Sri Venkateshwara University

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Ph.D. Thesis Format

MANUAL FOR PREPARATION OF Ph.D. THESIS

MANUAL FOR PREPARATION OF Ph.D. THESIS

(Prescribed Format and Specification)

1. GENERAL:

The manual is intended to provide broad guidelines to the Ph.D. Scholars in the preparation of the thesis. In general, the thesis shall report, in an organized and scholarly fashion, an account of original research work of the research scholar leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented etc) and demonstrating a quality as to make a definite contribution to the advancement of knowledge and the research scholar's ability to undertake sustained research and present the findings in an appropriate manner with actual accomplishments of the work plainly stated and honestly appraised.

2. NUMBER OF COPIES TO BE SUBMITTED:

Six hard copies of the thesis along with a soft copy in PDF format on CD/Pen Drive are to be submitted to the Dean Research. One hard bound copy of the thesis and a soft copy in PDF format on CD should be submitted to the controller of Examinations after the viva –voce examination.

3. SIZE OF THESIS:

The size of thesis should not be less than 225 pages (Pages less than 225 may be accepted in exceptional cases) of typed (font size-12 Times new roman with line spacing 1.5 lines) matter reckoned from the first page of Chapter 1 to the last page of the Appendix.

4. ARRANGEMENT OF CONTENTS OF THESIS:

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

1. Cover Page & Title page
2. Declaration
3. Supervisor Certificate
4. Acknowledgement
5. Table of Contents
6. List of Tables
7. List of Figures
8. List of Symbols and Abbreviations
9. Chapters
10. References
11. Appendices
12. List of Publications
13. Plagiarism Report
14. Conference Certificates

The Tables and Figures shall be introduced in the appropriate places.

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5. PAGE DIMENSIONS AND MARGIN:

TYPING INSTRUCTIONS:

FONT SIZE

Chapter numbers and titles	(Times New Roman -16, Bold, Capital, Center)
Other Headings	(Times New Roman-14, Bold, Capital, Center)
Text	(Times New Roman-12)
Line spacing	(1.5 lines)
Section title and numbers	(Times New Roman-12, capital Bold)
Subsection title and numbers	(Times New Roman-12, Bold)

FONT/TYPE STYLE: Times New Roman (12)

- The synopsis should have the following page margins

Top edge	:	(1inch) 25 mm
Bottom edge	:	(1inch) 25 mm
Left side	:	(1½ inch) 40 mm
Right side	:	(1inch) 25 mm

The thesis should be prepared on good quality white paper preferably not lower than 80 gsm. Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

1. THESIS PREPARATION:

The Scholar shall submit a typed copy of the manuscript to the supervisor for the purpose of approval. In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final thesis. Upon approval of the manuscript by the supervisor, the final thesis should be prepared according to the specification outlined in this section as well as in the following sections

General Typing Instructions:

- Corrections, interlineations and crossing out of letters or w o r d s will not be permitted in any of the copies of the thesis intended for submission. Erasures, if made, should be neatly carried out in all copies.
- A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page.
- The last word of any page should not be split using a hyphen.

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- One and a half spacing should be used for typing the general text. The general text shall be typed in Font Style "Times New Roman "and Font Size 12.
- Single spacing should be used for typing:
    (i) Long Tables
    (ii) Long quotations
    (iii) Foot notes
    (iv) Multiline captions
    (v) References
- All quotations exceeding one line should be typed in an indented space - the indentation being 15mm from either margin.
- The headings of all items 2 to 14 listed in section 4 should be typed in capital letters without punctuation and centered 50mm below the top of the page.
- The text should commence 4 spaces below this heading.
- The page numbering for all items 1 to 9 should be done using lower case Roman numerals and the pages thereafter from Chapter – 1 onwards should be numbered using Arabic numerals.
- All page numbers (whether it is in Roman or Arabic numbers) should be typed without punctuation on the upper right hand corner 15mm from top with the last digit in line with the right hand margin.
- The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered (ii) of consecutively thereon for the remaining pages till the main text of chapter 1. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.
- Any statement to be highlighted or emphasized must be done using regular bold letters. Italics or underlining is not permitted for this purpose.

Cover Page & Title Page: A specimen copy of the Cover page & Title page for thesis is given in Annexure I.

Declaration: The declaration shall be in double line spacing using Font Style Times New Roman, Font Size 13, as per the format shown in Annexure II.

Bonafide Certificate: The Bonafide Certificate shall be in double line spacing using Font Style Times New Roman, Font Size 12, as per the format shown in Annexure III.

The certificate shall carry the supervisor's signature and shall be followed by the supervisor's name, academic designation (not any other responsibilities of administrative nature), department and full address of the institution where the supervisor has guided the research scholar. The term 'SUPERVISOR' must be typed in capital letters between the supervisor's name and academic designation.

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Acknowledgement: The acknowledgement shall be brief and should not exceed two pages when typed in double spacing. The scholar's signature shall be made at the bottom end above his / her name typed in capitals.

Abstract: An abstract is not an introduction. It summarizes the main highlights of your thesis, including the results. The abstract should not exceed 4 pages typed with double line spacing, Font Style Times New Roman and Font Size 12 and not include any citations or figures. The abstract should **briefly**

- Describe the problem and why it is being investigated.
- Summarize the primary methods used in your thesis.
- Describe the major results of the thesis.
- Summarize the conclusion of the results and the implications of your thesis.

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

List of Tables: The list of tables should have the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.

List of Figures: The list of figures should have the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head.

List of Symbols and Abbreviations: One and a half spacing should be used for typing the matter under this head. Standard symbo1s, abbreviations etc. should be used.

Chapters: Divide your overall work into logical portions, and then develop each portion as a chapter. The logical order is likely to be different from the chronological order you completed the work. Each chapter may be further divided into several divisions and sub-divisions.

- Each chapter should be given an appropriate title.
- Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
- Footnotes should be used sparingly. They should be typed single space and placed

- Directly underneath in the very same page, which refers to the material they annotate.

The format for typing Chapter headings, Divisions headings and Sub-division headings are explained through the following illustrative examples.

Chapter heading	:	CHAPTER 1
INTRODUCTION Division heading:		1.1 OUTLINE OF
THEISIS Sub-division heading	:	1.1.2

The word CHAPTER without punctuation should be centered 45mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of' the text starting 20mm, inside from the left hand margin.

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

Numbering of Chapters, Divisions and Sub-Divisions:

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub-divisions within a chapter. For example sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow the number assigned to it.

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

Numbering of Equations:

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering Commencing afresh for each Chapter or Appendix. Thus for example, an equation appearing in Chapter 2, if it happens to be the eighth equation in that Chapter should be numbered (2.8) thus:

$$f_c = k\left[\frac{V_c}{V_c + V_w + V_a}\right]^2 \qquad (2.8)$$

While referring to this equation in the body of the thesis it should be referred to as "Equation (2.8)". (Without quotes).

Tables and Figures: A Table is meant to tabulate numerical data in the body of the thesis as well as in the appendices. All other non-verbal material used in the body of the thesis and appendices such as charts, graphs, maps, photographs and diagrams may be designated as figures.

- A table or figure including caption should be accommodated within the prescribed margin limits and appear on the page following the page where their first reference is made.
- Tables and figures on half page or less in length may appear on the same page along with the text, However, they should be separated from the text both above and below by triple spacing.
- All tables and figures should be prepared on the same paper or material used for the preparation of the rest of the thesis.
- Two or more small tables or figures may be grouped if necessary in a single page.
- Wherever possible, the entire photograph(s) may be reproduced on a full sheet of photographic paper.
- Photographs if any, should be included in colour photocopy form only. More than one photograph can be included in a page.
- Samples of Fabric, Leather etc, if absolutely necessary may be attached evenly in a page and fixed/pasted suitably and should be treated as figures

Numbering of Tables and Figures: Tables and Figures appearing anywhere in the thesis should bear appropriate numbers. The number of the Table should be given at the top of the table with a caption. The number of the figures should be given at the bottom of the figure with caption. The rule for assigning such numbers is illustrated through an example. The fourth figure in chapter 3 will be designated as Figure 3.4. Similar rules apply for tables except that the word Figure is replaced by the word Table. If figures (or tables) appear in appendices then figure 3 in Appendix 2will is designated as Figure a 2.3. If a table to be continued into the next page this may be done, but no line should be drawn underneath an unfinished table. The top line of the table continued into the next page should, for example read Table 2.1 (continued) placed centrally an underlined.

Conclusion Chapter: The conclusion chapter in some sense comprises the "introduction written backwards." The conclusion should include the following:

- Review: "Tell the reader what you just told them." Refresh the reader's memory about the

contents of each preceding chapter at a level of approximately one to two sentences per chapter. The review can be very effective at enabling the reader to understand the overall scope of your work.

- Conclusions: Summarize the salient contributions of your work. Justify that your work constitutes a contribution to the literature worthy of awarding a degree.

- Recommendations for Future Work: Suggest how it would make sense to extend your work in the future. This may include opportunities for confirming or relaxing assumptions required within the scope of your work or applying your work to related research.

List of References: The listing should be typed 4 spaces below the heading "REFERENCES" in single spacing left-justified. The References should be arranged in numerical order according to the sequence of citations within the text.

(1) Reference to journal articles and papers in serial publications should include:

- Last name of each author followed by their initials
- Year of publication
- Full title of the cited article in quotes, title capitalization
- Full name of the publication in which it appears
- Volume number (if any) in boldface (Do not include the abbreviation, "Vol.")
- Issue number (if any) in parentheses (Do not include the abbreviation, "No.")
- Inclusive page numbers of the cited article (include "pp.")

(2) Reference to textbooks and monographs should include:

- Last name of each author followed by their initials
- Year of publication
- Full title of the publication in italics, title capitalization
- Publisher
- City of publication
- Inclusive page numbers of the work being cited (include "pp.")
- Chapter number (if any) at the end of the citation following the abbreviation, "Chap."

(3) Reference to individual conference papers, papers in compiled conference proceedings, or any other collection of works by numerous authors should include:

- Last name of each author followed by their initials
- Full title of the cited paper in quotes, title capitalization
- Individual paper number (if any)
- Full title of the publication in italics, title capitalization
- Initials followed by last name of editors (if any), followed by the abbreviation (in the case of books /reports), "eds." (In the case of books),

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- Publisher (in the case of books),
- City of publication (in the case of books),
- Volume number (if any) in boldface if a single number, include, "Vol." if part of larger identifier (e.g., "PVP-Vol. 254")
- Inclusive page numbers of the work being cited (include "pp.")
- Month and / or year of publication

(4) Reference to thesis and technical reports or books should include:

- Last name of each author followed by their initials
- Year of publication (in bracket)
- Full title in quotes, title capitalization
- Report number (if any)
- Publisher or institution name, city

A typical illustrative list is given below.

[1] Ning, X., and Lovell, M. R., "On the Sliding Friction Characteristics of Unidirectional Continuous FRP Composites," ASME J. Tribol., 124(1), pp. 5-13, 2002.

[2] Barnes, M., "Stresses in Solenoids," J. Appl. Phys., 48(5), pp. 2000–2008, 2001.

[3] Jones, J., (2000), Contact Mechanics, Cambridge University Press, Cambridge, UK, Chap. 6.

[4] Lee, Y., Korpela, S. A., and Horne, R. N., "Structure of Multi-Cellular Natural Convection in a Tall Vertical Annulus," Proc. 7th International Heat Transfer Conference, U. Grigul et al., eds., Hemisphere, Washington, DC, 2, pp. 221–226, 1982.

[5] Watson, D. W., "Thermodynamic Analysis," ASME Paper No. 97-GT-288, 1997.

[6] Tung, C. Y., (1982), "Evaporative Heat Transfer in the Contact Line of a Mixture," Ph.D. thesis, Rensselaer Polytechnic Institute, Troy, NY.

[7] Kwon, O. K., and Pletcher, R. H., (1981), "Prediction of the Incompressible Flow Over A Rearward-Facing Step," Technical Report No. HTL-26, CFD-4, Iowa State Univ., Ames.

[8] Smith, R., (2002), "Conformal Lubricated Contact of Cylindrical Surfaces Involvedin a Non-Steady Motion," Ph.D. thesis, http://www.cas.phys.unm.edu/rsmith/homepage.html

Appendices: Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction and cloud the central theme under discussion. Common examples of information included in appendices are listing of computer programs used to obtain your results, documentation of experimental setups, standards required for your work, tables of raw data, and part drawings.

- Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc.
- Each appendix must be given a descriptive title. Most appendices require at least an introductory paragraph explaining what the appendix contains and why.

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List of Publications:

The list of papers published by research scholar during the period of research shall be given under the heading "List of Publications". The listing as per the format specified in section 6.12 should be typed 4 spaces below the heading "LIST OF PUBLICATIONS" in single spacing left-justified.

2. After the viva-voce examination:

One copy with hard bound binding and one soft copy (pdf file) in a properly labeled CD/Pen drive are to be submitted after the viva-voce examination with all the corrections suggested by the examiners.

3. Binding Specifications

- Each of the 6 copies of the thesis submitted for evaluation should be sewn and bound using flexible cover of thick white art paper. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page**.**
- One hard copy submitted after the viva voce examination should be sewn and hard bound using dark brown soft rexin (cloth) having a square on all edges. Boards used should be of quality strong enough to support the thesis when standing on the shelf. The cover should be printed in golden letters and the text for printing should be identical to what has been prescribed for the title page**.** On the spine of the thesis should be printed in golden lettering of suitable size, from left to right, the title of the degree (i.e., Ph.D.), name of the candidate (title capitalization) and the year of submission.

4. Color of thesis cover : As per Annexure (V)

5. Plagiarism: Plagiarism is the representation of any work or idea of another author as one's own. Remember at all times that plagiarism is a serious offence that could jeopardize an academic career. Scholars are reminded that they are required to respect standards of academic honesty and intellectual property in the case of all material used in the thesis. U.G.C. approved software should be used & a certificate, duly signed by the scholar should be attached, certifying that the thesis being submitted is Plagiarism free to the true of 90%

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6. Concluding Remarks:

- Your thesis must meet all formatting guidelines
- Define unfamiliar terms before using them.
- Every chapter must begin with an overview of the contents of that chapter. Similarly, every section and sub-section must begin with a brief overview of that section.
- One paragraph is usually appropriate for each chapter or major section. One sentence may suffice for a short section.
- Use short, simple sentences. Each sentence should express a single idea.
- Use short, simple paragraphs. Each paragraph should express a single thought. Most paragraphs will be three to six sentences in length.
- All units of measure should be in the SI system
- If your research involves some form of modeling or analysis, develop the equations in the body of your text. Use "Microsoft Equation" or something similar to typeset your equations. Place each equation on a separate line and number your equations sequentially.
- Use tables when absolute numbers are important and graphs when trends are important. Always discuss a table or figure before presenting it.

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Annexure I.

A Case study of Customer Behavior in Iron Products with Reference to International Iron Markets

A Thesis Submitted to Sri Venkateshwara University,

Pakyong, Sikkim

For the award of the Degree of

DOCTOR OF PHILOSOPHY

IN

(Subject)

Submitted by

Name of scholar:

Enrolment No: …

Supervised by

Prof. (Dr.) …….

Designation:

Department of …… School of ……

Sri Venkateshwara University, Pakyong, Sikkim

Month & Year

Annexure II

DECLARATION

I, **……,** hereby, declare that the thesis entitled **"……."** is a bonafide record of independent research work done by me under the supervision of **Prof. (Dr.)**

…… and submitted to **Sri Venkateshwara University, Pakyong, Sikkim** for the award of degree of Doctor of Philosophy in **(Subject).** This thesis has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or any other title.

Place: <<Signature of the Scholar>>

Date: <<Name>>

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Annexure III

SUPERVISOR'S CERTIFICATE

This is to certify that the thesis entitled "**……**
……." is bonafide record of Independent research work done by **……(Scholar name)** under my supervision submitted to **Sri Venkateshwara University, Pakyong, Sikkim** for the award of Doctor of Philosophy in **(Subject name).** This thesis has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or any other title.

Date: - …….

Place:-…….

(Dr.) ……..

Designation:

Sri Venkateshwara University,

Pakyong, Sikkim

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COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis: " ……

……."

Research Scholar Name: ……

Copyright Transfer

The undersigned hereby assigns to the Sri Venkateshwara University, Pakyong all rights under copyright that may exist in and for the above thesis submitted for the award of the Ph.D. degree.

Signature (Research Scholar)

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ACKNOWLEDGEMENT



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ANNEXURE IV

(A typical Specimen of Table of Contents)

<Font Style Times New Roman, Font Size 14>TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	ABSTRACT	iii
	LIST OF TABLES	xvi
	LIST OF FIGURES	xviii
	LIST OF SYMBOLS, ABBREVIATIONS	xxvii
1.	INTRODUCTION	1-57
	1.1 General	1
	1.2 Use of Industrial Waste In Concrete-Making	2
	1.2.1 General	5
	1.2.2 Beneficiation Ceramic Waste	12
	1.2.3 Test on Ceramic Waste Coarse Aggregate	19
	1.2.3.1 General	
	1.2.3.2 Beneficiation Ceramic Waste	25
	1.2.3.3 Test on Ceramic Waste Coarse Aggregate	29
	1.3 SUSTAINABLE CONCRETE TECHNOLOGY	33
	1.4 CERAMIC INDUSTRIAL WASTE AS COARSE AGGREGATE	45
2	LITERATURE REVIEW	58-89
3	RESEARCH METHODOLY	90-100
4	DATA ANALYSIS	101-156
5	DATA INTERPRETATION	157-200
6	RESULT AND DISCUSSION	201-220
7	CONCLUSIONS	221-225
8	RECOMMENDATIONS	226-227
9	REFERENCES	228-235
	APENDICES	

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ANNEXURE-**(V)**

The colour of the thesis cover in various disciplines shall be as follows:

S. No.	Stream/ Specializations	Color
1.	Engineering & Technology	Orange
2.	Commerce and Management	Dark Green
3.	Agriculture	Grey
4.	Arts , Humanities and Social Sciences	Brown
5.	Science	Blue
6.	Computer Science & IT	Cherry Red
7.	Law	Black
8.	Pharmacy	Light Green
9.	Education & Physical Education	Pink
10.	Yoga and Naturopathy	Light Blue
11.	Journalism and mass communication	Purple

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