format for corporate documents is as follows:

Name of corporate body (Year). *Title of document*. Location: Publisher.

For example;

Women's Law Center (2002). *Promise Still Owed to the Nation's Young  
 Women*. Washington DC: Women's Law Center.

Engineers Joint Council (1969). *Thesaurus of Engineering and  
 Scientific Terms*. New York: Engineers Joint Council.

If there is an editor, the general format is as follows:

Editor (Ed.) (Year). *Document title*. Location. Publisher.

For example;

Thomas, R. (Ed.) (1978). *Handbook for Authors of  
 American Chemical Society Publications*. Washington, D. C.:  
 American Chemical Society

### 3.3.2.7. Theses

The major elements that must be included when the information is taken from a

thesis are as follows:

Author (Year). *Title*. Name of institution: Level of thesis.

For example;

Abdullah, M. K. (1989). *Modeling of Swirling Fluidized Bed Hydrodynamic Characteristics*. Universiti Tun Hussein Onn Malaysia: Ph.D. Thesis.

Mat Ali, A. (2008). *Hubungan antara Gaya Pembelajaran Pelajar Kejuruteraan dan Pencapaian Akademik*. Universiti Tun Hussein Onn Malaysia: Master's Thesis.

Mohamed, B. (2008). *Design of Pavement on Soft Soil*. Universiti Tun Hussein Onn Malaysia: Master's Project Report.

#### 3.3.2.8. Proceedings

The general format for writing a reference from a proceeding is as follows: Author (Year). Title. *Proceeding*. Location: Publisher. Page numbers. For example;

Alias, M. (2006). The Effects of Teacher Generated Concept Maps on the Learning of Secondary School Physics. *Proc. of the Second Int. Conf. on Concept Mapping*. San Jose. Universidad de Costa Rica. pp. 550-557.

#### 3.3.2.9. Laws

The major elements that must be included when the information is taken from a law article are as follows:

Country (Year). *Name of laws*: Law number.

For example;

Malaysia (1983). *Perintah Monumen Lama dan Tapak Tanah Bersejarah*: P.U.(A)41 1983.

**3.3.2.10. Standards**

The major elements that must be included when the information is taken from a standard are as follows:

Name of institution (Year). *Name of standard*. Location: Standard number.

For example;

British Standards Institution (1987). *Tongued and Grooved Software Flooring*. London: BS 1297.

**3.3.2.11. Patents**

The major elements that must be included when the reference is a patent are as follows:

Owner (Year). *Name of patent*. Patent number.

For example;

Lindgren, E. A. (1960). *Screen Room Air Inlet and Wave Guard*. U.S. Patent 2, 925, 457.

**3.3.2.12. Commercial catalogues**

The major elements that must be included when the information is taken from a catalogue are as follows:

Producer (Year). *Title*. Location: Note.

For example;

Howick Partitioning Ltd. (1984). *Howick: Partitioning in Business*. Redhill (U.K.): Trade Brochure.

**3.3.2.13. Measured technical drawings / map**

The major elements that must be included when information is taken from:

- (a) Measured technical drawing

Author (Year). *Title*. Location. Reference number. Note.

For example;

Sulaiman, Z. (2006). *Double Story Buildings: Perspective View*.

Universiti Tun Hussein Onn Malaysia. LT10-2006. Technical  
Drawing.

(b) Map

Author (Year). *Title [map]*. Location. Publisher

For example;

Derbyshire, E. et al. (2000). *Glacier map of Tasmania. [Map]*. London:

Royal Geographical Society.

**3.3.2.14.** Newspaper clippings

The major elements that must be included when an article is taken from a newspaper are as follows:

Author (Date). Title of article. *Name of newspaper*. Page numbers.

For example;

Latiff, A. B. A. (2001, Februari 14). Hatinya telah dimiliki. *Utusan*

*Mingguan*. p. 12.

**3.3.2.15.** Translated sources

The elements that must be included when information is taken from a translated source are as follows:

Original author's name. (Year of translation). *Title of book* (Name of translator, Trans.). Place of publication: Publisher. (Original work published Date)

For example;

Freud, S. (1970). *An outline of psychoanalysis* (Strachey, J., Trans.). New

York: Norton. (Original work published 1940)

**3.3.2.16. Unpublished sources**

Unpublished sources used in a thesis should be stated with the word “Unpublished” added at the end.

**3.3.2.17. Interviews**

Interviews are not considered to be recoverable data, so no reference to interviews should be provided in the reference list. You may, however, cite the interview within the text as a personal communication. For example;

...students are not interested in community services (Hassan, A. R., personal communication, August 15, 2006)

**3.3.2.18. Reference to electronic sources**

The internet provides a vast opportunity for obtaining information. All Internet information obtained from sources that are cited in the text must be duly acknowledged in the text as well as in the reference list.

**3.3.2.19. Citing references in the text**

When quoting from an Internet source, use page number if available. If page numbers are not available, use other identifying information such as paragraph number. For example;

It was concluded that, “The cost to the nation’s health of working out of phase with our biological clocks is probably incalculable at present.” (Rajaratnam, 2001, para. 23).

If paragraph number is not available, state the heading of the section from which the quotation is taken and count the paragraphs starting from the heading to the paragraph containing the quotation. For example;

It was concluded that, “The cost to the nation’s health of working out of phase with our biological clocks is probably incalculable at present.” (Rajaratnam, 2001, Results, para. 3).

An example of the reference list system “Author (Date)” is given in APPENDIX P1.

### 3.4. Number System

#### 3.4.1. Citing references in the text

All references mentioned in the text should be numbered using Arabic numerals. The first reference is given the number 1, the second reference given the number 2 and so on. One of the following methods can be used:

- i) If the author's name is written as part of a sentence, then the reference number should be placed in square brackets "[ ]" after the name of the author as in the following example:

According to Rajaratnam [1], the practice of working at hours that conflict with our biological clocks may lead to health disorders and losses for the country that cannot be assessed at this time.

- ii) If the author's name is not part of a sentence, then the reference number should be included in square brackets "[ ]" at the right places, as in the following example:

The study [1] shows that engineering students have a lower ability to visualise space than they should. Because this ability is important in solving engineering problems, it should be improved among students of engineering [2].

#### 3.4.2. Writing styles

Writing styles for different types of publications in the reference list

The methods of writing the references in the list are as follows:

- i) Books

Writer. Title. Edition (if not the first). *Place of publication*. Publisher. Year.

Example:

Hornby, A.S.. *Oxford Advanced Learner's Dictionary of Current English*. 2nd Ed. Oxford: Oxford University Press. 1994

## ii) Articles in Books

Writer. Title of article. In: The author of the book. *Titles*. Place of Publication: Publisher. Page numbers; year

Example:

Sarmani, S. Radioactive contamination. In: Mohamad, A. B. (Ed). *Environmental Perspectives*. Petaling Jaya: Fajar Bakti. pp. 71-87; 1987.

## iii) Articles in Journals

Writer. Title of article. *Title of journal*. Year. Volume number (issue number): Page numbers.

Example:

Mikac, N. and Branica, M. Complexation of trialkyllead with diethyldithiocarbonate. *Electroanalysis*. 1994. 6(2): 37 – 43.

## iv) Articles in Proceedings

Writer. Title of article. *Name of conference*. Date of conference. Place of publication: Publisher. Year. Page numbers.

Example:

Alias M. The effect of teacher generated concept maps on the learning of secondary school physics. *Second Int. Conference on Concept Mapping*. San Jose, Costa Rica: Universidad de Costa Rica. 2006. pp. 550-557.

## v) Theses

Writer. *Title of thesis*. Level of thesis. Name of institution; year.

Example:

Abdullah, M. K. *Modeling of Swirling Fluidized Bed Hydrodynamic Characteristics*. Ph.D. Thesis. Universiti Tun Hussein Onn Malaysia; 2008.

## vi) Standards

Name of institution. *Name of standard*. Place of publication, standard number. Year.

Example:

British Standards Institution. *Tongued And Grooved Software Flooring*. London, BS 1297. 1987

## vii) Patents

Owner's name. *Name of patent*. Patent number. Year.

Example:

Lindgren, E. A. *Screen Room Air Inlet and Wave Guard*. U.S. Patent 2, 925, 457. 1960.

## viii) Commercial Catalogues

Name of distributor. *Title*. Place of publication: Note. Year.

Example:

Howick Ltd partitioning. Howick: *Partitioning in Business*. Redhill (U.K.): Trade Brochure. 1984.

## ix) Measured technical drawings

Name. *Title*. Place of publication: Note. Year.

Example:

Solomon, Z. *Building Level Two: Perspective Views*. Universiti Tun Hussein Onn Malaysia: Painting Technique. 2006.

## x) Internet

Author Name. (Year). *Title [electronic version]*. Sub-title (if any). Retrieved on Month Day, Year, from URL

Example:

Wordnet (2006). *WordNet Search – 2.1*. Retrieved on November 30, 2006, from <http://wordnet.princeton.edu>

If a DOI is provided, use it instead of the URL. Example of a reference with a DOI is given below.

Kinchin, I. (2006). Developing PowerPoint handouts to support meaningful learning. *British Journal of Educational Technology*, 0(0). Retrieved August 23, 2007, from doi: 10.1111/j.1467-8535.2006.00536.x

In the reference list, the reference numbers in the text are listed in ascending order. An example of a reference list using the number system is given in Appendix P2.



## REFERENCES

- American Psychological Association (2011). *What's New in the Sixth Edition of the Publication Manual*. Retrieved from <http://www.apastyle.org>
- American Psychological Association (2004). *Publication Manual of the American Psychological Association*. 5th edition. Wisconsin, USA: George Banta Comp.
- British Standard Institution (1990). *British Standard Recommendations for the Presentation of Theses and Dissertation*. London: BS4821.
- Dewan Bahasa dan Pustaka (1990). *Gaya Dewan Bahasa*. Kuala Lumpur.
- Hornby, A.S. (1994). *Oxford Advanced Learner's Dictionary of Current English*.  
Oxford: Oxford University Press
- Modern Language Association (1977). *MLA Handbook for Writers of Research Papers, Theses and Dissertations*. New York: Modern Language Association.
- Turabian K. L. (1973). *A Manual for Writers of Term Papers, Theses and Dissertations*. 4th edition. Chicago: University of Chicago Press.
- Universiti Kebangsaan Malaysia (2004). *Panduan Menulis Tesis*. Pusat Pengajian Siswazah.
- Universiti Teknologi Malaysia (1989). *Panduan Penulisan Tesis Untuk Pelajar UTM*. Perpustakaan Sultanah Zanariah.
- WordNet (2006). *WordNet Search – 2.1*. Retrieved November 30, 2006, from <http://wordnet.princeton.edu>

## APPENDIX A1

**SELECT COLLEGE  
STATUS CONFIRMATION FOR UNDERGRADUATE PROJECT REPORT**

I, **Tekalign Tolla Gebrehiwot**, agree to allow this Undergraduate Project Report to be kept at the Library under the following terms:

1. This Undergraduate Project Report is the property of the Select College.
2. The library has the right to make copies for educational purposes only.
3. The library is allowed to make copies of this report for educational exchange between higher educational institutions.
4. \*\* Please Mark (v)

CONFIDENTIAL

RESTRICTED

FREE ACCESS

Approved by,

(WRITER'S SIGNATURE)

(SUPERVISOR'S SIGNATURE)

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

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

NOTE:

\*\* If this Undergraduate Project Report is classified as CONFIDENTIAL or RESTRICTED, please attach the letter from the relevant authority/organization stating reasons and duration for such classifications.

## APPENDIX A2

**SELECT COLLEGE  
STATUS CONFIRMATION FOR MASTER'S PROJECT REPORT**

I, **Tekalign Tolla Gebrehiwot**, agree to allow this Master's Project Report to be kept at the Library under the following terms:

1. This Master's Project Report is the property of the Select College.
2. The library has the right to make copies for educational purposes only.
3. The library is allowed to make copies of this report for educational exchange between higher educational institutions.
4. \*\* Please Mark (v)

CONFIDENTIAL (Contains information of high security or of great)

RESTRICTED (Contains restricted information as determined by the Organization/institution where research was conducted)

FREE ACCESS

Approved by,

(WRITER'S SIGNATURE)

(SUPERVISOR'S SIGNATURE)

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

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

NOTE:

\*\* If this Master's Project Report is classified as CONFIDENTIAL or RESTRICTED, please attach the letter from the relevant authority/organization stating reasons and duration for such classifications.

## APPENDIX A3

**SELECT COLLEGE  
STATUS CONFIRMATION FOR MASTER'S THESIS**

I, **Tekalign Tolla Gebrehiwot**, agree to allow this Master's Thesis to be kept at the Library under the following terms:

1. This Master's Thesis is the property of the Select College.
2. The library has the right to make copies for educational purposes only.
3. The library is allowed to make copies of this report for educational exchange between higher educational institutions.
4. \*\* Please Mark (v)

CONFIDENTIAL (Contains information of high security)

RESTRICTED (Contains restricted information as determined by the Organization/institution where research was conducted)

FREE ACCESS

Approved by,

(WRITER'S SIGNATURE)

(SUPERVISOR'S SIGNATURE)

Permanent Address:

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

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

NOTE:

\*\* If this Master's Thesis is classified as CONFIDENTIAL or RESTRICTED, please attach the letter from the relevant authority/organization stating reasons and duration for such classifications.

**APPENDIX A4**

**SELECT COLLEGE  
STATUS CONFIRMATION FOR DOCTORAL THESIS**

I, **Tekalign Tolla Gebrehiwot**, agree to allow this Doctoral Thesis to be kept at the Library under the following terms:

1. This Doctoral Thesis is the property of the Select College.
2. The library has the right to make copies for educational purposes only.
3. The library is allowed to make copies of this report for educational exchange between higher educational institutions.
4. \*\* Please Mark (v)

**CONFIDENTIAL** (Contains information of high security)

**RESTRICTED** (Contains restricted information as determined by the Organization/institution where research was conducted)

**FREE ACCESS**

Approved by,

(WRITER'S SIGNATURE)

(SUPERVISOR'S SIGNATURE)

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

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

NOTE:

\*\* If this Doctoral Thesis classified as **CONFIDENTIAL** or **RESTRICTED**, please attach the letter from the relevant authority/organization stating reasons and duration for such classifications.

**APPENDIX B**

2.5 cm

2.5 cm

This thesis has been examined on date .....  
and is sufficient in fulfilling the scope and quality for the purpose of awarding the  
Degree of Doctor of Philosophy.

4 line

Chairperson:

Prof. Asrat Woldeyes  
Faculty of Civil and Environmental Engineering  
Select College

4.0 cm

2.5 cm

Examiners:

Prof. Aklilu Lemma  
Faculty of Education Addis  
Ababa University

PROF. DR. ZAKARIA BIN KASA  
Faculty of Education  
Universiti Putra Malaysia

Prof. James Brown  
Faculty of Technical Education  
University of Hamburg

2.5 cm

2.5 cm

2.5 cm

MODELING OF SWIRLING FLUIDIZED BED HYDRODYNAMIC CHARACTERISTICS

X

TEKALIGN TOLLA GEBREHIWOT

X

4.0 cm

A project report submitted in partial fulfillment of the requirement for the award of the Degree of Master of.....

2.5 cm

8 line

Faculty of Mechanical and Manufacturing Engineering  
Select College

8 line

APRIL 2022

2.5 cm

2.5 cm

2.5 cm

2.5 cm

MODELING OF SWIRLING FLUIDIZED BED HYDRODYNAMIC CHARACTERISTICS

X

TEKALIGN TOLLA GEBREHIWOT

X

4.0 cm

A thesis submitted in fulfillment of the requirement for the award of the Degree of Master of.....

2.5 cm

8 line

Faculty of Mechanical and Manufacturing Engineering  
Select College

8 line

APRIL 2022

2.5 cm

2.5 cm



2.5 cm

2.5 cm

MODELING OF SWIRLING FLUIDIZED BED HYDRODYAMIC CHARACTERISTICS

X

TEKALIGN TOLLA GEBREHIWOT

X

4.0 cm

A thesis submitted in fulfillment of the requirement for the award of the Doctor of Philosophy.

2.5 cm

8 line

Faculty of Mechanical and Manufacturing Engineering  
Select College

8 line

APRIL 2022

2.5 cm

2.5 cm

**APPENDIX D1**

*2.5 cm*

*2.5 cm*

I hereby declare that the work in this project report is my own except for quotations  
and summaries which have been duly acknowledged

*4 line*

Student : .....  
Write name of student

Date : .....

*8 line*

Supervisor : .....  
Write name of supervisor here

*4 line*

Co Supervisor : .....  
Write name of co-supervisor here

*2.5 cm*

*4.0 cm*

*2.5 cm*

**APPENDIX D2**

*2.5 cm*

*2.5 cm*

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged

*4 line*

Student : .....  
Write name of student

Date : .....

*8 line*

Supervisor : .....  
Write name of supervisor here

*4 line*

Co Supervisor : .....  
Write name of co-supervisor here

*2.5 cm*

*4.0 cm*

*2.5 cm*

**APPENDIX E**

*2.5 cm*

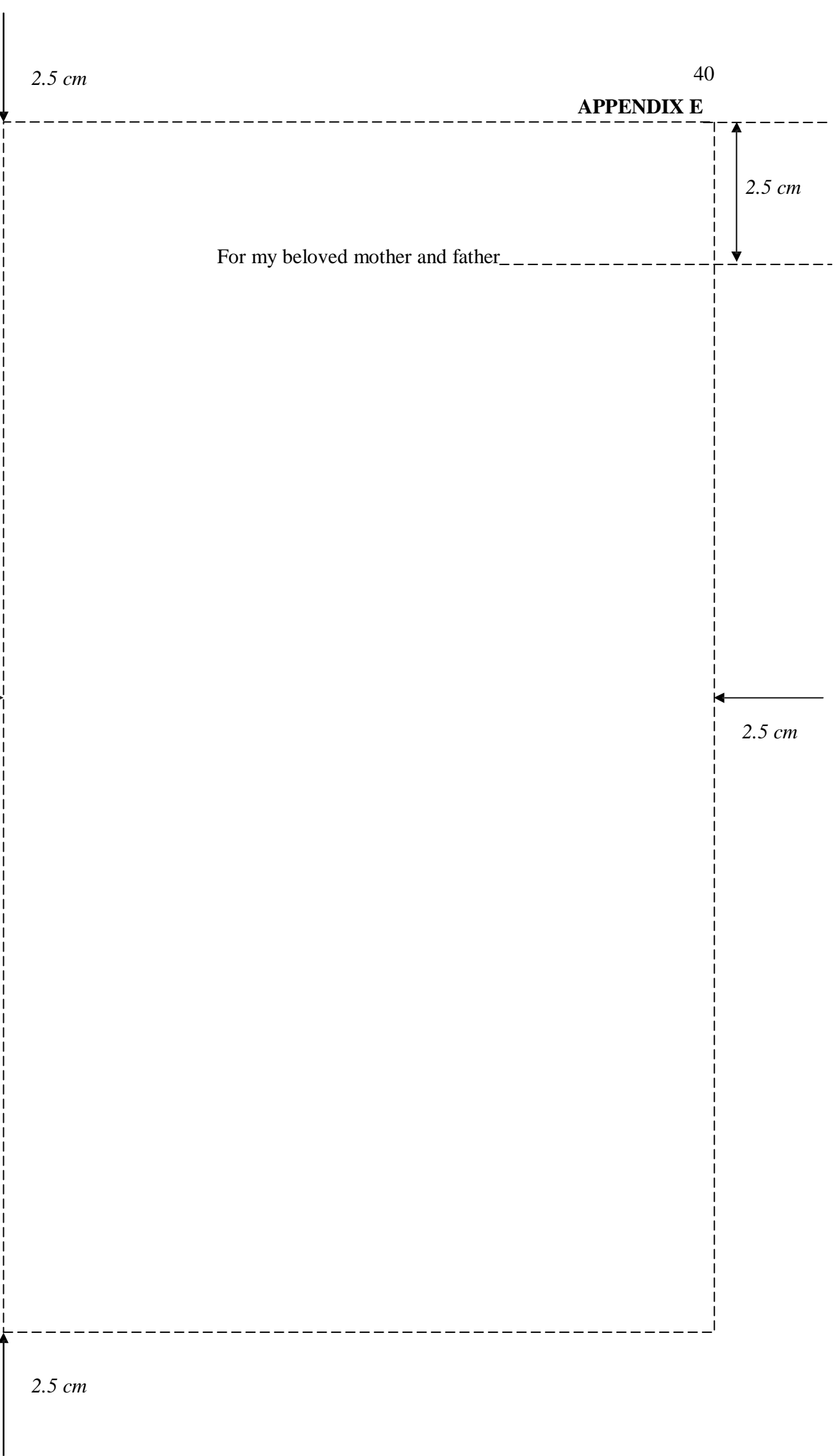
*2.5 cm*

For my beloved mother and father

*4.0 cm*

*2.5 cm*

*2.5 cm*



ACKNOWLEDGEMENT

The author would like to express his sincere appreciation to his supervisor, Prof. Dr. Mohamad Nor bin Husain for the support given through out the duration for this research.

*1.27 cm (0.5 inch)*

↔ The cooperation given by the Department of Water Resources Johor is also highly appreciated. Appreciation also goes to everyone involved directly or indirectly towards the compilation of this thesis. Last but not least,.....

*2.5 cm*

*2.5 cm*

*4 line*

*4.0 cm*

*2.5 cm*

*2.5 cm*

2.5 cm

42

**APPENDIX G1a**

2.5 cm

ABSTRACT

4 line

Spiral catalyst substrate is one of the substrate types for catalytic converter and has high geometric surface area. It is to provide support structure in which the washcoat and the catalyst are applied. Currently, an issue of considerable interest in producing the substrate from a thin sheet metal with a thickness 0.11mm and using FeCrAl material has become a trend. Existing patented apparatus overseas use a complicated system and specific details are scarce. Therefore, this research presents the works in designing and developing an innovative apparatus based on a systematic approach of Pahl and Beitz's model of design process. Furthermore, Finite Element Method (Dynaform) was applied for the forming analysis of a trapezoid cell of corrugation on a thin sheet metal and spiral shape of corrugated sheet metal. These works provide the conceptual designs for the apparatus of Corrugated Tool for corrugation process and Spiral Tool for spiral process. The selected conceptual design was established by developing a model of the apparatus. A rule of thumb for requiring unloaded diameter of corrugated sheet metal in spiral shape was derived. Forming Limit Diagram (FLD) shows that the thin sheet metal was successfully formed without any cracking and Thickness Diagram shows that the thickness of the formed thin sheet metal was in safe thickness. The springback effect that occurs during the sheet metal in spiral shape was solved using the developed casing. The designed apparatus of Corrugated Tool and Spiral Tool were fabricated and optimization was performed by producing the spiral catalyst substrate. The innovative apparatus for producing the full scale of spiral catalyst substrate were successfully designed and developed.

4.0 cm

2.5 cm

2.5 cm

2.5 cm

43

**APPENDIX G1b**

ABSTRACT

2.5 cm

4 line

The development of the NOSS-based training system and the National Dual Training System (NDTS) as different entities had caused confusion and raised concerns on the future direction and position of the national skills training system in Malaysia. The basic purpose of the study was to examine how they had evolved in order to determine their key characteristics and parameters, and to examine their comparability and ultimately to ascertain whether there was a basis for their integration within the country's national skills training system. The study adopted the interpretive qualitative research design which was premised on the phenomenological approach. For data collection, it employed interviews of key participants in both training systems, review of documents including unpublished official records, case studies and sector study. The development of the training systems were examined utilising analytical dimensions which covered the purpose of training, policy framework, delivery mechanism and work context. The two training systems showed strong convergence in almost all these dimensions. From the investigation, five major themes emerged, namely strong commonalities between the two training systems; fundamental limitations in each of the training systems; well established, existing work-based foundation; the need for a dynamic NOSS-based training system; and the need for re-aligning the NDTS closer to the work context in Malaysia. Based on these themes, the study contended that the NOSS-based training system and the NDTS should no longer be kept separate. Their integration into a unified system can be realized through a framework which meets various key requirements; is conceptually feasible; and involves three main phases of consolidating the existing training systems that include making the NOSS-based training system more dynamic and the NDTS more flexible.

4.0 cm

2.5 cm

2.5 cm

*2.5 cm*

CONTENTS

*4 line*

i

TITLE  
DECLARATION ii  
DEDICATION iii

*2.5 cm*

*4.0 cm*

ACKNOWLEDGEMENT iv  
ABSTRACT v  
CONTENTS vii  
LIST OF TABLE xiv

CHAPTER 1 INTRODUCTION 1

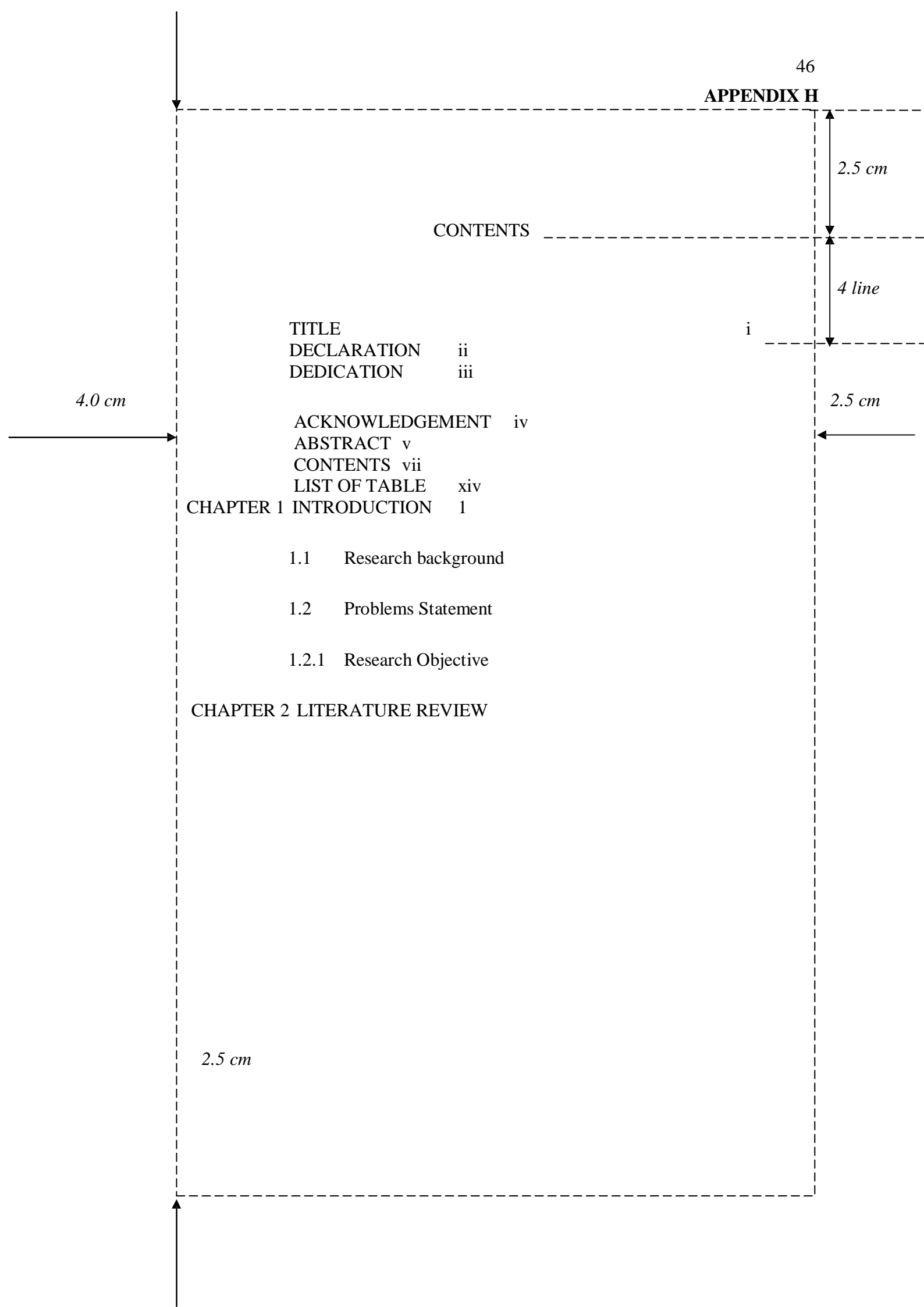
1.1 Research background

1.2 Problems Statement

1.2.1 Research Objective

CHAPTER 2 LITERATURE REVIEW

*2.5 cm*





LIST OF TABLES

1.1	Analysis for the location of o and w	15
4.1	Relation between speed, radius and imperial force	19
4.2	Change in rate of flow in pipe system due to gravity against change in the Reynold Number	37
5.1	Relationship between displacement and rotation of balance control	45
5.2	Relationship between rotation and voltage	48
6.1	For the compliment of valve depreciation at different open angels	57
6.2	Relationship between rate of flow and voltage produce	60

*1.5 cm  
Please  
left blank*

*2.5 cm*

*2.5 cm*

*4 line*

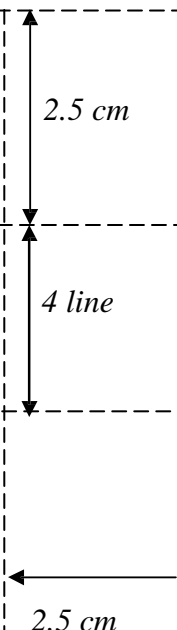
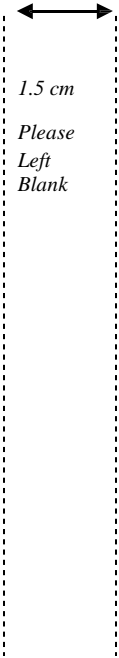
*4.0 cm*

*2.5 cm*

*2.5 cm*

LIST OF FIGURES

1.1	Method for flow system control	15
4.1	Block diagram for flow control (close circuit)	16
5.1	Stability analysis	20
5.3	Force analysis	21
5.5	Teorem Bernoulli	22
5.6	Pipe System	29



LIST OF SYMBOLS AND ABBREVIATIONS

- $D, d$  - Diameter
- $F$  - Force
- $G$  - Gravity = 9.81 m/s
- $I$  - Momen of Iner
- $l$  - Length
- $m$  - Mass
- $P$  - Pressure
- $Q$  - Rate of Flow
- $r$  - Radius
- $T$  - Torque
- $Re$  - Reynold Number
- $V$  - Velocity
- $x$  - Shift
- $Z$  - High
- $\theta$  - Angle
- $SC$  - Select College
- $UNESCO$  - United Nation for Education, Science and Cultural Organization

2.5 cm

2.5 cm

4 line

4.0 cm

2.5 cm

2.5 cm

LIST OF APPENDICES

APPENDIX

TITLE

PAGE



A

Thesis Status Approval Form

1.5 cm

29

B

Examiner Approval

Please

30

Left

C

Title Page

Blank

31

D

Thesis Purpose Statement

32

E

Declaration Page

33

F

Example of Dedication Page

34

G

Example of Acknowledgement Page

35

H

Example of List of Tables

36

I

Example of List of Figures Page

37

J

Example of List of Symbols/Abbreviations/

Nomenclature/Meaning Page

38

K

Example of List of Appendix Page

39

2.5 cm

2.5 cm

4 line

4.0 cm

2.5 cm

2.5 cm

2.5 cm

CHAPTER 2

TITLE CHAPTER

No spacing between paragraphs

First sentence in a first paragraph of a chapter begins from the left margin.

First sentence of a second paragraph of a chapter begins 1.27 cm from the left margin.

2.1 Sub-title

First sentence in a first paragraph of a sub-title begins from the left margin.

First sentence of a second paragraph of a sub-title begins 1.27 cm from the left margin.

2.1.1 Sub-sub-title

4.0 cm

2.5 cm

4 line

4 line

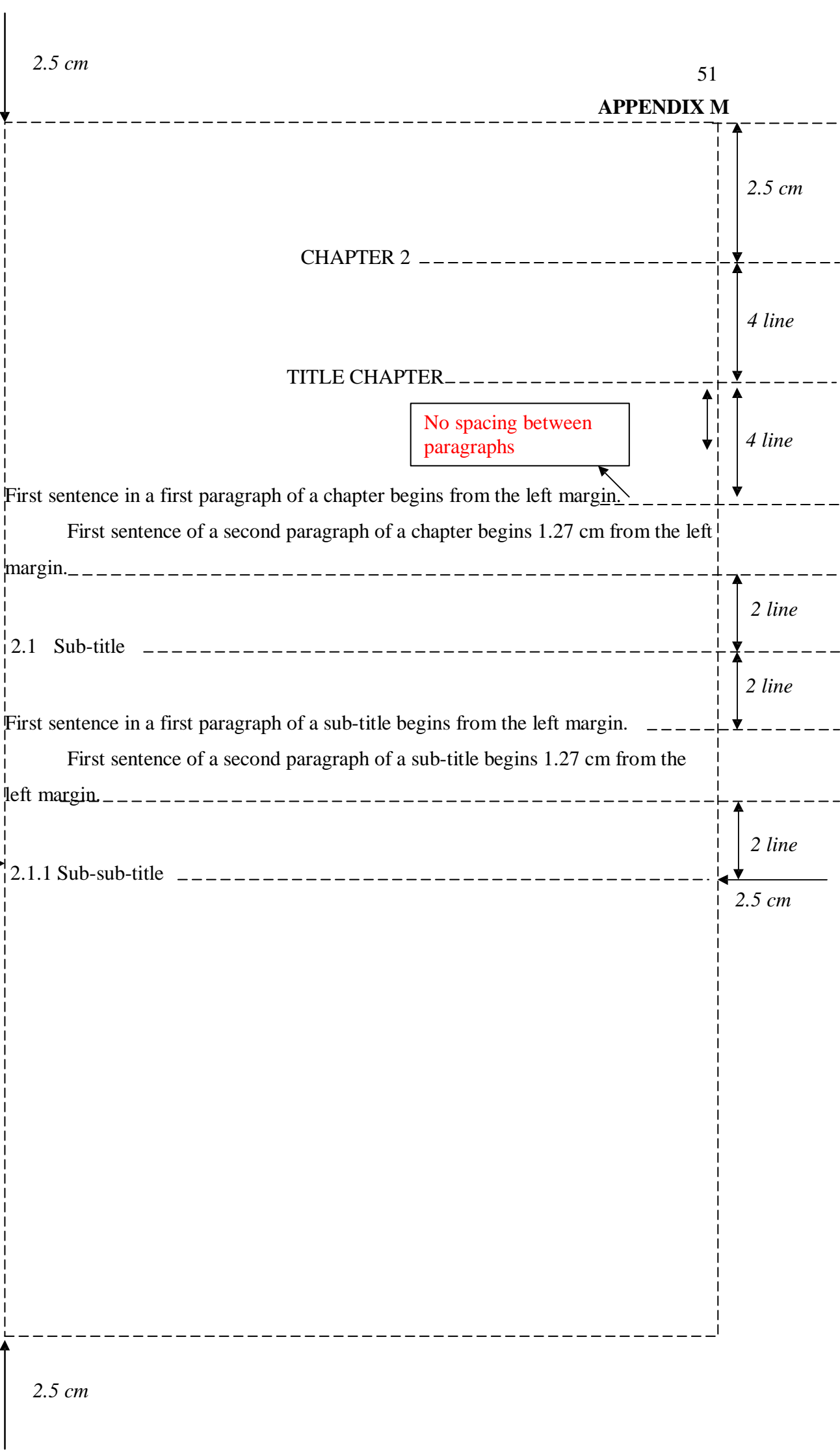
2 line

2 line

2 line

2.5 cm

2.5 cm



**APPENDIX N**

Writing in the table should use Times New Roman point size 10 with one (1) spacing between rows. If the table more than one page, the connection on the following pages should be labeled with "Table 4.3 (continued)." As an example, please refer to Table 4.3. If the table is taken from a particular source, the source should be stated at the end of the table title. See examples in Appendix N. Tables can only be placed after referred to in the text.

Table 4.3: Comparison between lab and simulation computer result.  
(Gist, Schwoerer and Rosen, 1989)

Length Ratio	Lab Experiment in Average	Comparison Simulation in Average
0.125	0.25	0.137
0.250	0.46	0.560
0.375	0.63	0.738
0.500	0.75	0.861
0.625	0.83	0.939
0.750	0.88	0.981
0.875	0.93	0.997
1.000	1.00	1.000

4.0 cm

2.5 cm

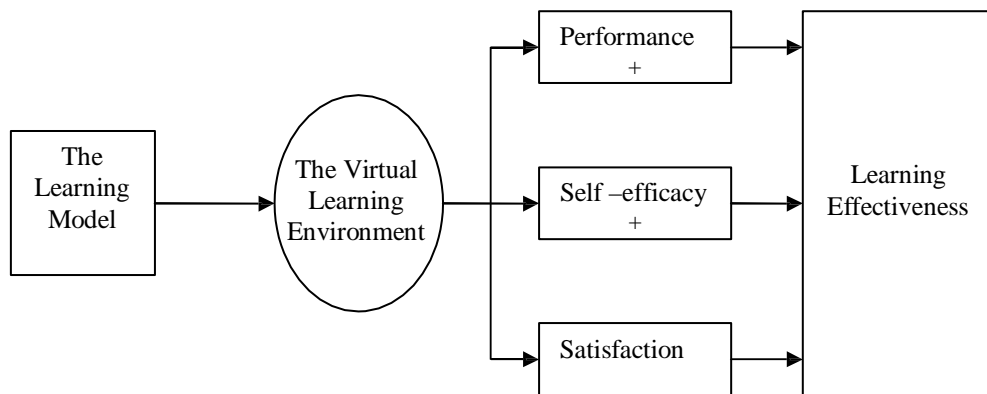


Figure 4.4: Model of the Effectiveness Virtual Learning Environments (Gist, Schwoerer and Rosen, 1989)

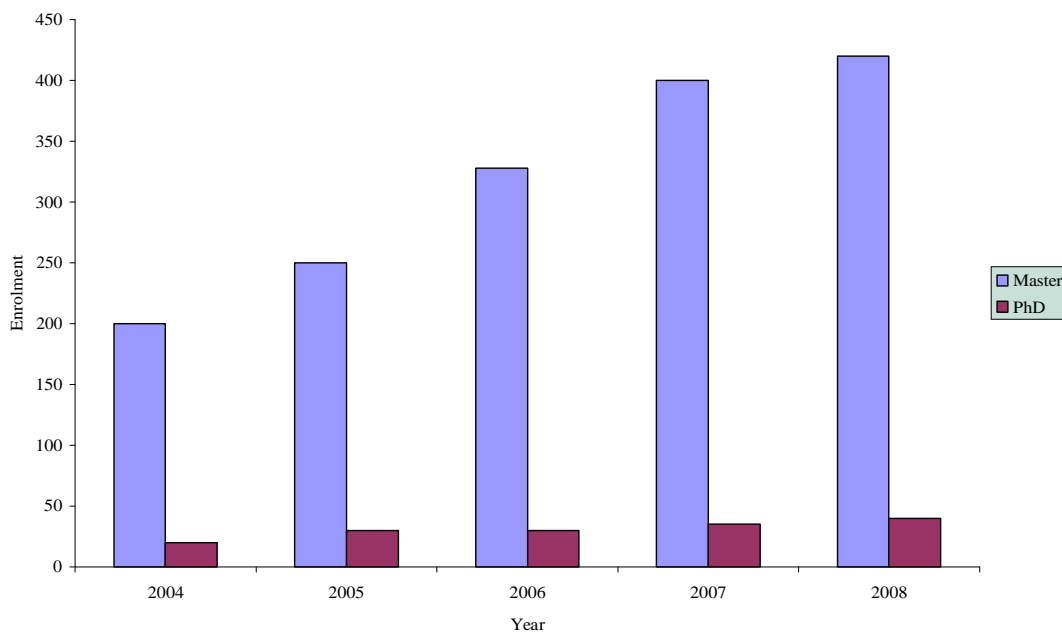


Figure 4.4: Students enrolment from 2004 to 2008 at Pusat XYZ, Kajang, Selangor.

2.5 cm

54

**APPENDIX P1**

REFERENCES

2.5 cm

4 line

Ali Suradi, A. Z. (1989). *Pemrosesan Teks Bahasa Melayu untuk Pemahaman Komputer*. Universiti Teknologi Malaysia: Tesis Ph.D.

Alias, M. & Mohd Zain, A. F. (2006). Relationship between entry qualifications and performance in graduate education. *International Education Journal*, 7(3), 371-378. Retrieved from <http://iej.cbj.net>

American Chemical Society (Ed.) (1978). *Handbook for Authors of American Chemical Society Publications*. Washington, D.C.: American Chemical Society.

Engineers Joint Council (1969). *Thesaurus of Engineering and Scientific Terms*. New York: Engineers Joint Council.

4.0 cm

Herculanc-Houzel, S., Collins, C.E, Wong, P., Kaas, J. H., & Lent, R. (2008). The Basic nonuniformity of the cerebrel cortex. *Proceedings of the National Academy of Sciences* 105, 12593-12598. doi:10.1073/pnas.0805417105

Light, M. A., & Light, I.H. (2008). The geographic expansion of Mexican immigration in the United States and its implications for local law enforcement. *Law Enforcement Executive Forum Journal*, 8(1), 73-82.

Martin, A. M. (Ed.) (1991). *Peat as an Agent in Biological Degradation of Waste*. London: Elsevier.

2.5 cm

Mikac, N. and Branica, M. (1994). Complexation of trialkyllead with diethyldithiocarbonate. *Electroanalysis*, 6, 37 – 43.

Paredis, J. (1993). Genetic state-space search for Constraint Optimization Problems. *Proc. of the 13<sup>th</sup> Int. Joint Cont. on Artificial Intelligence (IJCAI93)*. San Mateo, USA: Morgan Kaufman.

Puget, J. F. and Albert, P. (1994a). SOLVER: Constraints – objects descriptions. *Technical Report*. ILOG S.A.

Puget, J. F. and Albert, P. (1994b). A C++ implementation of CLP. *Technical Report*. ILOG S.A.



## REFERENCES

1. Theusen, G. J. and Fabrycky, W. J. *Engineering Economy*. 6th edition. Englewood Cliffs, N. J.: Prentice-Hall. 1984.
2. Sarmani, S. Pencemaran Radioaktif. Dlm.: Ahmad Badri Mohamad. *Perspektif Persekitaran*. Petaling Jaya: Fajar Bakti. 71–87; 1987
3. Billings, S. A. Identification of Nonlinear Systems: A Survey. *Proc. Instn Electr. Engrs, Part D*, 1980, 127(6): 272-284.
4. Sheta, A. F. and De Jong, K. Parameter Estimation of Nonlinear Systems in Noisy Environments Using Genetic Algorithms. *Proceedings of the 1966 IEEE International Symposium on Intelligent Control*. September 15-18, 1996. Dearborn, Michigan: IEEE, 1996. 360-365.
5. Abu Bakar, A. Z. *Pemprosesan Teks Bahasa Melayu Untuk Pemahaman Komputer*. Tesis Doktor Falsafah. Universiti Teknologi Malaysia; 1989
6. British Standards Institution. *Tongued and Grooved Software Flooring*. London, BS 1297. 1987
7. Lindgren, E. A. *Screen Room Air Inlet and Wave Guard*. U.S. Patent 2, 925, 457. 1960.
8. Howick Partitioning Ltd. *Howick: Partitioning in Business*. Redhill (U.K.): Trade brochure. 1984.
9. Sheta, A. F. and De Jong, K. Parameter Estimation of Nonlinear Systems in Noisy Environments Using Genetic Algorithms. *Proceedings of the 1966 IEEE International Symposium on Intelligent Control*. September 15-18. Dearborn, Michigan: IEEE. 1996. 360-365.
10. Herculanc-Houzel, S., Collins, C.E, Wong, P., Kaas, J. H., & Lent, R. The Basic nonuniformity of the cerebrel cortex. *Proceedings of the National Academy of Sciences 105*. April 20-29. Dearborn, Michigan. XYX. 2008. ms 12593-12598.

*2.5 cm*

Continue the text here from previous page.

*2 line*

2.5 Sub-title

*2 line*

First paragraph starts here.....

and second paragraph continues here.....

*2 line*

2.5.1 Sub-sub-title

*2 line*

**2.5.1.1 Sub-sub-sub-title**

*2 line*

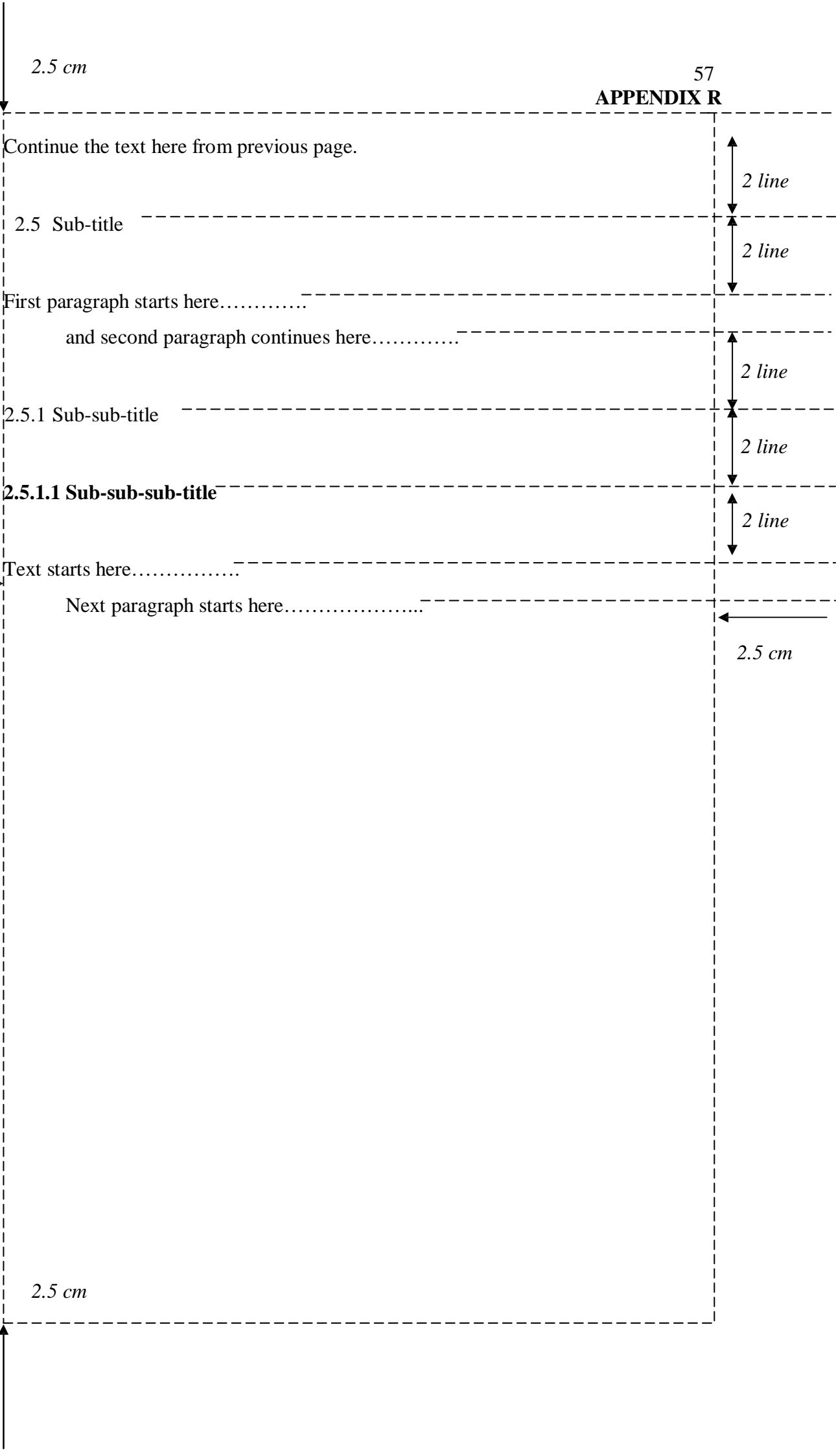
Text starts here.....

Next paragraph starts here.....

*2.5 cm*

*4.0 cm*

*2.5 cm*



2.5 cm

ACID NUCLEIC PHOTO CHEMICAL REACTION AND ITS  
RELATIOMSHIP WITH PHOTOBIOLOGICAL CONTENTS

2.5 cm

2.5 cm

X

4.0 cm

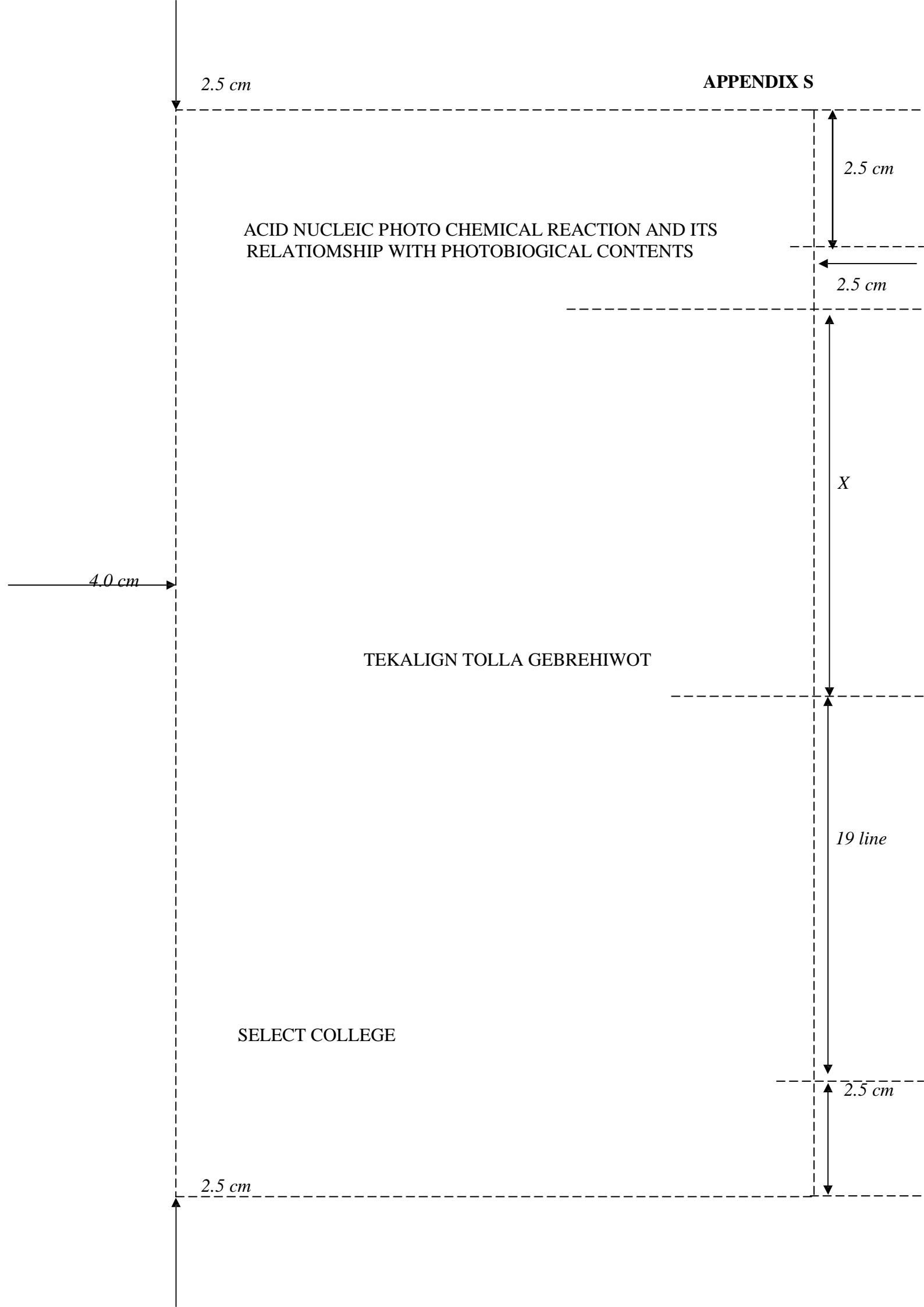
TEKALIGN TOLLA GEBREHIWOT

19 line

SELECT COLLEGE

2.5 cm

2.5 cm



← 2.5 cm →      TEKALIGN TOLLA                      PhD                      NOVEMBER 2011      ← 2.5 cm →

← 2.5 cm →      AZEB MAMO                      MSc                      NOVEMBER 2011      ← 2.5 cm →

← 2.5 cm →      TEKALIGN TOLLA                      BACHELOR DEGREE                      NOVEMBER 201      ← 2.5 cm →

# SECTION II: POTENTIAL ADVISORS

---

## Section II: Potential Advisors List

### 1. Objectives of Academic Advising

The objectives of academic advising shall be to:

- 1.1. establish one to one contact between staff member and a small group of students by assigning an academic advisor to each student;
- 1.2. help understand and recognize individual student's learning needs and goals;
- 1.3. promote and facilitate a learning process of a selected group of students;
- 1.4. provide an additional source of help, guidance and support in the academic pursuits of students requiring such support in addition to those provided by the normal channels.

### 2. Selection of Advisors

Academic staff members are assigned the responsibility of academic advising based on the following criteria:

- 2.1. Appropriate academic specialization in the respective broad area of study of the student assigned to him.
- 2.2. A short orientation and training program in academic advising shall be conducted for all academic advisors to initiate effective advising for students of the concerned age group and area of specialization.
- 2.3. Each academic staff member shall be assigned a group of students from within the program of studies under the school. The number of students assigned to each advisor shall be limited to a reasonable number, such that the objective of the academic advising are achieved. Such number shall in no case exceed 20

### 3. Role of Academic Advisors

Academic staff members assigned as advisors shall assume the roles and responsibilities to:

- 3.1. interact with their assigned students on a regular basis, according to mutually agreed frequency and duration;

- 3.2. understand the strengths and weaknesses of their group through continuous and regular monitoring of their academic performance;
- 3.3. help these students develop personal academic goals or learning plans and facilitate their progress towards their goals;
- 3.4. advise those students who express a desire or need for individual attention and shall help them in their learning process. This may be initiated either by the students or by the Academic Advisors;
- 3.5. act as learning consultants to their assigned group, In this role, they shall help students develop strategy for learning, studying, improving academic standards and developing competence in their selected programs of study;
- 3.6. wherever, necessary, these advisors shall network with other Academic staff members and help students use all available resources to meet their learning and developmental needs.
- 3.7. help students choose their program of study, major, minor, elective, and specialization if applicable;
  - 3.7.1. keep copies of academic and other necessary records required for advising their assigned group of students;
  - 3.7.2. help provide advice to a student academic difficulties

#### **4. Role of Associate Deans of Students' Affairs**

- 4.1. Associate Dean of Students' affairs shall initiate and finalize plans for assigning all the students to appropriate School members selected as advisors.
- 4.2. Associate Dean of Students' affairs shall obtain from academic advisors, progress reports and action plans regarding process of academic advising twice in each semester. The plan shall be evaluated for its effectiveness and perceived deficiency in consultation with academic staff members and department heads at the end of each semester. Based on such evaluation changes and modifications may be made as improvement on the earlier process. The decision for improvement shall be recorded.

4.3. Associate Deans of students' affairs and heads of departments shall also organize and plan orientation sessions for students and academic advisors, for each new entry. The objectives of these programs are to:

4.3.1. help create an awareness about the need for academic advising;

4.3.2. help clarify the mutual roles and responsibilities of students and academic staff members;

4.3.3. Provide all relevant records to the concerned advisors and the Students' Affairs Office. Such records include:

a) Admission details;

b) Grades secured in qualifying examination;

c) Scores in assessment results; and

d) Attendance records; and

e) Evaluation and improvements of the Academic Advising System.

4.3.4. Departments shall organize an advisory committee which will be in charge of advising graduate students.

## 5. Evaluation

The usefulness of the Academic Advising system is evaluated as follows:

5.1. Analysis of students' performance;

5.2. Feedback from the advisees about the effectiveness of the advisor and the Academic Advising program, and suggestions for improvement;

5.2.1. Feedback from teaching staff about progress in performance of students in class work and examinations;

5.2.2. Comments from concerned Heads of Departments, schools Deans.

## 6. Improvements

6.1. The results of the analysis conducted are used to effect improvement in the academic advising program.

6.2. The areas of improvements are identified by the Associate Dean for Students' Affairs of the school and discussed in the appropriate committees or sub-committees formed for the specific purpose.

6.3. The improvements in the scheme are measured primarily through the performance of students, and establishing relationship between the academic advice and results.

6.4. Heads of Departments and Academic Advisors shall also suggest specific plans for modification in the program for the purpose of improving its effectiveness.

## 7. Potential Advisors

Student advising shall take place in accordance with the guidelines set by the student affairs department of the College. Select College shall assign advisors for all our students. One advisor shall not advise more than eight candidates who shall defend their proposal. In order to satisfy this commitment, we have identified and potential advisors among instructors who will advise our students on part-time basis. The following list includes some of the potential advisors who have agreed to serve as thesis advisors and Online Course instructors at Select College.



SN	Full Name	Academic Level	Academic Rank	Area of Specialization
1.	Profesor Belete Kebede	PHD	Full Professor	Business management
2.	Dr Dirriba Ayale	PHD	Assistance Professor	Business Administration & Management
3	Dr. Worku Alamu	PHD	Assistance Professor	Business Management
4	Dr Arom Abraham	PHD	Assistance Professor	Management study
5	Dr. Takilu Kasa	PHD	Assistance Professor	Public Finance Management
6	Mr. Wondmageny Birru	MA	Assistance professor	Finance & Investment
7	Dr. Muluadam Alamu	PHD	Assistance professor	Public Management & Policy studies
8	Dr. Abaynhe Dagaga	PHD	Assistance Professor	Public Management & Policy studies
9	Dr Gete Andualem	PHD	Assistance Professor	Marketing& International Trade
10	Dr Bantie Workie	PHD	Assistance Professor	Business Management
11	Dr Tilaye Kasahun	PHD	Assistance Professor	Business strategic Management
12	Dr. Balay Tizazu	PHD	Assistance Professor	Business Management
13	Dr. Getachewu Bay'e	PHD	Assistance Professor	Leadership Management
14	Dr. Mulugeta Kebede	PHD	Assistance Professor	Management