RESEARCH TITLE

(CONTINUED)

(CONTINUED)

(CONTINUED)

STUDENT’S NAME

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**CONFIRMATION STATUS FOR ACADEMIC REPORT OF**

**BACHELOR’S DEGREE / DIPLOMA (CHOOSE ONE)**

**RESEARCH TITLE (IT MAY BE MORE THAN ONE LINE, USE 1.5 SPACING FOR RESEARCH TITLE)**

**ACADEMIC SESSION: 2024/2025 (DURING REPORT SUBMISSION)**

I, **(CAPITAL LETTER TNR, 7; REMOVE SPACING)** acknowledge and agrees to allow this Report to be kept by Universiti Tun Hussein Onn Malaysia’s Library in accordance with the following terms:

1. This Report is an academic property of the aforementioned student. Notwithstanding, Universiti Tun Hussein Onn Malaysia shall automatically retain a non-exclusive, non-transferable, irrevocable, royalty-fee, worldwide license on the intellectual properties for research and educational purposes.
2. The Library reserves the right to reproduce this Report limited to educational purposes.
3. The Library reserves the right to reproduce the Report for educational exchanges between higher educational institutions.
4. The Library reserves the right to make the digital copies of this Report publicly accessible via the internet in downloadable format provided that the Report is not subject to an embargo. Should an embargo be in place, the digital copy will only be made available as set out above once the embargo has expired.
5. \*\*Kindly mark (√ ) to **ONE (1)** of the options below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **CONFIDENTIAL** | This Report contains information of high security or of great importance to Malaysia as stipulated under the **OFFICIAL SECRET ACT 1972.**  *The Library shall only publish the title and abstract of the Report.* | | |
|  | **RESTRICTED** | Kindly mark (√ ) to **ONE (1)** of the options below | | |
|  |  |  | The Report contains commercially sensitive materials which will breach prior contractual arrangement with any organization/ institutions. | |
|  |  |  | A full text access to this Report will compromise the protection of future intellectual properties rights (including opportunity to publish or patent application) | |
|  |  |  | The Report uses personal sources and/or contains sensitive cultural information which has been obtained on condition that the items be restricted. | |
|  |  | The Report shall be embargo from **Month, Year** to **Month, Year.** | | |
|  |  |  | | |
|  |  | *The Library shall only publish the title, abstract and introduction of the Report prior the expiry of the embargo.* | | |
|  | **FREE ACCESS** | The Report can readily be made available for public to access.  *The Library shall publish the full text of the Report including tables, figures, appendices and other additional information.* | | |
|  |  |  | | |
|  | | | | Approved by, |
|  | | | |  |
| **(STUDENT’S NAME, TNR, 7)** | | | | **(SUPERVISOR’S NAME, TNR, 7)** |
| Permanent Address  ADDRESS  TNR, 7  REMOVE SPACING | | | |  |
|  | | | |  |
| Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \*\* If this Report is classified as **CONFIDENTIAL** or **RESTRICTED**, an official letter from the relevant authority/organization stating reasons and duration for such classification are to be attached in the Report. | | | | |

RESEARCH TITLE

STUDENT’S NAME

A project report submitted in partial fulfilment of the requirement for the award of the Bachelor of / Diploma of ……………………..

Faculty’s Name

Universiti Tun Hussein Onn Malaysia

MONTH YEAR (*Use Submission Month*)

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

[SIGNATURE]

Student : …………………………………….

[STUDENT’S NAME]

Date : …………………………………….

[SIGNATURE]

Supervisor : …………………………………….

[SUPERVISOR’S NAME]

[SIGNATURE]

Co-Supervisor : …………………………………….

[CO-SUPERVISOR’S NAME]

**DEDICATION [OPTIONAL]**

*For my beloved father and mother …*

**ACKNOWLEDGEMENT**

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.

**ABSTRACT**

The abstract is a short summary of the thesis written in a single page only. It should describe the rationale and objectives (problem statement), the methodology, as well as the findings and conclusion of the study undertaken. The abstract should be between 250 - 350 words written in two languages, Bahasa Melayu and English. For English Reports, the abstract begins in English and continues with its Malay translation on the next page. Do not include any literature review, unexplained abbreviations, limitations or suggestions for future research in the abstract. It must be written with a single spacing.

**ABSTRAK**

Abstrak tesis adalah ringkasan pendek sesuatu tesis. Ia menerangkan tentang rasional dan objektif (pernyataan masalah), metodologi, keputusan dan Kesimpulan sesuatu kajian yang dijalankan. Abstrak tersebut antara 250 - 300 perkataan dan ditulis dalam dua bahasa, Inggeris dan Bahasa Melayu. Bagi tesis yang ditulis dalam Bahasa Inggeris, abstrak hendaklah ditulis dalam Bahasa Inggeris diikuti oleh terjemahan dalam Bahasa Melayu pada muka surat berikutnya. Jangan masukkan ulasan karya, singkatan tanpa penjelasan, kekangan kajian atau cadangan kajian lanjutan dalam abstrak.

**CONTENTS**

|  |  |  |
| --- | --- | --- |
|  | **TITLE** | i |
|  | **STUDENT DECLARATION** | ii |
|  | **DEDICATION** | iii |
|  | **ACKNOWLEDGEMENT** | iv |
|  | **ABSTRACT** | v |
|  | **ABSTRAK** | vi |
|  | **CONTENT** | vii |
|  | **LIST OF TABLES** | viii |
|  | **LIST OF FIGURES** | x |
|  | **LIST OF SYMBOLS AND ABBREVIATIONS** | xi |
|  | **LIST OF APPENDICES** | xii |
|  |  |  |
| **CHAPTER 1 : INTRODUCTION** | |  |
|  | 1.1 Introduction | 1 |
|  | 1.2 Research Background | 2 |
|  | 1.2.1 Sub-Heading | 3 |
|  | 1.2.2 Sub-Heading | 4 |
|  |  |  |
| **CHAPTER 2 : LITERATURE REVIEW** | |  |
|  | 2.1 | 9 |
|  |  |  |
| **CHAPTER 3 : RESEARCH METHODOLOGY** | |  |
|  | 3.1 | 10 |
|  |  |  |
| **CHAPTER 4 : RESULTS AND FINDINGS** | |  |
|  | 4.1 | 11 |
|  |  |  |
| **CHAPTER 5 : DISCUSSION AND CONCLUSION** | |  |
|  | 5.1 | 12 |
|  |  |  |
| **REFERENCES** | | 13 |
|  |  |  |
| **APPENDICES** | | 14 |
|  |  |  |

**LIST OF TABLES**

|  |  |  |  |
| --- | --- | --- | --- |
| 1.1 | Analysis for the location of o and w |  | 15 |
| 4.1 | Relation between speed, radius and imperial force |  | 37 |
| 4.2 | Change in rate of flow in pipe system due to  gravity against change in the Reynold Number |  | 39 |
| 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 |

**LIST OF FIGURES**

|  |  |  |  |
| --- | --- | --- | --- |
| 1.1 | Method for flow system control |  | 15 |
| 4.1 | Block diagram for flow control (close circuit) |  | 37 |
| 4.2 | Stability analysis |  | 39 |
| 5.1 | Force analysis |  | 45 |
| 5.2 | Theorem Bernoulli |  | 48 |
| 6.1 | Pipe System |  | 57 |
|  |  |  |  |

**LIST OF SYMBOLS AND ABBREVIATIONS**

- Aluminum oxide/ Alumina

- Proportionality constant

BVP - Boundary value problem

- Specific heat at constant pressure

- Copper

- copper oxide

Greek symbol

- Mass concentration of dust particles/ stretching rate

- fluid-particle interaction for velocity

- Velocity slip parameter

- Similarity variable

Superscript

- Dust particles

- Fluid properties

- Nanofluid phase

- Particle phase

Subscript

- Dust particles

- Fluid properties

- Nanofluid phase

**LIST OF APPENDICES**

|  |  |  |  |
| --- | --- | --- | --- |
| **APPENDIX** | **TITLE** |  | **PAGE** |
|  |  |  |  |
| A | Thesis Status Approval Form |  | 50 |
| B | Examiner Approval |  | 51 |
| C | Title Page |  | 52 |

**CHAPTER ONE**

**TITLE OF CHAPTER**

* 1. **Main Heading**

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

First sentence of the second paragraph begins ONE TAB from the left margin and justify.

* + 1. **Subheading No 1**

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

First sentence of the second paragraph begins ONE TAB from the left margin and justify .

Tables in the thesis must be numbered in Arabic numerals, linked to the respective chapter number. The caption must be appearing above the table, justified, without a period at the end, and single-spaced between lines for each table and the text within the table, should be written using the font size used in the document (as per section 1.9) and single spaced between the lines. If a table spans multiple pages, denote its continuation on the subsequent page as, for instance, "Table 1.1 (continued)."

**Table 1.1:** Number of Reviewed Journals with respect to Publication Source

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of reviewed journals with respect to publication source** | | | |
| **Name of journal** | **No of articles** | **Name of journal** | **No of articles** |
| A Journal of the Decision Science Institutes | 1 | Journal of Business Marketing Management | 1 |
| Academy of Management Journal | 1 | Journal of Business Research | 6 |
|  | | | |
| **Table 1.1**: Continued | | | |
| Industrial Marketing Management | 14 | MIT Sloan Management | 1 |
| Innovation-Management Policy & Practice | 3 | Operation Management of Resources | 1 |
| International Journal of Organizational Innovation | 2 | Organizational Studies | 2 |
| International Business Journal | 1 | Organizational Dynamics | 1 |
| International Business Review | 2 | Production Planning & Control | 1 |
| International Journal of Business and Management | 1 | PLOS One | 1 |
| International Journal of Business Innovation and Research | 1 | R&D Management | 6 |
| International Journal of Innovation Management | 1 | Research Policy | 27 |
| International Journal of Electronic Business Management | 1 | Sciencetometrics | 1 |
| International Journal of Engineering Innovation & Management | 2 | Science and Public Policy | 5 |
| International Journal of Research and Marketing | 1 | Science Technology and Society | 1 |
| International Journal of Technology Management | 1 | Strategic Management Journal | 5 |
| International Small Business Journal | 2 | Strategic Change | 1 |
| Industrial and Corporate Change | 3 | Technovation | 24 |
| Journal of Marketing | 2 | Technological and Economic development of Economy | 1 |
| Journal of Economics & Management Strategy | 1 | Technology Analysis & Strategic Management | 2 |
| Journal of International Marketing | 1 | Technology and Investment | 1 |
| Journal of International Management | 1 | Technology Forecasting & Social Change | 6 |
| Journal of Product Innovation Management | 17 | The International Journal of Human Resource Management | 2 |
| Journal of Purchasing and Supply Chain | 1 | World Journal of Entrepreneurship, Management & Sustainable Development | 1 |
| **Total** | 88 |  | 138 |

**1.1.1.1 Tertiary heading no. 1**

When a table is sourced, provide the source at the end of its caption. Tables should only be included after citation in the text. Additionally, all tables referenced in the text must be listed in the list of tables.

**Table 1.2**: Comparison between lab and simulation computer result (Gist, Schwoerer and Rosen, 1989)

|  |  |  |
| --- | --- | --- |
| **Length Ratio** | **Lab Experiment in Average** | **Comparison Simulation in**  **Average** |
| 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 |

Figures in the thesis must be numbered in Arabic numerals, linked to the respective chapter number (e.g., the third figure in Chapter 4 is labeled "Figure 4.3"). The caption must be appearing below the figure, justified, and single-spaced between lines for each figure and the text within the figure, should written using the font size used in the document (as in thesis writing guideline) and single spaced between the lines.

If the table is arranged horizontally, the following is an example of the format for a horizontal table

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 4.19: Correlation and Discriminant Validity | | | | | | | | | | | | | |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1. Degree of Innovation Uncertainty | **0.801** |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Degree of Innovation Asset Specificity | 0.460 | **0.804** |  |  |  |  |  |  |  |  |  |  |  |
| 3. Information Sharing | 0.658 | 0.518 | **0.790** |  |  |  |  |  |  |  |  |  |  |
| 4. Trust | 0.454 | 0.298 | 0.668 | **0.777** |  |  |  |  |  |  |  |  |  |
| 5. Business Understanding | 0.657 | 0.644 | 0.753 | 0.589 | **0.865** |  |  |  |  |  |  |  |  |
| 6. Communication | 0.662 | 0.486 | 0.765 | 0.637 | 0.825 | **0.862** |  |  |  |  |  |  |  |
| 7. Commitment | 0.658 | 0.552 | 0.758 | 0.618 | 0.827 | 0.793 | **0.852** |  |  |  |  |  |  |
| 8. Decision Synchronization | 0.630 | 0.578 | 0.783 | 0.713 | 0.814 | 0.784 | 0.814 | **0.935** |  |  |  |  |  |
| 9. Resource Sharing | 0.685 | 0.548 | 0.765 | 0.570 | 0.729 | 0.695 | 0.759 | 0.832 | **0.844** |  |  |  |  |
| 10. Absorptive Capacity | 0.678 | 0.550 | 0.562 | 0.565 | 0.651 | 0.681 | 0.698 | 0.699 | 0.612 | **0.839** |  |  |  |
| 11. Disseminative Capacity | 0.612 | 0.437 | 0.672 | 0.549 | 0.668 | 0.644 | 0.752 | 0.767 | 0.717 | 0.689 | **0.851** |  |  |
| 12. Market Performance | 0.570 | 0.365 | 0.612 | 0.516 | 0.527 | 0.502 | 0.585 | 0.646 | 0.675 | 0.573 | 0.592 | **0.871** |  |
| 13. Innovation Survival | 0.658 | 0.354 | 0.623 | 0.668 | 0.534 | 0.587 | 0.643 | 0.662 | 0.589 | 0.610 | 0.622 | 0.715 | **0.764** |

*Note: Values in the diagonal (in bold) represent the square root of the AVE while off-diagonals are correlations*

**Degree of Innovation Asset Specificity**

**Innovation Commercialization Collaboration (COLLABORATION**)

**R2 = 0.454**

**Market Performance**

**R2 = 0.427**

**β = 0.350**

**β = 0.653**

**Figure 5.9:** Mediating effect of (AS🡪COLLABORATION🡪MP)

When a figure is sourced, provide the source at the end of its caption. Figure should only be included after citation in the text. Additionally, all figures referenced in the text must be listed in the list of figures.

A screenshot of a computer

Description automatically generated

**Figure 2.7**: Three collaboration models in commercialization (Sources: Lin *et al*., 2011)

If the figure is arranged horizontally, the following is an example of the format for a horizontal figure.

**Figure 1.3:** Concetual Framework of the Study

Mathematical equations must be written by employing the equation editor in **MS WORD** and 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 (Equation / Eq. 1.1) and (Equation / Eq. 1.2) are given to the third and fourth equations respectively that appear in Chapter 1, as follows:

(Equation / Eq. 1.1)

(Equation / Eq. 1.1)

**REFERENCES (APA)**

American Psychological Association (2011). *What’s New in the Sixth Edition of the Publication Manual*. Retrieved from [http://www.apastyle.org](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

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

**APPENDIX A**