



## **GUIDELINES FOR PREPARING THE PH.D. SYNOPSIS/THESIS**

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These guidelines highlight the basic rules necessary for maintaining the quality, format, and appearance of the synopsis/PH.D. thesis submitted to RK University. It is the responsibility of the students and their respective supervisors/co-supervisors to abide by the rules/requirements mentioned in this document. The synopsis/PH.D. thesis will not be accepted if these criteria are not fulfilled. All PH.D. scholars should consult their guides for additional requirements, if any.

## COMPONENTS OF THE SYNOPSIS/THESIS

Each and every synopsis/thesis needs to include the following:

1. Cover Page and Title Page (please see Annexure I)
2. Certificate (please refer to Annexure II)
3. Declaration (please refer to Annexure III)
4. Acknowledgements (Besides acknowledging the usual stakeholders, make sure you also acknowledge the funding agencies/institutes/collaborators for the timely help)
5. Table of Contents\* (please refer to Annexure IV)
6. List of Tables\* (Page I ..... ) (please refer to Annexure IV)
7. List of Figures\* (Page II ... ) (please refer to Annexure IV)
8. List of Symbols, Abbreviations, and Nomenclatures (Page III .... ) (please refer to Annexure IV)
9. Structured Abstract (Page IV...) (please refer to Annexure V)
10. Graphical Abstract (Page V...) (please refer to Annexure VI)
11. Introduction
12. Review of Literature (Page 1, 2, 3....)
13. Objectives
14. Materials and Methods
15. Results
16. Discussion
17. Conclusion
18. References
19. List of Publications
20. Appendices

\*Note: The Table of Contents and the List of Tables/Figures can be inserted using the new features available in MS Word/other programs. Here's a useful link for your reference:

<https://www.youtube.com/watch?v=0xdJzhNu0jA>

## STYLE AND FORMAT

**General:** The synopsis/thesis should primarily be written in the past tense, but the present tense should also be used at certain places (for specific examples, please visit the following two e-resources: <http://www.ncbi.nlm.nih.gov/books/NBK993/> and <http://cgi.stanford.edu/~dept-ctl/tomprof/posting.php?ID=1009>). The synopsis/thesis should be written in error-free English (students need to make a conscientious effort to improve their oral and written communication skills. Those unable to do so need to hire a professional editing service or get premium access to well-known language enhancing programs (such as grammarly.com) before submitting their synopsis/thesis to RKU). The entire thesis must be written in Arial font (black color), size 12, and should be kept justified (it should not be left-aligned, right-aligned, or centered). An “en dash” should be used to indicate number ranges (e.g., 10–44 instead of 10-44). Either US English or UK English needs to be used, but not both (please check the current settings of your MS Word spell checker). It is not possible to cover every single aspect of thesis writing in the university guidelines. Students are therefore requested to upgrade their technical communication skills by attending various seminars, webinars, courses (e.g., IIT Mumbai’s free online course on technical communications), and workshops specifically arranged for this purpose. RKU also arranges such events from time to time.

**Art Work:** Fancy art work that does not contribute to the methodology or outcome of the research work should be strictly avoided. The required line spacing would be 1.5. Single line spacing should be used at the beginning and at the end of each new section, as well as above and below each table/figure. The margin should be 1.5” away from the left (to leave some space for binding) and 1” away from the right, top, and bottom. The text of the thesis must be justified, unless necessary otherwise.

**Header and Footer:** The Header (section name on all pages; right-aligned) and Footer (candidate’s name; left-aligned and page number in Arabic numerals, rightaligned) should be created using the Arial regular font, size 10, and in the title case (with the first letter of each word capitalized).

**Annexure:** Enter the details of various certificates/pages according to the templates provided in the respective annexure. Pay close attention to the font type, font size, and case in these templates.

**Sections, Headings, and Sub-headings:** All sections should be numbered in the text as well as in the table of contents (e.g., **2. MATERIALS AND METHODS...**) and must be in Arial font, size 14, upper case, bold, and left-aligned. All headings must be subsequently numbered and must be in the Arial font, size 12, bold, and in the title case (with the first letter of each word capitalized) and left-aligned (e.g., **2.1 Pharmacognostic Study...**). All sub-headings should be subsequently numbered using the Arial font (regular), size 12, with the title case (wherein the first letter of each word is capitalized). All sub-headings should be left-aligned (e.g., **2.1.1**

**Morphological Study...**). The rest of the text should be in the Arial font, size 12, and should be justified.

**Acknowledgements:** In this section, the student is expected to acknowledge all the funding agencies/institutes/people from whom he/she has received help during his/her doctoral studies.

**References:** This section needs to be presented using standard convention, as outlined below. Tables should never be used for this section. The references need to be listed in the same order in which they appear inside the main text of the synopsis/thesis.

## CONTENT

**Objectives:** This section should provide the complete rationale of the study. You need to comment on why you undertook this particular study.

**Materials and Methods:** This section should mention the names of all the test compounds, materials, reagents, chemicals, plant/biological material, software applications, research instruments/methods used, etc., along with the corresponding sources and/or company names. The procedure needs to be detailed in the form of a flowchart (as a figure) and the same needs to be described in the accompanying text. The

results are not to be included in this section. However, the corresponding locations may be indicated (e.g., the results of the biochemical analysis are tabulated in Table 4.1 and depicted in Fig. 4.2).

**Tables, Figures, and Equations:** The table and figures, along with the corresponding captions, should be centrally aligned and must conform to the margin specifications. Largesized figures should be photographically (or otherwise) reduced to the appropriate size before insertion (without loss of image resolution). The fonts used inside the figures should ideally match with the text font and should be clearly visible. The list of tables and figures should use exactly the same captions as those appearing in the text of the synopsis/thesis. Each figure caption should be placed below the figure and each table caption should be placed above the table using the Arial font, size 12 (bold), in the title case, and should be numbered using Arabic numerals (e.g., **Figure 4.8** Description and **Table 4.7** Description). When referring to the tables, figures, and equations (in the text section), the table/figure/equation numbers should be placed in curved brackets (e.g., (Table 4.1), (Fig. 4.1), or (Eq. 4.1)). Tables, figures, and equations may also be referred to in the running text as Table 4.2, Fig. 4.3, and Eq. 4.4 (e.g., as evident from Table 4.2, as depicted in Fig. 4.3, and as shown in Eq. 4.4) respectively. Equations appearing in each section should be numbered serially using the Arabic numerals. In order to distinguish equation numbers from reference numbers, kindly use **square brackets to denote equations**. Here's an example:

$$A = B \times C \dots\dots\dots [4.1]$$

**Referencing within the Text:** All references within the text must be cited in the numerical order (according to their order to appearance). No reference number should be out-of-sequence. The references must be cited using round brackets/commas/en dashes. Spaces/hyphens should not be inserted anywhere. In case of multiple references, the citations should only contain the first and last reference numbers [e.g., a recent report (1) or previous reports (6, 9), or literature survey (1–4)].

**List of References:** All references should be arranged number-wise in this section, with a single blank line between two references (this section needs to be justified. It should not be left-aligned). The National Library of Medicine's Style Guide (NLM Style Guide) needs to be referred to for this particular section

<http://www.ncbi.nlm.nih.gov/books/NBK7256/?amp=&depth=2>). We recommend using Mendeley Desktop (available for free), EndNote (purchase required), or a similar reference manager for your referencing and citation requirements. Mendeley has a preconfigured NLM citation style (you simply need to locate and install it). We highly recommend using Mendeley (or EndNote) to save your time. Manually updating the list of references (without using any software) is not at all recommended. However, you need to double check the references inserted by Mendeley/EndNote to make sure there are no formatting errors. Please see the NLM Style Guide for more details. The Faculty of Doctoral Studies & Research has uploaded an easy-to-follow HD video tutorial on Mendeley (<https://www.youtube.com/watch?v=EW1-HTDfHPg>). Please view the same in full-screen mode. Please refer to the section below to see a few examples:

**Appendices:** These should be numbered using Arabic numerals (e.g. Appendix 1, Appendix 2, etc.) and should be referred to at the appropriate places in the text of the thesis, using curved brackets. Appendices shall carry the title of the work reported and the same title shall be used in the contents page as well. The appendices should include the copies of all necessary certificates, including the first page of the candidate's publication(s) that are related to the present work.

**Paper Quality:** An A4-sized white Executive Bond Paper (80 to 90 gsm) should be used for the thesis, which should be printed only on one side of the paper.

**Thesis Quality:** The thesis should be hard bound between copper-brown silk leather cover pages, and the lettering should have a golden embossment. The bound side of the thesis should have the NAME OF THE CANDIDATE, NAME OF THE PROGRAM (e.g., PH.D. in PHARMACEUTICS), and the thesis submission month/year (e.g., APRIL 2016) in large, legible, and embossed (golden-colored) lettering, as per the template.

**Thesis Submission:** For the purpose of archiving, two duly signed copies of the bound thesis (one copy for the Faculty of Doctoral Studies & Research and one for the Central Library), along with an electronic copy of the thesis in the .pdf format (saved on a blank CD) are to be submitted to the Associate Director, Faculty of Doctoral Studies and Research, RK University. The supervisors must ensure that all the corrections suggested by the examiners have been incorporated into the thesis (or synopsis).

**ANNEXURE I [COVER PAGE]**

**TITLE**

A SYNOPSIS/THESIS SUBMITTED  
FOR THE AWARD OF THE DEGREE OF

**DOCTOR OF PHILOSOPHY**

IN

**NAME OF SPECIALIZATION**

UNDER THE

**FACULTY OF -----**

SUBMITTED BY

**STUDENT'S NAME**

CURRENT DEGREE

(PH.D. REG. NO.: 123)

SUPERVISOR

**NAME**



**MONTH YEAR**

**ANNEXURE I [COVER PAGE]**

**TITLE**

A SYNOPSIS/THESIS SUBMITTED

FOR THE AWARD OF THE DEGREE OF

**DOCTOR OF PHILOSOPHY**

IN

**NAME OF SPECIALIZATION**

UNDER THE

**FACULTY OF -----**

SUBMITTED BY

**STUDENT'S NAME**

CURRENT DEGREE

(PH.D. REG. NO.: 123)

SUPERVISOR

**NAME**

CO-SUPERVISOR

**NAME**





**MONTH YEAR**

**ANNEXURE II [CERTIFICATE]**



**CERTIFICATE**

This is to certify that the synopsis/thesis titled “Title .....” (title case, bold, but not underlined) has been written under my supervision and that it describes the original research work carried out by Mr./Ms.\_\_\_\_\_ (student’s name in bold, but not underlined), registered at RK University under the Faculty of \_\_\_\_\_ (remove the underlining), in the subject \_\_\_\_\_ (mention your specialization; remove the brackets/underlining), for the Degree of Doctor of Philosophy. To the best of my knowledge and belief, this work is original in nature and has not been submitted to any other institution in India or abroad, as part of a degree/non-degree program.

**Supervisor’s Signature Name:**

Designation:

Primary Affiliation:

**Signature of the Dean/Dir./Dy. Dir. Name:**

Faculty/School of \_\_\_\_\_

RK University

**Co-supervisor’s**

**Signature Name:**

Designation:

Primary Affiliation:

ANNEXURE III [DECLARATION]



**DECLARATION**

I hereby certify that I am the sole author of this synopsis/thesis and that neither any part of this synopsis/thesis nor the entire synopsis/thesis has been submitted to any other institution in India or abroad, as part of a degree/nondegree program. I certify that, to the best of my knowledge, my synopsis/thesis does not infringe upon anyone's intellectual property rights, and that any contents (including but not limited to ideas, techniques, quotations, etc.) excerpted from the work of other people have been fully acknowledged in accordance with the standard referencing practices. Wherever any copyrighted material is surpassing the bounds of fair use, a written permission has been obtained from the copyright owner(s) (to permit the inclusion of such material in my synopsis/thesis) and a copy of the same has been included in the appendix section. I declare that this is a true (and final) copy of my synopsis/thesis and that it includes all revisions, as approved by my synopsis/thesis review committee.

I also acknowledge that this thesis is free of plagiarism and that I am fully aware of the plagiarism prevention policy of RK University.

Candidate's Signature

**Candidate's Full Name**

Candidate's Designation and Primary Institutional Affiliation

Ph.D. Registration No.: \_\_\_\_\_ (as it appears on the Ph.D. registration certificate) Date:

\_\_\_\_\_

Place: \_\_\_\_\_

## ANNEXURE IV [SAMPLE TABLE OF CONTENTS]

### TABLE OF CONTENTS

|  |     |
|--|-----|
| List of Tables.....  | I   |
| List of Figures.....   | II  |
| List of Symbols, Abbreviations, & Nomenclatures.....   | III |
| Abstract .....   | IV  |
| Graphical Abstract.....  | V   |
| Chapter  |     |
| 1. Introduction & Review of Literature.....  | 1   |
| 1.1 Insert the Second-Level Heading Here.....  | 1   |
| 2. Objectives.....   | 7   |
| 2.1 Insert the Second-Level Heading Here.....  | 7   |
| 3. Materials and Methods .....   | 15  |
| 3.1 Insert the Second-Level Heading Here .....   | 15  |
| 4. Results .....   | 25  |
| 4.1 Insert the Second-Level Heading Here.....  | 25  |
| 5. Discussion .....  | 100 |
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| References   |     |
| .....  | 140 |
| List of Publications .....   | 150 |
| Appendices   |     |
| Certificate A (approval certificate of a regulatory committee for conducting animal experiments, clinical trials, data collection, etc.) |     |
| Certificate B (any other relevant certificate)   |     |
| Publication A (first page only)  |     |
| Publication B (first page only)  |     |

## ANNEXURE IV [SAMPLE TABLE OF CONTENTS]

### LIST OF TABLES

|                                |    |
|--------------------------------|----|
| 1.1 Insert the title here..... | 5  |
| 1.2 Insert the title here..... | 6  |
| 2.1 Insert the title here..... | 8  |
| 2.2 Insert the title here..... | 11 |
| 2.3 Insert the title here..... | 13 |

### LIST OF FIGURES

|                                  |    |
|----------------------------------|----|
| 2.1 Insert the caption here..... | 8  |
| 2.2 Insert the caption here..... | 10 |
| 3.1 Insert the caption here..... | 16 |
| 3.2 Insert the caption here..... | 19 |
| 3.3 Insert the caption here..... | 22 |

### LIST OF SYMBOLS, ABBREVIATIONS, AND NOMENCLATURES (list these in an alphabetical order)

| Sr. No. | Symbol/Abbreviation/Nomenclature | Meaning | Page No. |
|---------|----------------------------------|---------|----------|
| 1.      | Symbol                           | Meaning | 3        |
| 2.      | Abbreviation                     | Meaning | 10       |
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**ANNEXURE - V [SAMPLE STRUCTURED ABSTRACT]**

**ABSTRACT**

(Word Limit: 400 Words excluding the names and keywords)

**[THESIS TITLE]**

Submitted By: [Your name as found in the official RKU records, excluding any titles. Please mention your institutional affiliation here. You also need to mention that you are a PH.D. scholar of RK University.]

Supervised By: [Supervisor's name, designation, and affiliation]

Co-Supervised By: [Supervisor's name, designation, and affiliation]

Keywords: Keyword 1, Keyword 2, Keyword 3, Keyword 4, Keyword 5, Keyword 6, Keyword 7, Keyword 8, Keyword 9, Keyword 10 (at least ten keywords)

**Background:** Previous contributions made by other researchers and the identified shortcomings.

**Aim:** Why did you undertake this research work and what problem(s) are you trying to address?

**Materials and Methods:** Briefly describe the materials and methods used.

**Results and Discussion:** Briefly mention your key findings objectively and then comment on the same.

**Conclusions:** What would you infer from your study and what would be the most significant contributions of your research work to your discipline? Are you able to identify the shortcomings of your research?

**ANNEXURE - VI [GRAPHICAL ABSTRACT]**

**GRAPHICAL ABSTRACT**

**[THESIS TITLE]**

Submitted By: [Your name as found in the official RKU records, excluding any titles. Please mention your institutional affiliation here. You also need to mention that you are a PH.D. scholar of RK University.]

Supervised By: [Supervisor's name, designation, and affiliation]

Co-Supervised By: [Supervisor's name, designation, and affiliation]

**Insert a high-quality (original) image that graphically depicts the central theme of your Ph.D. Thesis. Images downloaded from the internet cannot be accepted as graphical abstracts.**