

**GUIDELINES FOR THE  
PREPARATION OF  
SYNOPSIS AND THESIS**

## **GUIDELINES FOR THE PREPARATION OF SYNOPSIS**

Synopsis should outline the research problem, the methodology it and the summary and conclusion of the findings. The size of the Synopsis should not exceed 25 pages of typed matter reckoned from the first page to the last page including the list of references and list of publications of the scholar. The sequence in which the synopsis should be arranged is as follows with references and list of publications in separate pages.

- 1) Cover page and title page
- 2) Text divided into suitable headings (numbered consecutively)
- 3) References (not more than 12)
- 4) List of publications (those published/accepted for publications. Mention the impact factor of the journal- only Web of science or Scopus impact factor)

Standard A4 size (297 mm x 210 mm) bond paper may be used for preparing the synopsis. The synopsis should have the following page margins:

|             |   |             |
|-------------|---|-------------|
| Top edge    | : | 30 to 35 mm |
| Bottom edge | : | 25 to 30 mm |
| Left side   | : | 35 to 40 mm |
| Right side  | : | 20 to 25 mm |

The synopsis should be prepared using good quality white paper preferably not lower than 80GSM. One and half line spacing should be used for typing the general text. The general text shall be typed in Font Style Times New Roman and Font Size 13. One or two tables/figures may be included at appropriate places in the text of the synopsis and they should conform to the margin specification. All page numbers (Arabic numbers) should be typed without punctuation on the upper right hand corner 20 mm from top with the last digit in line with the right hand margin. Synopsis should be soft bound with black calico cloth and using flexible cover of thick white art paper. The cover should be printed in black letters on plain white background and the text for printing should be identical to what has been prescribed for the title page. The references such as journals, books, E-books, conference proceedings, patents, etc should be typed following the International standard.

A typical Specimen of Cover page and Title Page  
<Font style Times New Roman>

**SELECTIVE CATALYTIC REDUCTION OF NO<sub>x</sub> ON  
NEW CATALYTIC SYSTEMS**

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**A SYNOPSIS**

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***Submitted by***

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**V. MOHANKUMAR**

**Roll No 1907130004**

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***Under the supervision of***

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**Dr. V. VENUGOBAL**

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Professor

Department of Chemical Engineering

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***in partial fulfillment of the requirements for the award of the degree of***

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**TAMIL NADU, INDIA**

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**APRIL 2022**

## **GUIDELINES FOR THE PREPARATION OF THESIS**

The scholars are expected to read the guidelines carefully, and meticulously follow them in the preparation of the thesis. Non-compliance with any of these instructions may lead to the rejection of the thesis submitted.

### **1. GENERAL**

This Manual is intended to provide general guidelines to the research 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.). Thesis shall demonstrate 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.

### **2. SIZE OF THE THESIS**

The size of the thesis shall be normally between 100 and 300 pages of typed matter reckoned from the title page to the last page of thesis including the reference section.

### **3. ARRANGEMENT OF THE CONTENTS OF THE THESIS**

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

- 1) Cover page and Title page (as shown in Annexure I)
- 2) Certificate by the Research Supervisor (as shown in Annexure II)
- 3) Declaration by the Scholar (Annexure III)
- 4) Abstract
- 5) Acknowledgement (one page only)
- 6) Table of contents (Annexure IV)
- 7) List of Tables (Annexure V)
- 8) List of Figures (Annexure VI)
- 9) List of Abbreviations and Symbols (Annexure VII)
- 10) Chapters
- 11) Appendices (if applicable)
- 12) References
- 13) List of Publications

The Tables and Figures should be included subsequently after referring to them in the text of the thesis. The thesis starting from chapters should be printed on both sides.

#### **4.QUALITY OF PAPER AND MARGIN SPECIFICATIONS**

The thesis should be prepared using good quality white paper preferably not lower than 80 GSM. Standard A4 size bond paper may be used for preparing the thesis. The dimensions of the final bound thesis (5 copies) should be 290 mm x 205 mm.

The following page margins should be followed while preparing the thesis:

|             |   |             |
|-------------|---|-------------|
| Top edge    | : | 30 to 35 mm |
| Bottom edge | : | 25 to 30 mm |
| Left side   | : | 35 to 40 mm |
| Right side  | : | 20 to 25 mm |

The Tables and figures should also conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size.

#### **5. MANUSCRIPT PREPARATION**

While preparing the thesis manuscript, attention should be paid to ensure that all textual matter is typewritten in the same format to the extent possible. Hence, some of the information required for the final typing of the thesis is presented in this section. The headings of all items from 2 to 12 listed in section 3 should be typed in upper case letters without punctuation and centered 50 mm below the top of the page. The text should start 4 spaces below the heading. The page numbering from 1 to 8 should be done using lower case Roman numerals and the pages from 9 to 12 should be numbered using Arabic numerals.

##### **5.1 Cover Page and title Page**

A specimen copy of the cover page and title page for the thesis is given in Annexure II.

##### **5.2 Certificate**

The certificate shall be typed in double line spacing using font style Times New Roman and Font size 12 as per the format shown in Annexure III. The certificate shall be signed by the Supervisor and shall be followed by the supervisor's name academic designation, department and full address of the institution where the supervisor has guided the scholar. Signature of the co-supervisor with details should be included wherever applicable.

##### **5.3 Abstract**

Abstract should be an essay type of description not exceeding four pages outlining the research problem, methodology used and summary of the findings. This shall be typed in one and a half line spacing using Font style Times New Roman and Font size 12.

##### **5.4 Acknowledgement**

It should be very brief and restricted to one page only when typed in one and a half line spacing. The scholar's signature shall be affixed at the bottom right end above the scholar's name typed in capitals.

## **5.5 Table of contents**

The title page, certificate and acknowledgement will not find a place among the items listed in the Table of Contents, but the page numbers of which are in lower case Roman letters. One and a half line spacing should be adopted for typing the matter under this head. A specimen copy of the table of contents for the thesis is given in Annexure IV.

## **5.6 List of Tables**

The list should use exactly the same captions as they are written above the tables in the text. One and a half line spacing should be used for typing under this heading.

## **5.7 List of Figures**

The list should use exactly the same captions as they appear below the figures in the text. One and a half line spacing should be used for typing under this heading.

## **5.8 List of symbols and abbreviations**

One and a half line spacing shall be used for typing the matter under this heading. Standard symbols, abbreviations, etc., shall be used.

## **1.9 Chapters**

The chapters may be broadly classified into three parts: (i) introduction, (ii) the main theme of the thesis and (iii) results, discussion, summary and conclusion. The main chapters may be divided into several sections, divisions and sub-divisions. Each chapter should be given appropriate title. Titles and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.

## **5.10 Appendices**

Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction and spoil the central theme of the thesis. Appendices shall be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc. Tables and references in appendices should be numbered and referred at appropriate places just as in the case of chapters. Appendices shall carry the title of the work reported and the same title shall be included in the table of contents.

## **5.11 List of References**

Any works of other researchers, if used either directly or indirectly, the origin of the material thus referred to should be indicated at appropriate places in the thesis. Such references in the form of research articles, monographs, books, review articles, patents and proceedings shall be cited in the thesis following the international standard. A citation should be placed wherever appropriate, preferably at the end of a sentence. All the citations shall be in the same font as the main text. The list of references should be typed 4 spaces below the heading "REFERENCES" in single line spacing using Font style Times New Roman and Font size 13.

### 5.12 List of Publications

The list of publications (those already published/accepted for publication in journals and papers presented in conferences/symposia) made by the research scholar during the period of research shall be reported in the table of contents.

### 5.13 Tables and Figures

Table means tabulated data in the body of the thesis as well as in the appendices. Others such as charts, graphs, maps, photographs and diagrams may be designated as figures. The table or figure including caption should be accommodated within the prescribed margin limits and should appear on the following page where their first reference is made. All tables and figures should be typed on the same quality paper used for the preparation of the text of the thesis. Two or more small tables or figures may be grouped and typed in a single page, if necessary. Wherever possible, the photograph(s) shall be reproduced on a full sheet of photographic paper or standard A4 size paper.

## 6. TYPING INSTRUCTIONS

**6.1 General:** The impressions on the typed/printed copies should be black in colour. One and a half line spacing should be used for typing the general text. The general text shall be typed in Font style Times New Roman and Font size 13. Long tables, long quotations, foot notes, multiline captions and references should be typed in single line spacing.

**6.2 Chapters:** The format for typing headings, division headings and sub-division headings are as follows

|                      |  |
|----------------------|--|
| Chapter heading      | CHAPTER 1<br>INTRODUCTION  |
| Division heading     | 1.1 OUTLINE OF THESIS  |
| Sub-division heading | 1.1.1 Literature Review<br>1.1.1.1 Romanian views on archaeology |

The word CHAPTER without punctuation should be centered 50 mm 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 20 mm inside from the left hand margin.

The division and sub-division captions along with their numbering should be left justified. The typed material directly below division or sub-division heading should commence 2 spaces below it and should start typing 20 mm from the left hand margin. Within division or sub-division paragraphs are permitted and they should also commence 3 spaces below the last line of the preceding paragraph, with offset from the left hand margin by 20 mm.



## **7. NUMBERING INSTRUCTIONS**

### **7.1 Page Numbering**

All page numbers (whether it be in Roman or Arabic numbers) should be typed without punctuation on the upper right-hand corner 20 mm from the top with the last digit in line with the right-hand margin. The preliminary pages such as title page, acknowledgement, table of contents, etc. should be numbered in lower case Roman numerals. Pages of the main text starting with Chapter 1 should be consecutively numbered using Arabic numerals till the end of the thesis.

### **7.2 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 2 under division 4 belonging to chapter 3 should be numbered as 3.2.4. The caption for the sub-division should immediately follow the number assigned to it. Appendices, if any, should also be numbered in an identical manner starting with appendix 1.

### **7.3 Numbering of tables and figures**

Tables and figures appearing anywhere in the thesis should have appropriate numbers. For example, if a Figure in Chapter 4 happens to be fifth, then assign 4.5 to that figure. Similar rules apply for tables. For example, if a table in chapter 3 happens to be second, then assign 3.2 to that table. If Figures or Tables appear in Appendices, then Table 3 in Appendix 1 will be designated as Table A1.3. Similarly for Figures.

### **7.4 Numbering of Equations**

Equations appearing in each chapter or appendix should be numbered serially, the numbering should commence afresh for each chapter or appendix. Thus for example, an equation appearing in chapter 3, if it happens to be the fourth equation in that chapter should be numbered as (3.4) thus:

$$y' + a(t)y = b(t) \quad (3.4)$$

While referring to this equation in the body of the thesis it should be referred to as equation (3.4).

## **8. BINDING SPECIFICATIONS**

Thesis side pinning/stitching, covered with wrapper printed on 300 GSM white art card and outer side gloss laminated, adhesive binding. The cover (white colour) should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

A typical Specimen of Cover page and Title Page

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**APRIL 2022**



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Department of Botany

Annamalainagar 608 002  
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## **CERTIFICATE**

This is to certify that the thesis entitled “ISOLATION AND CHARACTERIZATION OF MOSQUITO LARVICIDAL COMPOUND(S) FROM SOME MEDICINAL PLANTS AGAINST *Aedes aegypti*, *Anopheles stephensi* and *Culex quinquefasciatus*” is a bonafide record of research work done by **Mr. SOFI IMTIYAZ ALI (Roll No. 1519030011)**, Research Scholar, Department of Botany, Annamalai University, Annamalainagar, under my guidance during the period **2015-2018**, and that this thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title to this candidate or any other candidate.

This is also to certify that the thesis represents the independent work of the candidate.

Place :  
Date :

(Dr. V. RAVIPRASAD)  
Research Supervisor

**DECLARATION**

I, **SOFI IMTIYAZ ALI**, Research Scholar in the Department of Botany, declare that the work embodied in this Ph.D. thesis entitled “ISOLATION AND CHARACTERIZATION OF MOSQUITO LARVICIDAL COMPOUND(S) FROM SOME MEDICINAL PLANTS AGAINST *Aedes aegypti*, *Anopheles stephensi* and *Culex quinquefasciatus*” is the result of my own bonafide work carried out with my personal effort and submitted by me under the supervision of **Dr. V. RAVIPRASAD**, Professor, Department of Botany, Annamalai University, Annamalainagar. The contents of this thesis have not formed the basis for the award of any Degree/Diploma/Fellowship/Titles in this University or any other University or similar Institutions of higher learning.

I declare that I have faithfully acknowledged and given credit and referred to the researchers wherever their works have been cited in the body of the thesis. I further declare that I have not willfully copied others' data/work/results, etc. reported in the journals, magazines, books, reports, dissertations, theses, Internet, etc. and claimed as my own work.

Place:

Date:

Signature of the Research Scholar

Roll No.: 1519030011

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**LIST OF ABBREVIATIONS AND SYMBOLS****ABBREVIATIONS**

|                      |   |   |
|----------------------|---|---|
| AES                  | – | Atomic Emission Spectroscopy                      |
| AIR                  | – | Air Injection Reactor                             |
| BET                  | – | Brunauer-Emmet-Teller                             |
| CFC                  | – | Chlorofluorocarbon                                |
| cm <sup>3</sup> /min | – | Cubic Centimetre per minute                       |
| cm <sup>3</sup> /g   | – | Cubic Centimetre per gram                         |
| CNG                  | – | Compressed Natural Gas                            |
| DRS UV-Vis           | – | Diffuse Reflectance Ultraviolet Visible           |
| EDX                  | – | Energy Dispersive X-Ray                           |
| EPR                  | – | Electron Paramagnetic Resonance                   |
| FT-IR                | – | Fourier Transform Infra-Red                       |
| GC                   | – | Gas Chromatography                                |
| IUPAC                | – | International Union of Pure and Applied Chemistry |
| KHz                  | – | Kilo Hertz  |
| LPG                  | – | Liquid Petroleum Gas                              |
| µm                   | – | Micrometre  |
| nm                   | – | Nanometre   |
| °C                   | – | Degree Celsius                                    |
| RT                   | – | Retention Time                                    |
| RH                   | – | Relative Humidity                                 |
| PCR                  | – | Polymerase Chain Reaction                         |
| UNDP                 | – | United Nations Development Programme              |
| WTO                  | – | World Trade Organisation                          |
| FRBM                 | – | Fiscal Responsibility and Budget Management       |
| BE                   | – | Budget Estimate                                   |
| RE                   | – | Revised Estimate                                  |

**SYMBOLS**

|           |   |                               |
|-----------|---|-------------------------------|
| $\omega$  | – | Absolute frequency            |
| $\rho$    | – | Density of the fluid          |
| $\theta$  | – | Direction of wave propagation |
| $\Omega$  | – | Frequency of the waves        |
| $\phi$    | – | Potential function            |
| $\alpha$  | – | Alpha                         |
| Å         | – | Angstrom                      |
| $\beta$   | – | Beta                          |
| %         | – | Percentage                    |
| $\gamma$  | – | Surface tension               |
| $\theta$  | – | Theta                         |
| $\lambda$ | – | Wavelength                    |
| $\Psi$    | – | Psi                           |

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