

GUIDELINES FOR PREPARATION OF THESES/ DISSERTATIONS/ REPORTS

PREAMBLE

While utmost attention must be paid to the contents of the thesis/ dissertation/ report (here-in-after called the 'thesis'), which is being submitted in partial fulfillment of the requirements of the respective degree, it is imperative that a standard format be prescribed. Write up of the thesis may be prepared either in M.S. word or Latex. The same format shall also be followed in preparation of the final soft copies to be submitted to the Library in future.

1. ORGANIZATION OF THE THESIS/ DISSERTATION/ REPORT

This thesis shall be presented in a number of chapters, starting with Introduction and ending with Summary and Conclusions. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into *sections*, *subsections* and *subsubsection* so as to present the content discretely and with due emphasis.

1.1. Introduction

The title of **Chapter 1** shall be Introduction. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the thesis on the basis of the literatures cited. It may also highlight the significant contributions from the investigation.

1.2. Report on Present Investigation

The reporting on the investigation shall be presented in the next chapters with appropriate chapter titles.

- Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted.
- While important derivations/formulae should normally be presented in the text of these chapters, extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices. Representative data in table and figures may, however, be included in appropriate chapters.
- Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages.
- Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right. Equation number of all the Equation should be chapter wise. The number of Equations should follow right alignment.

1.3. Results and Discussions

This shall form the penultimate chapter of the thesis and shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

1.4. Summary and Conclusions

This will be the final chapter of the thesis. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

1.5. Appendix

Detailed information, lengthy derivations, raw experimental observations etc. are to be presented in the separate appendices, which shall be numbered in Roman Capitals (e.g. “Appendix IV”).

1.6. Literature Cited

The list of references should appear **at the end of each chapter** with references listed either alphabetically or sequentially as they appear in the text of the thesis. If pertinent works have been consulted but not specifically cited, they should be listed as Bibliography or General References. Spacing and font size should be consistent inside a single reference, and there should be double spacing between two different references. The font size and line spacing of each reference shall follow the format of original write-up. The reference format of different category of references are given next page:

Reference Format

For referencing an article in a scientific journal and conference proceedings, the suggested format should contain the following information: authors, year, (and/ or) title and name of journal, volume number and page numbers.

For referencing an article published in a book, the suggested format should contain authors, year, the title of the book, editors, publisher along with ISBN No., page number of the article in the book being referred to.

For referencing a thesis the suggested format should contain, author, submitted or awarded year, the title of thesis, name of the organization where the thesis was submitted.

A few examples of formats of references are given below and the student should be consistent in following the style.

i. Journals

Exner, H. E. (1979), “Physical and Chemical Nature of Cemented Carbides”, *International Metals Review*, v. 24, pp. 149-173.

Or

Exner, H. E. (1979), *International Metals Review*, v. 24, pp. 149-173.

ii. Conference Proceedings

Fischmeister, H. F. (1982), “Development and Present Status of the Science and Technology of Hard Materials”, *Science of Hard Materials*, Plenum Press, New York, NY, USA, pp. 1-45.

Or

Fischmeister, H. F. (1982), *Science of Hard Materials*, Plenum Press, New York, NY, USA, pp. 1-45.

iii. Books

German, R. M. (1990), “Powder Injection Molding”, *Metal Powder Industries Federation, Princeton, N. J., USA*.

iv. Thesis

Johnson, J. L. (1994), “Densification, Microstructural Evolution, and Thermal Properties of Liquid Phase Sintered Composites”, *Ph.D. Thesis, the Pennsylvania State University, University Park, PA, USA*.

v. Technical Reports

Zukas, E. G., Rogers, P. S. Z. and Rogers, R. S. (1976), “Experimental Evidence for Spheroid Growth Mechanisms in the Liquid Phase Sintered Tungsten Based Composites”, *Informal Report: Los Alamos Scientific laboratory, USA*, pp. 1-35.

vi. Patents

Oenning V. and Clark, I. S. R. (1991), U. S. Patent No. 4988386.

vii. Journals in Non-English Language

Weihong L. and Xiuren, T. (1988), "Tungsten Matrix in Cu-W Contact Materials by Impregnation Process," *Powder Metallurgy Technology*, v. 6, n. 8, pp. 1- 4 (in Chinese).

Or

Weihong L. and Xiuren, T. (1988), *Powder Metallurgy Technology*, v. 6, n. 8, pp. 1- 4 (in Chinese).

1.7. Publications by the Candidate

Articles, technical notes etc. on the topic of the thesis published by the candidate may be separately listed after the LAST CHAPTER. This may also be included in the contents.

2. THESIS FORMAT

2.1. Paper

2.1.1. Quality

The thesis shall be printed/ Xeroxed on white bond paper, whiteness 95% or above, weight 70 gram or more per square meter.

2.1.2. Size

The size of the paper shall be standard A 4; height 297 mm, width 210 mm.

2.1.3. Type Setting, Text Processing and Printing

The text shall be printed employing laser jet or Inkjet printer, the text having been processed using a standard text processor. The standard font shall be **Times New Roman of 12 pts with 1.5 line spacing.**

2.1.4. Left and Right Margins

The candidates shall have to take double sided printing with mirrored left (38 mm) and right (25 mm) margin.

2.1.5. Header

The header must have the Chapter number and Section number (e.g., Chapter 2, Section 3) on even numbered page headers and Chapter title or Section title on the odd numbered page header.

2.1.6. Paragraph format

Vertical space between paragraphs shall be about 2.5 line spacing. The first line of each paragraph should normally be indented by five characters or 12mm. A candidate may, however, choose not to indent if (s)he has provided sufficient paragraph separation.

A paragraph should normally comprise more than one line. A single line of a paragraph shall not be left at the top or bottom of a page (i.e., no windows or orphans should be left).

2.2. Chapter and Section Format

2.2.1. Chapter

Each chapter shall begin

- On a fresh odd number page with an additional top margin of about 75mm. Chapter number (in Arabic) and title shall be printed at the center of the line in 6mm font size (18pt) in bold face using upper case alphabets).
- A vertical gap of about 25mm shall be left between the Chapter number and Chapter title lines and between chapter title line and the first paragraph.

2.2.2. Sections and Subsections

A chapter can be divided into Sections, Subsections and SubsubSections so as to present different concepts separately. Sections and subsections can be numbered using decimal points, e.g. 2.2 for the second section in Chapter 2 and 2.3.4 for the fourth Subsection in third Section of Chapter 2. Chapters, Sections and Subsections shall be included in the contents with page numbers flushed to the right. Further subsections need not be numbered or included in the contents.

The Section and SubSection titles along with their numbers in 5 and 4mm (16 and 14 pt) fonts, respectively, in bold face shall be flushed to the left (not centered) with 12 point and 6 point spacing respectively above and below these lines. In further subdivisions character size of 3 and 3.5 with bold face, small caps, all caps and italics may be used for the titles flushed left or centered. These shall not feature in the contents.

2.2.3. Table / Figure Format

As far as possible tables and figures should be presented in portrait style. Small size table and figures (less than half of writing area of a page) should be incorporated within the text, while larger ones may be presented on separate pages. Table and figures shall be numbered chapter wise.

For example, the fourth figure in chapter 5 will bear the number Figure 5.4 or Fig 5.4. Table number and title will be placed above the table while the figure number and caption will be located below the figure. Reference for Table and Figures reproduced from elsewhere shall be cited in the last and separate line in the table and figure caption, e.g. (after McGregor[12]).

2.2.4. Non-paper Material

Digital or magnetic materials, such as CDs and DVDs may be included in the thesis. They have to be given in a closed pocket in the back cover page of the thesis. It should be borne in mind that their formats may become obsolete due to rapid change in technology, making it impossible for the Central Library to guarantee their preservation and use.

All the non-paper materials must have a label each indicating the name of the thesis, name of student and the date of submission.

3. Auxiliary Format

3.1. Binding

The evaluation copies of the thesis/dissertation/report may be spiral bound or soft bound. The final hard bound copies to be submitted after the viva-voce examination. They have to be hard-bounded with the following color specifications:

Ph.D. Thesis Blue

M.Tech. Dissertation Black

B.Tech./M.Sc. Project Report Brown

3.2. Front, Back and Side Covers

The front cover shall contain the following details:

Full title of thesis in 18 to 22 point's size font (bold) properly centered and positioned at a distance of 25 cm from the top.

Institute emblem of size 2” height should be placed at the centre of the front cover page.

Name of candidate (in Italic) along with the name of Department, Institute, Year is in 12 to 16-point size, bold shall be placed at a distance of 25 cm from the bottom.

The side cover shall contain the following details:

- Name of degree along with name of thesis and candidates name is to be provided at the closed side of the bounded book.

Sample copies of the ' Front Cover', and 'Side Cover' are appended (**Specimen 'A'**) and (**Specimen 'B'**) respectively.

3.2.1. Lettering in Front Cover and Side Cover

All lettering shall be embossed in silver.

3.3. Blank Sheets

In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the thesis.

3.4. Title Sheet

This shall be the first printed page of the thesis and shall contain the submission statement: the Thesis/Dissertation/project Report submitted in partial fulfillment of the requirements of the Degree, Ph.D. /M.Tech./B.Tech./M.Sc., the name and Roll No. of the candidate, name(s) of the Supervisor and Co-supervisor (s) (if any), Department, Institute and year of submission.

Sample copy of the 'Title Sheet' is appended (**Specimen 'C'**).

3.5. Dedication Sheet and Thought (or Idea) Sheet

The dedication sheet and the thought (or Idea) sheet are auxiliary pages. If the candidate so desires (s)he may dedicate his/her thesis, which statement shall follow the title page. If included, this shall form the page i of the auxiliary sheets but shall not have a page number. If the candidate so desires (s)he may incorporate one thought (or idea) sheet which follow the dedication sheet.

3.6. Approval Sheet

In the absence of a dedication sheet this will form the first page and in that case shall not have a page number. Otherwise, this will bear the number two in Roman lower case “ii” at the center of the footer.

The top line shall be:

1. **Thesis Approval** for Ph.D.
2. **Dissertation Approval** for M.Tech.,
3. **Report Approval** for B.Tech., and M.Sc. Projects, as the case may be.

The Approval Sheets are to be included only in the hard bound copies which are submitted after the successful Ph.D. viva voce examination.

A sample copy of the Approval Sheet is appended (**Specimen `D'**)

3.7. Declaration of Academic Honesty and Integrity

A declaration of Academic honesty and integrity is required to be included along with every thesis/dissertation/report after the approval sheet. The format of this declaration is given in **Specimen `E`** attached.

3.8. Certificate

A certificate is obtained from supervisor/supervisor (s) is to be enclosed. The format of this certificate is given in **specimen `F`** attached.

3.9. Preface, Acknowledgement and Curriculum Vitae

Candidate should include one page preface, one or two pages acknowledgement and one page Curriculum Vitae. Curriculum Vitae is to be given at the last of the thesis after Appendices.

3.10. Contents

The contents shall enlist the titles of the chapters, section and subsection using decimal notation, as in the text, with corresponding page number against them, flushed to the right. The format of the contents is given in **specimen `G`** attached.

3.11. List of Figures and List of Tables

Two separate lists of Figure captions and Table titles along with their numbers and corresponding page numbers against them shall follow the Contents. After that the list of symbols as used in the thesis is to be given.

3.12. Abbreviation Notation and Nomenclature

A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of tables and figures. (As far as possible, generally accepted symbols and notation should be used).

3.13. Abstract

An M Tech. thesis should contain an abstract not exceeding 300 words (about one page), and a Ph.D. thesis should contain an abstract/synopsis not exceeding 500 words (about 1 ½ pages) in double spacing. The abstract shall highlight the important features of the thesis/ dissertation/report and shall correspond to the electronic version to be submitted to the Library for inclusion in the website. The Abstract in the thesis, however, shall have two more parts, namely, the layout of the thesis giving a brief chapter wise description of the work and the key words.

3.14. Copyright Notice

The thesis has to contain copyright notice comprising of the followings:

- a. The encircled symbol “C” ©
- b. The year of the award of the degree
- c. The name of the owner of the copyright
- d. The sentence “All Rights Reserved”

Example:

© 2012 Anamica Das. All rights reserved

3.15. Units

Units used in the thesis should be SI units.

3.16. Pagination

Auxiliary page from dedication (if any) to abbreviations shall be numbered using Roman numerals in lower case.

Page numbers for the body of the thesis should be in Arabic numerals and should be centered at the bottom of the pages. The pagination should start with the first page of Chapter 1 and should continue throughout the text (including tables, figures, and appendices).