(Appendix-iii)

RECOMMENDATION FOR SUBMISSION OF THESIS

According to the Appendix "5" of URC-02 document concerning process of submission of thesis "if the SRC finds the work presented to be worthy of Ph.D., submit the dissertation within three months from the date of pre-dissertation submission presentation." However, point 20 of the check-list for Pre-Submission Presentation of Dissertation/thesis insist on plagiarism check done on the draft thesis. Both the above stated point clash with each other. It is also recommended that plagiarism report duly signed by supervisor, co-supervisor (if any) and librarian should be attached with the copies of dissertation, both soft copy and hard copy, to the Controller of Examinations, for evaluation through SRC. Recommendations proposed are:

- 1. The point 20 in CHECK-LIST of Pre-submission of thesis should be removed and incorporated as point 15 in CHECK-LIST for final submission of thesis.
- 2. Proposed changes in the different section of thesis

Thesis:	(Tentative	Chapters)	

Appendices

1.	Title	(same as given Annexure I)
2.	Dedication	(optional)
3.	Declaration	(correction in candidate/supervisor declaration; attached as annexure II)
4.	Acknowledgement	(acknowledge to anybody from family members, friends, contributors etc.)
5.	Abstract	(up to 250 words only)
6.	Table of Contents	(in details with heading, sub-heading, sub-sub-heading with Page numbers)
7.	List of Figures and Tables	(if, figure and tables used in the thesis)
8.	Abbreviations, Notations and Nomenclature	(with full form of abbreviations used in the thesis)
9.	List of Publications	(a list of publications in Journals and Conference, based on thesis work)
10.	Introduction	(Aims & objectives should be merged in Introduction)
11.	Review of Literature	
12.	Chapters	(Plan of Work and Methodology/ Materials & Methods/Data Analysis and Interpretations/Findings and Discussion/ or as approved by the respective SRC)
13.	Conclusion and Future Scope of Work	
14.	Bibliography/ References	(Not to be included in chapter numbers)

Approved
amalile
10/2/2021

Appendices:

- I. Questionnaire
- II. Proofs of Papers Published (based on the thesis)
- III. Brief Biography of the Research Scholar
- IV. Brief biography of the Supervisor and Co-Supervisor
- V. Plagiarism Certificate (Issued & duly signed by the University Librarian & Supervisor(s))

Note:

- In Thesis Sr. No. 2 to 10 is known as Preliminary chapters/ pages. Pagination of these pages shall be presented in lower case of Roman Numerals e.g. i, ii, iii etc.
- Main chapter from Introduction to onwards, pagination shall be in Indo-Arabic Numerals, e.g. 1, 2, 3, etc.
- 3. On the cover page of thesis (Hard Copy); Month and year of submission of thesis should be mentioned.
- 4. The footer will contain Page numbering in the text of the thesis shall be Indo-Arabic numerals (e.g. 1, 2, 3) at the center of the footer. Left side should have PhD Thesis, and right side K.R Mangalam University e.g.

Ph.D. Thesis

1

K.R. Mangalam University

- 5. Vertical space between paragraphs shall be about 1.5 line spacing. The first line of each paragraph should normally be indented by five characters or 12mm.
- 6. On successful completion of the oral defense examination, the scholar will submit bound volumes of the thesis as per the followings
 - a. Central Library of K.R Mangalam University
 - b. Departmental Library of K.R Mangalam University
 - c. Controller of Examinations
 - d. Supervisor
 - e. Co-supervisor (not needed if there is no Co-supervisor)
 - f. Candidate (self-copy of the scholar)

These should incorporate all necessary corrections/modifications and must contain the following copyright certificate in the beginning of the thesis, on a separate page on the left side:

©K.R. Mangalam University, Gurugram -122003. All rights reserved

- 7. The hard-bound copies need to be submitted on the day of external viva.
- 8. Color of PhD theses will be Maroon embossed with golden.
- 9. The candidate shall follow the APA Style 7 th edition /MLA style 7th edition of citation and style of listing will be consistently same throughout his/her thesis.

Annexure-I

TITLE OF THESIS

Thesis submitted in fulfillment for the requirements of the degree of

DOCTOR OF PHILOSOPHY

Name of Research Scholar

Roll No:----

Under Supervision of Name of Supervisor (Supervisor)



Department of ----School of -----

K.R. MANGALAM UNIVERSITY

Sohna Road, Gurugram, Haryana, India

Month and Year of Thesis Submission

(Times New Roman, All capital, BOLD, Font 20, 1.5 Line Spacing)

(Font 14, Space 14 points)

All capital, BOLD, Font 18)

(BOLD, Font 18)

(Font 14)

(Font 16)

(Font 18, Bold)

(Font 14)

(4x4 cms.)

(Font 14)

(Font 14, 1.5 line spacing)

(Font 14, Bold)

(Font 14, 1.5 line

spacing)

(Font 14, Bold)

Annexure -II

DECLARATION

I, hereby, declare that the research work present	ed in the thesis titled, "
submitted by me at the Department of	, School ofof K.R. Mangalan
University, Gurugram, in fulfillment of the require	rement for the award of the degree of "Doctor o
Philosophy", is an authentic record of my o	original research work carried out under the
supervision of Dr and Co-supervis	sion of Dr The work presented in
this thesis has not been submitted by me in ar	ny form (part or full) for any other degree of
diploma to this University or elsewhere.	
I, further declare that, if my thesis is found of	conied or comes and a late to the
violation or any legal dispute arises at any stage o	frime I will be calculated as 11.5 cm.
University shall have sole right to cancel my research	responsible for it and the
see of the second region to cancer my research	uch work at initio and the degree.
Date:	Signature of the Candidate
	o sandada o
I/We certify that the research work done by	embodies original work
done by him/her under my/our supervision and v	wouch that there is no plagiarism and that the
work presented in this thesis has not been submit	ted for the award of any other degree/diploma
anywhere else and is in accordance with UGC- reg	
Name of Co-Supervisor:	
Signature of Co-Supervisor:	
Date:	Place:
(Signature(s) of the Co-Supervisor, if applicable)	
	5
Name of Supervisor:	
Signature of Supervisor	
Date:	Place:

Approved
autolite
17/2/21

G. Checklist for Preparing Thesis

Following checklist will help in planning, organizing and writing Thesis. It can also be used by the supervisor(s) and SRC to verify that the Thesis is in order.

Introduction: Objectives, Scope and Limitations

- 1. Are the objectives of research and scope clearly spelt out?
- 2. Are the objectives based on in-depth literature review, state-of-art?
- 3. Are scope and limitations of research clearly mentioned?

Literature Survey

- 4. Is the literature survey up-to-date and exhaustive?
- 5. Are the international/national journals of repute referred?
- 6. Are the research gaps clearly identified?

Methodology

- 7. Is the methodology adopted described exhaustively?
- 8. Are all data sources mentioned/defined?
- 9. Is the research methodology adopted up-to-date?

Results and Discussions

- 10. Are the outcomes of research discussed at length?
- 11. Is the knowledge addition in the area of research clearly presented?

Conclusions and Future Scope of Work

- 12. Are the conclusions clearly spelt out?
- 13. Are the specific contributions to the field of research revealed?
- 14. Is the future scope of work stated?

References

- 15. Is the citation of references done in standard format?
- 16. Are all the references cited in the text?
- 17. Are the references relevant and adequate to the work?

Documentation of Thesis

- 18. Is the work properly divided in to chapters?
- 19. Has the candidate made sections/subsections to explain his work?
- 20. Are the figures/tables presented neatly?
- 21. Are the captions for figures/tables proper and consistent?
- 22. Is the list of tables, figures, symbols/acronyms given in the thesis?
- 23. Is proper acknowledgement attached?
- 24. Is the flow of writing logical?
- 25. Are the appendices appended properly to the thesis?
- 26. Is the list of papers published/presented based on the thesis included?
- 27. Is the included brief biography of candidate and supervisor(s) included?

H. Thesis Format

Following guidelines shall be followed for all Synopsis/ Thesis:

• Paper:

o **Type:** On good quality white paper 80-100 gsm.

o Size: A4 size

• Page Layout:

o **Orientation**: Portrait

o Margins:

At least $1\frac{1}{4}$ - $1\frac{1}{2}$ inches (3.17-3.81cm) on the left-hand side, 3/4 - 1 inch (2 -2.54cm) at the top and bottom of the page, and about $\frac{1}{2}$ - 0.75 inches (1.27 - 1.90cm) at the outer edge. The best position for the page number is at top-Centre or top right $\frac{1}{2}$ inch (1.27 cm) below the edge. Pages containing figures and illustration should be suitable paginated.

- o **Print:** Typescript should appear on one side only.
- o **Line spacing**: at least one-and-a-half spaced. Footnotes, quotations, references and photographic captions may be single spaced.
- **Font:** Times New Roman (preferred) / Arial / Courier New.

Font sizes:

Chapter Title 16 point Bold, Center justified, double space

Headings 14 point Bold Subheadings 14 or 12 point Bold

Body-text (paragraphs): 12 points, Not Bold, Justified

Footnotes 8-10 point

Footnotes shall be given on the same page where reference is quoted.

Length of Thesis

The maximum and minimum length of theses (number of pages) is dependent of the research area and work done. It is expected that the work presented for the degree of Ph.D. should normally be between 40,000 - 120,000 words of text. Candidates wishing to greatly deviate these sizes should discuss the matter with their supervisors and SRC.

• Binding:

- The final theses must be bound in a permanent form (hard binding to be done after defense of the thesis).
- o For evaluation, soft binding/spiral binding shall be done.
- o Front cover should be as per Annexure I, properly spaced and embossed in gold. Their sizes should be: Title 24 pt., name of the candidate 18 pt. and the name of the School 14 pt., Name of University 18 pt.
- O Spine of the thesis should show "Ph. D. Thesis" on top across the width of spine, name of the candidate in the middle along the length of spine, and the year of submission across the width at the bottom. Lettering on spine should be in 18 pt. bold.

I. Checklist for Final Submission of Dissertation/Thesis

Roll Number

CD.

envelope from Supervisor(s)

submission presentation.

13.

14.

Following checklist shall be filled for final submission or Thesis and submitted to SRC along with the Thesis.

K. R. Mangalam University, Sohna Road, Gurugram

CHECKLIST for Final Submission of Dissertation/Thesis

Name Letter	e of the Candidate (in Block rs)			
S.No.	Requirements for submission of Thesis		Remarks,	if
1.	Pre-submission presentation to SRC done and Thesis was approved by SRC for Final Submission.			
2.	Thesis prepared as per the specified format			
3.	Preparation of thesis duly checked and certified by supervisor(s).			
4.	Verified the correctness of thesis title as approved by the URC.			
5.	Plagiarism check done on Thesis.			
6.	Plagiarism check report attached.			
7.	Supervisor has approved the Thesis			
8.	Co-Supervisor(s) have approved the Thesis			
9.	Self-declaration certificate stating that research carried out by the scholar is original and has not been submitted for any other degree / diploma, institution.			
10.	Certificate from the Supervisor/Co- Supervisor(s)			
11.	Three (or more) copies of Thesis made in soft (spiral) binding.			
12.	Soft copies of thesis (in a single PDF format) and synopsis on a			

Date:	Place: _				

Details (in specified format) of six external Examiners in sealed

Thesis submitted to COE within three months of pre-

Appendix "5" Ref: URC Agenda Item No. 02.05 (Page **14** of **22**)

Name of Co-Supervisor:		
Date:	_ Place:	Signature of Co-Supervisor
Name of Co-Supervisor:		
Date:(Note: Signature(s) of the Co-Su	Place: pervisor(s) required, if applicable)	Signature of Co-Supervisor
Name of Supervisor:		Signature of Supervisor
Date:	_ Place:	S stand of cape.

K. Guidelines for preparation of Thesis/Dissertations

- 1. The Thesis must meet the standards of a scholarly writing. The entire work shall be divided into suitable chapters, sections, and sub-sections.
- 2. The objective(s), scope, limitations of research, general conclusions, specific conclusions, specific contributions and future scope of work shall be clearly spelt out in the thesis.
- 3. The thesis shall be written in English language.
- 4. It should be word-processed on single side of paper. See more details under "Thesis Format".
- 5. Soft copy of the Thesis shall be given on a CD/DVD as a single PDF file and this copy must be exactly same as the Hard copy. The soft copies of papers published/presented, and synopsis shall also be included.
- 6. All figures, diagrams, images and tables shall be numbered consistently followed throughout the thesis document. Be sure to give caption to each table/figure and they are cited in the text. Mention data sources below the Tables/Figures if any. Figures should be made as self-explanatory as possible.
- 7. Use only standard abbreviations. Avoid abbreviations in the title and chapter headings/sub headings. The full term for which an abbreviation stands should precede its first use in the text.

8. Detailed guidelines for different sections are given below:

- a. Cover Page/Title Page: This shall be the first printed page of the thesis. A Sample sheet is enclosed (Enclosure-I). The cover page is the front cover of bound thesis. The title page is the first page inside. Two shall be identical. The title should be exactly as approved by the URC.
- b. *Dedication*: Optional. If a candidate desires, s/he may dedicate the thesis to whomsoever desired. The dedication shall follow the title page. If dedication is included, this shall form the page (i) of the auxiliary sheets but shall not have a page number.
- c. *Certificate*: A declaration of academic honesty and integrity is required to be included along with the thesis. A sample is given in **Enclosure-II**.
- d. *Acknowledgement*: Acknowledgement page shows the essence of the thesis' author and his/her experience. Include the names of people who actually did help you during your research. It should contain candidate's signature. A sample is given in **Enclosure-III**.
- e. *Abstract*: The minimum 500 words abstract shall highlight the problem, methodology, important features and achievements of the thesis.
- f. *Contents*: The contents shall follow the abstract and shall enlist the titles of the chapters, sections and subsections using decimal notation, with corresponding page number against them, flushed to the right.
- g. List of figures and Tables: List of figures with corresponding page number against them to the right and then List of Tables with corresponding page numbers at the right shall

follow the contents. All these must be captioned, serially numbered and referred in the text.

- h. *Abbreviations, Notations and Nomenclature*: A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided.
- i. *List of Publications*: A complete list of publications (Journals and Conferences) shall be included here.
 - Note: Auxiliary pages from dedication to abbreviations shall be numbered using Roman numerals in lowercase, e.g. (i), (ii) etc., while the text starting from the **Introduction** till end shall bear page numbers starting from 1.
- j. *Introduction*: The title of Chapter 1 shall be Introduction. It shall justify the problem posed, define the topic and shall include the objectives of the work presented in the thesis.
- k. *Review of Literature*: The chapter 2 title shall be Review of Literature. This normally presents the developments in the area, to emphasize the current status and importance of the research problem identified.
- I. Chapters: Report on the present investigation suitably divided in to chapters. The report on the investigations/findings shall be presented in one or more chapters with appropriate chapter titles. It is suggested that there shall be at least 4 chapters in addition to Introduction, Review of Literature and Conclusions. Each chapter should include
 - Introduction
 - Experimental setups/Procedures adopted/Methodologies/techniques adopted
 - Results
 - Discussions
- m. *Conclusions and Future Scope of Work*: This will be the final chapter of the thesis. A brief of the work carried out shall be the first part of the chapter. Conclusions derived from the all chapters should be presented here. Scope for future work should be stated lucidly in the last part of this chapter.
- n. *References*: Citation from websites should include the names(s) of author(s) (including the initials), full title of the article, website reference and when last accessed. Reference to personal communications, similarly, shall include the author, title of the communication (if any) and date of receipt (A sample is enclosed as **Enclosure-IV**).
- o. *Appendices*: It is an optional part of the thesis. Detailed information, lengthy derivations, raw experimental observations etc. shall be presented in the separate appendices, which shall be numbered as "Appendix I", "Appendix II" and so on. Each appendix shall have a title.
- p. Brief Biography of the Candidate (maximum 1 page).
- q. Brief Biography of the Supervisor (maximum 1 page)

Enclosure-III

ACKNOWLEDGEMENT

I would like to express a deep sense of gratitude and thank profusely to <name of supervisor>,

<designation> in <name of school>, K.R.Mangalam University, Gurugram, who was my thesis

Supervisor. Without the wise counsel and able guidance, it would have been impossible for me to

complete this dissertation.

I also express a deep gratitude to <name of co-supervisor>, <designation> in <affiliation of co-

supervisor>, my thesis Co-Supervisor, without whose wise counsel and able guidance, it would

have been impossible for me to complete this dissertation.

I am highly grateful to the Dean and Chairperson SRC, <name of the School>, KRMU and all

members of SRC for providing this opportunity to carry out the present thesis/ work.

The constant guidance and encouragement received from <name(s)> at KRMU. Gurugram has

been of great help in carrying the present work and is acknowledged with reverential thanks.

The help rendered by <Name, designation, organization>, and associates for the literature and

experimentation is greatly acknowledged.

The author expresses gratitude to other faculty members of School of <name of school>, KRMU,

Gurugram, for their intellectual support throughout the course of this work.

Finally, the candidate is indebted to all whosoever have contributed in this thesis work and

KRMU, Gurugram for giving opportunity to me to enhance my qualifications.

Signature with date

(NAME OF CANDIDATE)

References

- All the references listed in the **References** should be mentioned in text of dissertation.
- In-text references numbering should be in sequence.
- In text references shall be cited in square brackets e.g. [2]
- Uniformity of reference format is maintained in dissertation and references are formatted as per guidelines.
- Each reference shall contain all the necessary information. See the examples below:

1. Journal article

Author(s). "Article Title". *Journal Title*, vol.(no.), pp, date. DOI. Examples:

- [1] Bruce Rittmann, E. (1996) "How input biomass affects sludge age and process stability". *ASCE: J. Env. Engg*, 122, 4-8. DOI.
- [2] Neumann T., Ermert H. (2014) "Schlieren visualization of ultrasonic wave fields with high spatial resolution". *Journal of Ultrasonics*. 74(1), 561-566, Jan 2014. DOI.
- [3] Capodaglio, A.G., et.al (1991) "Sludge bulking analysis and forecasting: application of system identification and artificial neural computing technologies". *Water Res.*, 25(4), 1217-1224. DOI.

2. Book Chapters

Author(s). "Chapter Title" in *Book Title*, edition. Editors name, Ed. Publishing location: Publishing Company, year, pp. ISSN.

[4] Bourne, J.E. "Synthetic structure of industrial plastics", in *Plastics*, 2nd ed., J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15-67. [ISSN].

3. Book

Author(s). Book Title. Publishing Company, Year. [ISSN]

[5] Chen, W.K. Linear Networks and Systems. Belmont, CA: Wadsworth, 1993.

4. Articles presented in Conference with Proceedings published

Author(s). "Article Title", Conference Proceedings, location, year, pp. DOI.

[6] Martinola G. and Bauml M. F. "Optimizing ECC in Order to Prevent Shrinkage Cracking", in *Proceedings of the JCI International Workshop on Ductile Fiber Reinforced Cementitious Composites (DFRCC)-Application and Evaluation*, Takayama, Japan, 2002, Oct 21-22, 143-152.

5. Papers Presented at Conferences (no proceedings)

Author(s). "Paper's Title", Conference name, location, year.

[7] Brandli, B. and M. Dick. "Engineering names and concepts", presented at the 22nd Int. Conf. Engineering Education, Frankfurt, Germany, 2016.

6. Patents/Standards

Inventor(s)/Author(s). "Name/Title". Country where patent is registered. Patent number, date.

[8] Pagedas A. C., inventor; Ancel Surgical R&D Inc., assignee. "Flexible endoscopic grasping and cutting device and positioning tool assembly". United States. Patent US 20020103498, 2002 Aug 1.

7. PhD Dissertation / Thesis

Author. "Title". Degree level, school, location, year.

[9] Klamecki, B. "Incipient Chip Formation in Metal Cutting - A 3-D Finite Element Analysis". Ph.D. Dissertation, Univ. of Illinois at Urbana Champaign, USA, 2014.

8. Reference on the Internet

Authors(s). "Title". Internet: complete URL, date updated [date accessed].

[10] Ruchir S., Bhardwaj V., Manoj M. "On the Design of Adaptive and De-centralized Load Balancing Algorithms with Load Estimation for Computational Grid Environments". 2002 Jun [cited 2002 Aug 12].

http://ieeexplore.ieee.org/iel4/5485/14764/00669970.pdf?arnumber=669970

- [11] Foley K.M., Gelband H., editors. "*Improving palliative care for cancer*" [monograph on the Internet]. Washington: National Academy Press; 2001 [cited 2002 Jul 9]. Available at: http://www.nap.edu/books/0309074029/html
- [12] Jablonski S. *Online Multiple Congential Anomaly/Mental Retardation (MCA/MR) Syndromes* [database on the Internet]. Bethesda (MD): National Library of Medicine (US). 1999 [updated 2001 Nov 20, cited 2002 Aug 12].

Available from: http://www.nlm.nih.gov/mesh/jablonski/syndrome_title.html

9. e-Books

Author. Book title. (edition). [type of medium]. Vol. (issue). Available: site/path/file [date accessed].

[13] Calmer, S. Engineering and Art. (2nd edition). [on-line]. 27(3). Available: www.enggart.com/examples/student.html [May 21, 2003].

10. Newspaper/Magazine article

Author(s). "Article Title". Newspaper (month, year), section, pages.

[14] Bart, B. "Going Faster". Times (Oct. 14, 2012), sec. A, pp.1.