

**ANNEXURE – XI**  
**GUIDELINES FOR THESIS PREPARATION**

## **1. INTRODUCTION**

### *Purpose*

This document, herein after referred to as 'Thesis Guide', lists the general and specific requirements governing thesis preparation, including guidelines for structuring the contents.

### *Thesis Submission*

Besides various requirements for thesis submission such as submission of a list of examiners, additional copies of synopsis / abstract, and payment of thesis examination fees (for Ph.D. only), the students and their thesis supervisors should ensure that the guide- lines are adhered to. while submitting the thesis.

## **2. SPECIFICATIONS FOR THESIS FORMAT**

### *Preparation of Manuscript and Copies*

The thesis needs to be prepared using a standard text-processing software and must be printed in black text (color for images, if necessary) using a laser printer or letter quality printer in standard typeface (Times New Roman or Sans Serif font).

The thesis must be printed or photocopied on both sides of white paper. All copies of thesis pages must be clear, sharp and even, with uniform size and uniformly spaced characters, lines and margins on every page of good quality white paper of 75 gsm or more.

Thesis should be free from typographical errors.

### *Size and Margins*

A4 is the recommended thesis size.

The top, bottom and right side margins should be 25mm, whereas the left side margin should be 35 mm for both textual and non-textual (e.g., figures, tables) pages.

Content should not extend beyond the bottom margin except for completing a footnote, last line of chapter/subdivision, or figure/table caption.

A sub-head at the bottom of the page should have at least two full lines of content below it. If the sub-head is too short to allow this, it should begin on the next page.

All tables and figures should conform to the same requirements as text. Color may be used for figures. If tables and figures are large, they may be reduced to the standard size (provided the reduced area is not less than 50% of the original) and /or folded just once to flush with the thesis margin (if the page size does not exceed 250x360 mm).

Students may choose to submit printed thesis copies either in the standard size (as in 2.2.1) or in a book format that is roughly half of A4. If the book format is adopted for submission, it should be ensured that all textual and illustrative material is distinct and legible. Students should also submit the thesis in soft form (PDF) for storage and archival.

### *Page Numbering*

Beginning with the first page of the text in the thesis (chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices.

Page numbers prior to Chapter 1 should be in lower case Roman numerals. The title page is considered to be page (i) but the number is not printed.

All page numbers should be placed without punctuation in the upper right hand corner, 12 mm from the top edge and with the last digit even with the right-hand margin.

### *Multi-Volume Thesis*

A thesis may be in two or more volumes, if required. The volume separation should come at the end(s) of major division(s). Volume I should comprise the preliminary pages prior to chapter 1, except the title page.

### *Line Spacing*

The general text of the manuscript should be in double spacing (3 lines per inch). Long tables, quotations, footnotes, multi-line captions and bibliographic entries (references) should be in single spacing (6 lines per inch), with text size in 12 points (Times New Roman).

### *Tables, Figures and Equations*

All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared, wherever possible, on the same paper used to type the text and conform to the specifications outlined earlier. They should be inserted as close to the textual reference as possible.

Tables, figures and equations should be numbered sequentially either throughout the thesis or chapter-wise using Arabic numerals. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 17, Figure 24, Equation (33), or Table 5.3, Figure 3.11, Equation (4.16), etc.

If tables and figures are of only half a page or less, they may appear on the same page as text but separated above and below by triple line spacing. Font size for text should be the same as for the general text.

Good quality Line Drawings/figures must be drawn using standard software that provides vector rather than bit-map graphics. Figures must be scalable.

Images, Photographs, etc. must be scanned in resolution exceeding 200dpi with 256 greyscales for the monochrome images and 24 bit per pixel for the colour images.

## ***Binding***

The student should submit the copies of the thesis in fully bound form (3 - Spiral Binding) for Ph.D. at the time of submission for evaluation. Once the thesis is accepted, it is the student's responsibility to get it properly bound before depositing 4 copies (1. University copy 2. Institution/Library copy 3. Research Supervisor copy 4. Research Scholar copy) at the time of Viva Voce Examination. The front cover of the bound copy should be the same as the title page of the thesis. The front cover should have printing on the side to include the author's name, abbreviated thesis title (optional), degree, department, and the year.

### **3. GUIDELINES FOR STRUCTURING CONTENTS**

#### ***Sequence of Contents***

The following sequence for the thesis organization should be followed:

- (i) Preliminaries
  - (a) Title Page as per the format given at the end of the Regulation
  - (b) Certificate by the guide at the end of the Thesis
  - (c) Declaration by the candidate
  - (d) Acknowledgement and/ or Dedication
  - (e) Table of Contents  
List of Figures, Tables, Illustrations, Symbols, etc (wherever applicable)
- (ii) Text of Thesis Introduction  
The body of the thesis, summary and conclusions
- (iii) Reference Material List of References, Bibliography (where included)
- (iv) Appendices (if included)
- (v) Index (if included )

All the headings are centered (without punctuation) 25 mm down the top edge of the page. The subsequent type-setting begins four spaces below the heading.

#### ***Preliminaries***

##### ***Synopsis/Abstract***

- (i) A Ph.D. thesis should contain an abstract/synopsis not exceeding 1000 words (about four pages) in double spacing.
- (ii) Synopsis/abstract shall be printed in double space with the heading "SYNOPSIS/ABSTRACT" in uppercase followed by certain preliminary information and the text.
- (iii) Synopsis/Abstract should be self-complete and contain no citations for which the thesis has to be referred.

## *Table of contents*

- (i) The table of contents lists all material that follows it. No preceding material is listed. Chapter titles, sections, first and second order sub-divisions, etc must be listed in it.
- (ii) Tables, figures, nomenclature, if used in the thesis, are listed under separate headings.

## *The Text of the Thesis*

### *Introduction :*

Introduction may be the first chapter or its first major division. In either case, it should contain a brief statement of the problem investigated. It should outline the scope, aim, general character of the research and the reasons for the student's interest in the problem.

The body of Thesis This is the substance of the dissertation inclusive of all divisions sub-divisions, tables, figures, etc.

### *Summary and conclusions*

If required, these are given as the last major division (chapter) of the text. A further and final sub-division titled "Scope for Further Work" may follow.

### *Reference material*

The list of references should appear as a consolidated list 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.

### *Reference Format*

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

For referencing an article published in a book, the suggested format should contain, authors, the title of the book, editors, publisher, year, page number of the article in the book being referred to.

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

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

## *Journals*

- M.Ponnaivaikko and K.S. Prakasa Rao, "Optimal Distribution System Planning", IEEE Trans. (PAS), June 1981, Vol. 100, PP. 2669 2977.
- K.R.Santhi, M.Ponnaivaikko, and N.Gangatharan, " A comparative Study of Stability Testing of 2-D Recursive Digital Filters," Journal of Computer Science, 2008, ISSN 1549-3636, Vol. 4(12), pp 976-981.

## *Conference Proceedings*

- T.Thiagarajan, J.Shanmugham and M.Ponnaivaikko, "Artificial Neural Network based on Fuzzification models for air heat systems", proceedings of the International conference on Trends in Industrial Measurements and Automation, TIMA 99, MIT, Chennai(India), Jan. 7 11, 1999, Paper No:48, PP 34 354.
- C.Lakshmi & Dr.M.Ponnaivaikko, "Improved kernel Discriminative common vector method for face recognition", Proceeding of the IEEE International Advances Computing Conference, March 6-7, Tappar University, Patiala, India, published in IEEE Xplore, pp: 239-244.

## *Books*

- 'Computer Science - Tools', Text Book authored by Dr.M. Ponnaivaikko, for Higher Secondary- Second year. 2006, TamilNadu Text Book Corporation.

## *Thesis*

- Mrs. Jayam Shakthi, "Security Issues in E-Commerce", Ph.D. Thesis, BITS, Pilani, Rajasthan, 2008.

## *Technical Reports*

- Dr.M.Ponnaivaikko, Dr.K.Parthasarathy, "Distribution network planning for the Delhi Metropolitan City upto 1980" A Report on the Project sponsored by the Delhi Development Authority. I.I.Sc., Bangalore, 1976,.

## *Patents*

- Dr.M.Ponnaivaikko, Principal Investigator, Dr.G.P.Dubey, et.al, Inter Disciplinary School of Indian System of Medicine (ISISM), SRM University, "Herbal formulation for the prevention and management of Type-2 diabetes mellitus and vascular complications associated with diabetes", US Patent No. US 8,337,911B2, 2012.

### *Appendix or Appendices*

- (i) Supplementary illustrative material, original data, and quotations too lengthy for inclusion in the text or which is not immediately essential to an understanding of the subject can be presented in Appendix or Appendices (as Appendix A , Appendix B, etc.)
- (ii) Each appendix with its title should be listed separately in the table of contents. Like wise, tables and figures contained in the Appendices are to be included in the lists of tables and figures, respectively.

#### **4. CONCLUDING REMARKS**

This Thesis Guide lists only the basic requirements for preparing the thesis. Over and above the aforementioned points, a thesis should be reader-friendly in both its appearance and presentation. Several aspects of thesis preparation, particularly style of writing and presentation, have not been discussed in great detail. The student should follow appropriate ideas from standard literature of his/ her area of research, and adopt a uniform style and format throughout the thesis, such as in the structural divisions/subdivisions of the thesis, in the mode of citing references and footnotes in the text, in using dimensions, units and notations, and in preparing tables and figures, etc.