**TITLE OF YOUR THESIS IN CAPITAL LETTERS (18-POINT)**

**CANDIDATE’S NAME**

**UNIVERSITI SELANGOR**

 **CANDIDATE’S NAME DOCTOR OF EDUCATION 2020 UNISEL**

**UNIVERSITI SELANGOR**

**AUTHOR’S DECLARATION**

Full Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student ID No. : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

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

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

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

Academic Session : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I hereby declare that:

1. This thesis/dissertation\* is the result of my original research work, except for quotations and citations which have been duly acknowledged.
2. This thesis/dissertation\* has not been submitted previously for any other degree at any institution.
3. This thesis is classified as CONFIDENTIAL/RESTRICTED/OPEN ACCESS\*.
4. There is no plagiarism or data falsification in this thesis.
5. Intellectual property from this thesis/dissertation\* is fully owned by Universiti Selangor.
6. Copyright of thesis/dissertation\* is fully owned by Universiti Selangor. Thus, the Library of Universiti Selangor has the right to make copies of this thesis/dissertation\* for academic purposes.

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

SIGNATURE

Date :

*\*delete as necessary*

SUPERVISOR’S DECLARATION

I/We\* hereby declare that I/we\* have checked and read this thesis/dissertation\* entitled “**Title Title Title**” and in my/our\* opinion this thesis/dissertation\* is sufficient in terms of scope and quality for the award of the degree of **Programme (Example:** **Doctor of Philosophy (specialisation).**

Signature : ....................................................

Name of Supervisor I : ....................................................

Date : ....................................................

Signature : ....................................................

Name of Supervisor II : ....................................................

Date : ....................................................

*\* Delete as necessary*

**DECLARATION OF COOPERATION**

I hereby certify that this thesis/dissertation\* entitled “**Title Title Title**” has been in cooperation with **Name of Company (Example: UDA Holding Berhad)** from **Date (Example :** **June 2018** **to** **July 2020)**.

**Certified by:**

Signature : ………………………………….

Name : ………………………………….

Position : ………………………………….

Date : ………………………………….

Company’s Stamp :

**Verified by:**

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

Assoc. Prof. Dr. Setyawan Widyarto

Dean

Centre For Graduate Studies

Universiti Selangor

Date :

*\* Delete as necessary*

**CERTIFICATION OF EXAMINATION**

I certify that the Panel of Examiners has met on **Date (Example : 10 July 2020)** to conduct the Viva-Voce examination for **Name Of Candidate (Example : Ahmad bin Ali)** on his **Programme (Example : Doctor of Philosophy)** thesis/dissertation\* entitled **“Title Title Title”** in accordance with Universiti Selangor Act. The Panel of Examiners recommends that the student be awarded the relevant degree.

**Prof. Dato’ Dr. Mohd Redzuan bin Othman**

President & Vice Chancellor
Universiti Selangor

(Chairman)

**Prof. Dr. Ahmad bin Ishak**

Universiti Malaya

(External Examiner I)

**Prof. Dr. Ahmad bin Ishak**

Universiti Malaya

(External Examiner II)

**Prof. Dr. Ahmad bin Ishak**

Universiti Malaya

(Interna Examiner I)

**Prof. Dr. Ahmad bin Ishak**

Universiti Malaya

(Senate Member)

**Certified by:**

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

**Assoc. Prof. Dr. Setyawan Widyarto**

Dean

Centre for Graduate Studies

Universiti Selangor

Date :

**DECLARATION OF COURSES**

I hereby declare that I have completed all the courses for this programme as listed below and this dissertation is a partial fulfilment of the requirements for the award of the degree of Doctor of Education.

|  |  |  |
| --- | --- | --- |
| **COURSE CODE** | **COURSE NAME** | **CREDIT HOUR** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Signature : ………………………………….

Name : ………………………………….

Student Id No. : ………………………………….

Date : ………………………………….

**TITLE OF THESIS**

**TITLE OF THESIS**

**NAME OF CANDIDATE**

**A thesis submitted in fulfilment of the**

**requirements for the award of the degree of**

**Doctor of Philosophy (Management)**

**Faculty of Business and Accountancy**

**Universiti Selangor**

**JANUARY 2020**

**DEDICATION**

 Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

**ACKNOWLEDGEMENT**

 Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

 Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

**ABSTRACT**

 Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

***ABSTRAK***

 *Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu. Tuliskan abstrak dalam Bahasa Melayu.*

**TABLE OF CONTENTS**

|  |  |  |
| --- | --- | --- |
| **CHAPTER** | **TITLE** | **PAGE** |
|  |  |  |
|  | **TITLE PAGE** | i |
|  | **DEDICATION** | ii |
|  | **ACKNOWLEDGEMENT** | iii |
|  | **ABSTRACT** | iv |
|  | **ABSTRAK** | v |
|  | **TABLE OF CONTENTS** | vi |
|  | **LIST OF TABLES** | vii |
|  | **LIST OF FIGURES** | viii |
|  | **LIST OF SYMBOLS/ABREVIATIONS** | xx |
|  | **LIST OF APPENDICES** | xxiii |
|  |  |  |
| **CHAPTER 1** | **INTRODUCTION** | 1 |
|  |  |  |
|  |  |  |
| **CHAPTER 2** | **LITERATURE REVIEW** | 4 |
|  | 2.1 | Sub -heading 1 | 4 |
|  |  | 2.1.1 | Sub-subheading 1 | 4 |
|  |  | 2.1.2 | Sub-subheading 2 | 6 |
|  | 2.2 | Sub-heading 2 | 8 |
|  | 2.3 | Sub-heading 3 | 10 |
|  |  |  |  |  |
|  |  |  |  |  |
| **CHAPTER 3** | **METHODOLOGY** | 11 |
|  | 3.1 | Sub -heading 1 | 11 |
|  |  | 3.1.1 | Sub-subheading 1 | 13 |
|  |  | 3.1.2 | Sub-subheading 2 | 14 |
|  |  | 3.1.3 | Sub-subheading 3 | 16 |
|  |  | 3.1.4 | Sub-subheading 4 | 17 |
|  | 3.2 | Sub -heading 2 | 20 |
|  | 3.3 | Sub -heading 3 | 22 |
|  | 3.4 | Sub -heading 4 | 24 |
|  |  |  |  |  |
|  |  |  |  |  |
| **CHAPTER 4** | **RESULTS AND DISCUSSION** | 26 |
|  | 4.1 | Sub -heading 1 | 26 |
|  |  | 4.1.1 | Sub-subheading 1 | 27 |
|  |  | 4.1.2 | Sub-subheading 2 | 30 |
|  | 4.2 | Sub -heading 2 | 40 |
|  |  | 4.2.1 | Sub-subheading 1 | 41 |
|  |  | 4.2.2 | Sub-subheading 2 | 43 |
|  |  |  |  |  |
|  |  |  |  |  |
| **CHAPTER 5** | **CONCLUSION AND RECOMMENDATION** | 50 |
|  | 5.1 | Sub -heading 1 | 52 |
|  |  | 5.1.1 | Sub-subheading 1 | 52 |
|  |  | 5.1.2 | Sub-subheading 2 | 53 |
|  |  |  |  |  |
|  |  |  |  |  |
| **REFERENCES** | 60 |
| **APPENDICES** | 70 |
| **LIST OF PUBLICATIONS** | 90 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**LIST OF TABLES**

|  |  |  |
| --- | --- | --- |
| **TABLE NO.** | **TITLE** | **PAGE** |
|  |  |  |
| 2.1 | Table caption  | 16 |
|  |  |  |
| 2.2 | Table caption  | 20 |
|  |  |  |
| 2.3 | Table caption  | 27 |
|  |  |  |
| 3.1 | Table caption  | 33 |
|  |  |  |
| 3.2 | Table caption  | 35 |
|  |  |  |
| 3.3 | Table caption  | 41 |
|  |  |  |
| 3.4 | Table caption  | 44 |
|  |  |  |
| 3.5 | Table caption  | 47 |
|  |  |  |
| 4.1 | Table caption  | 55 |
|  |  |  |
| 4.2 | Table caption  | 57 |
|  |  |  |
| 4.3 | Table caption  | 60 |
|  |  |  |
| 4.4 | Table caption  | 62 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **FIGURE NO.** | **TITLE** | **PAGE** |
|  |  |  |
| 2.1 | Figure caption  | 16 |
|  |  |  |
| 2.2 | Figure caption  | 20 |
|  |  |  |
| 2.3 | Figure caption  | 27 |
|  |  |  |
| 3.1 | Figure caption  | 33 |
|  |  |  |
| 3.2 | Figure caption  | 35 |
|  |  |  |
| 3.3 | Figure caption  | 41 |
|  |  |  |
| 3.4 | Figure caption  | 44 |
|  |  |  |
| 3.5 | Figure caption  | 47 |
|  |  |  |
| 4.1 | Figure caption  | 55 |
|  |  |  |
| 4.2 | Figure caption  | 57 |
|  |  |  |
| 4.3 | Figure caption  | 60 |
|  |  |  |
| 4.4 | Figure caption  | 62 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**LIST OF SYMBOLS/ABREVIATIONS**

|  |  |  |
| --- | --- | --- |
| *D, d* | - | Diameter |
|  |  |  |
| *F* | - | Force |
|  |  |  |
| *g* | - | Gravity = 9.81 m/s |
|  |  |  |
| *I* | - | Moment of inersia |
|  |  |  |
| *l* | - | Length |
|  |  |  |
| *m* | - | Mass |
|  |  |  |
| *N* | - | Rotational velocity |
|  |  |  |
| *P* | - | Pressure |
|  |  |  |
| *Q* | - | Volumetric flow-rate |
|  |  |  |
| *r* | - | Radius |
|  |  |  |
| *T* | - | Torque |

**LIST OF APPENDICES**

|  |  |  |
| --- | --- | --- |
| **APPENDIX** | **TITLE** | **PAGE** |
|  |  |  |
| A | Appendix title  | 160 |
|  |  |  |
| B | Appendix title | 180 |
|  |  |  |
| C | Appendix title | 186 |
|  |  |  |
| D | Appendix title | 200 |
|  |  |  |
| E | Appendix title | 205 |
|  |  |  |
|  |  |  |

**CHAPTER 1**

**TITLE OF THE CHAPTER**

 Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

**1.1 Sub-heading**

Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

**1.1.1 Sub-subheading**

Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

**1.1.1.1 Sub-subheading**

Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

**1.2 Sub-heading**

Text should begin at this position. First line of your paragraph must be indented. Text must be typed using double spacing.

**1.3 Sub-heading**

**1.3.1 Sub-subheading**

Text should begin at this position. First line of your paragraph must be indented.

**REFERENCES**

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

Billings. S. A. (1980). Identification of Nonlinear Systems: A survey. *Proc. Instn Electr. Engrs*, *Part D.* 127(6): 272-284.

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

Martin, A. M. Ed. (1991). *Peat as an Agent in Biological Degradation of Waste*. London: Elsevier. 314–362.

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

Sheta, A. F. and De Jong, K.(1996). 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, 360-365.

Sukiman Sarmani (1987). Pencemaran Radioaktif. Dlm. Ahmad Badri Mohamad. *Perspektif Persekitaran*. Petaling Jaya: Fajar Bakti. 71-87.

Theusen, G. J. and Fabrycky, W. J. (1984). *Engineering Economy*. 6th edition. Englewood Cliffs, N. J.: Prentice-Hall.

Veres, S. M. (1990). *Structure Selection of Stochastic Dynamic Systems*. New York: Gordon and Breach Science Publishers.

 **LIST OF PUBLICATIONS**

1. **Indexed Journal**
2. List of your paper
3. List of your paper
4. **Non-indexed Journal**
5. List of your paper
6. List of your paper
7. **Indexed Conference Proceedings**
8. List of your paper
9. List of your paper
10. **Non-indexed Conference Proceedings**
11. List of your paper
12. List of your paper

**Sample of Table in the text**

**Table 4.6** Comparisons of experimental and computer simulation results

|  |  |  |
| --- | --- | --- |
| **Distance Ratio** | **Experimental Result** | **Computer Simulation** |
| 0.125 | 0.25 | 0.19 |
| 0.250 | 0.46 | 0.50 |
| 0.375 | 0.63 | 0.68 |

**Sample of Figure in the text**



**Figure 4.6** Raman spectroscopy showing D and G line for Sample A and B