**COMPONENTS OF THESIS**

**Preliminary Pages**

The preliminary pages must include the title page, the certificates, acknowledgements, abstract and table of contents. Dedications should not be given.

**a) Title page**

The title page must be printed exactly in accordance with the sample.

**b) Certificates**

Declaration from the candidate and the Certificate from Supervisor and head of the Approved Place of research to be placed as per the Annexure – III and Annexure - IV

**c) Acknowledgement**

Acknowledgements should be brief (a single page). This should follow the title page and page containing the certificate from supervisor. Care should be taken to avoid the social obligations in this section. All those who rendered the help in technical matters should be duly acknowledged.

**d) Abstract**

One page abstract should be included. The abstract should normally include the following information: (1) a statement of the problem the research sets out to resolve; (2) the methodology used; (3) the major findings.

**e) Table of contents**

Except the title page, certificates, acknowledgements and abstract, all other major divisions of the thesis/dissertation should be listed in the table of contents. These division and sub-divisions, if any, must agree in wording and style with the text.

**f) List of Figures**

This page should contain the list of figures with their captions and figures numbers. The caption and figure numbers must match with the body as has been cited in the text.

**g) List of tables**

This page should contain the list of tables with their headings as mentioned in the main body of the thesis.

**h) List of abbreviations/Symbols/Glossary of terms**

These pages are optional. If it is felt that the number of abbreviations, symbols and new terminologies are large in number, they may be put in these pages.

**i) Text**

The detailed organization of the text will vary with theses in different subjects, but a consistent style must be followed. In general, the text should be divided into the following:

(i) Introduction, (ii) Review of Literature, (iii) Methodology, (iv) Analysis (v) Results and Discussion, (vi) Summary & Conclusion (vi) References.

The text of the thesis may also include certain materials such as illustrations, tables, photographs, chemical and mathematical formulae and footnotes.

**j) Tables**

Tables should be self-explanatory. Headings and the column/row entries should be clearly related. Tables less than half a page should be preceded or followed by the text. All tables should be numbered with Arabic numerals, consecutively throughout the thesis. The table numbers should start with the chapter number in which the table has been placed (Example: Tables in chapter 2 should bear the numbers like: 2.1, 2.2, 2.3 etc.)

**k) Formulae/Equation/Expressions**

Mathematical Formulae/Equation/Expressions should be carefully made out by computer. They should not be included in text lines, but should be placed in the proper position with a tab from left margin and in between lines of text. The must bear a number started with the number of chapter in which placed (Example: Equation in chapter 5 should bear the numbers like 5.1, 5.2, 5.3 etc.). The equations numbers should be right aligned and are to be put within parenthesis.

**l) Illustrations/Figures/Image/Photograph**

Illustrations used in the thesis must appear in all the copies. Illustrative materials may be line drawings, photographs, graphs, block diagram, flowchart etc. Illustrations may be inserted wherever needed in the text, numbered in Arabic numerals typed on a thesis paper below the illustration. The illustrations must be prepared using computer. The size of illustrations could be reduced photographically. The figure numbers should start with the chapter number in which the figure has been placed (Example: Figures in chapter 2 should bear the numbers like: 2.1, 2.2, 2.3 etc.). in case colour of the figure/illustration/image/photograph is important, colour prints may be added.

**m) Paper to be used**

The original thesis/dissertation as well as the photocopies should be prepared on a good quality white bond paper of A 4 size. All pages must have 1.5” margin on the left and 1” on the right and on the top and bottom, with no gutter.

**n) Typing**

The general text of the manuscript should be typed in 1.5-space and tables/long quotations/foot notes/Abstract in single space. The general text should be typed using 11-font size with Times New Roman. The heading of an article to be typed in font size 12 (Times New Roman) with all Uppercase Letters whereas sub articles should be in font size 12 (Times New Roman) in small caps style. Normally the thesis is to be typed in black ink.

**o) Pagination**

Certificates of approval, title page, acknowledgements and abstract etc. should not be given any page number. For text, Arabic numerals are used beginning with the first page of the text, i.e., Introduction and continued throughout the rest of the thesis/dissertation including the figures, tables and references. Suppress the page number in first page of each chapter. The page number is to be put as footer on the right bottom corner of each page with the same font and same size of the text.

**IV ABOUT THE CHAPTERS**

**a. Introduction**

A student should explain briefly the purpose of study of the problem involved, justifications for research work, scope of the study and its limitation, the specific objective3s of the research work must be mentioned here. It should be brief, precise and pertinent to the research work undertaken.

**b. Review of Literature**

This should include brief history and present status of the problem as evidenced by documented literature on similar or closely related problem. The findings of various investigators should be critically examined and interpreted in the light of objectives of the thesis problem. Relevant reference should only be cited. The source of information could be given as footnote at the bottom of the page on which matter is initiated for unpublished reference.

**c. Methodology**

This part of thesis should present the variables involved in the study techniques and materials in brief. The details of techniques and equipment employed in the investigation should be clearly stated. In the case of special experimental setups their assembly component details and theoretical consideration to design/proof/theory should be described.

**d. Analysis**

Mathematical techniques adopted for analysis of the problem should be clearly spelled out. In case of the use of software tools the corresponding algorithms should be suitably indicated with the help of annexures.

**e. Results and Discussion**

Under this, the data from experiments/investigations should be presented in complied tabulated form augmented with graphical of specific trend or behaviors of different variables or important observations made. Results any be divided into various sub heads. In presentation care should be taken to avoid repetition. Outstanding points which are important in the table or graph should be indicated. The level of significance should be indicated by certain symbols in footnotes to the table. All measurement should be in metric system on of lengthy and inconvenient sized tables should be avoided.

Discussion section should consider difference and implications of the experiment, it should present the perceptiveness and creatively of the researcher and writer and his final comments.

This is a critical part where art imagination should be shown be writer about range and depth of significance of study.

The discussion section ties the result of the study to both theory and application by pulling together the theoretical background, literature review, potential significance for application and results of the study. One important function of discussion sections is to summarize the findings of the study in the form of conclusions. If the study has been setup to test specific hypothesis along with ancillary findings and should be integrated and interpreted. Discussion should be related to objectives and assumptions made at the start of experiment. Attempt to prove or substantiate a point should be considered and findings of earlier worker should be cited. The explanation should be base don work done by other workers or author himself giving over all conclusion of the study.

**f. Summary & Conclusions**

The Summary should include the jist of the work carried out. It should display the salient fees of the work. The conclusions should be explicit and may as well include the suggestion for the further work in the area.

**g. References**

References to journal papers should contain the *name of the author(s), title of the paper, nam*e *of the journal, volume number, issue number, particular pages (pp) and year of publicatio*n. Similarly conference papers should mention the *name of author(s), title of the paper, name of the conference, place in which the conference was held and date, month and year* of the conference along with *the page numbers of the paper in the proceedings* of the conference. References to books should contain *name of the author, title of the book, name of the publisher, edition number, and year of publication.* If possible ISBN Number also can be quoted.

The style in which the references are to be quoted in the text is shown in Annexure-VI.