



KARPAGAM UNIVERSITY

(Established Under Section 3 of UGC Act 1956)
COIMBATORE 641 021. INDIA

Regulations for Ph.D., Full-Time (FT) / Part-Time (PT) Research

1. Eligibility

The candidates possessing Master's degree with 55% (50% in the case of SC / ST) of marks in the concerned or related discipline of Karpagam University or any other University recognized by Karpagam University as equivalent to, is eligible to register for Full-time / Part-time Ph.D.

The candidates who have undergone $10 + 2 + 3 + 2$ / $11 + 1 + 3 + 2$ / $10 + 2 + 4 + 2$ / $10 + 2 + 3 + 3$ are eligible to register for Ph.D.

Candidates who have obtained direct PG degree from Open University are not eligible for admission to Research Programme.

The candidates working in organizations (Industries, Research and Educational Institutions, etc.) other than Karpagam University are eligible to enroll for Part-Time Ph.D. programme only.

2. Admission

Admission for Ph.D. programme will be made two times in a year i.e January and July.

3. Selection Procedure

The candidates will be selected for admission to research programme based on the academic performance, the performance in the Entrance Test and in the Interview conducted to assess the aptitude of the candidate for research and his/her academic competence, subject to satisfying the eligibility conditions.

4. Subject of Registration

The candidates seeking admission to Ph.D. shall have the PG degree in the subject concerned.

The candidates seeking admission in interdisciplinary subject (Computer Science / Management / Environmental Science / Biotechnology / Life Sciences or any other) shall have PG in the subject concerned or PG in related subject.

5. Submission of Certificates

The candidates selected for admission to the Ph.D. programme shall be required to submit attested photocopy of the certificates after verification of the original certificates.

6. Duration of the Programme

The total duration of FT/PT for Ph.D in the case of M.A. / M.Sc / M.Com / MCA / MBA/M.Pharm./M.Tech./M.E. candidates is three / four years respectively. In the case of M.Phil. / MS it is two / three years respectively.

The maximum duration for all the above programmes shall be six years.

7. Doctoral Committee:

There shall be a Doctoral Committee for every scholar to monitor the progress of research work.

For every scholar, the Supervisor shall furnish a panel of three experts with doctoral qualification in the field of proposed research, from the faculty members of the University / Colleges / Experts from R& D Departments / National Laboratories / any other research laboratories, from which one will be nominated by the University, as member.

The Supervisor of the scholar shall be the convener of the Doctoral Committee.

The Joint Supervisor, if applicable, shall also be a member.

The Head of the University Department of the concerned subject shall be an internal member.

If a Doctoral Committee member is away from his/her place of work for a longer period, the Supervisor shall request for an alternate member from the panel of experts submitted.

The Doctoral Committee of a scholar shall meet within three weeks from the date of communication of his/her provisional registration, shall decide the topic of research, work plan, the course work to be undertaken by the scholar and also exemption from course work. The Doctoral Committee shall also submit a panel of three Experts from recognized institutes (other than Parent Institution) along with their CV for Part I Examination, Question Paper setting and Evaluation.

The scholar shall be permitted to submit the Synopsis only after getting recommended by the Doctoral Committee.

No TA/DA will be provided by the University for the Doctoral Committee meetings.

8. Research Programme

The research programme consists of Part I and Part II

Part I : Course Work

The candidates registering for FT / PT Ph.D. with PG qualification shall undergo the course work for one / two Semester respectively comprising the following theory papers.

Paper I : Research Methodology and Pedagogy
 Paper II : Subject Paper
 Paper III : Special Paper (Research Area)

The candidates with M.Phil. qualification are exempted from the course work for Paper I and II. They are exempted from the course work for paper III provided, the M.Phil. research work is related to the topic of research chosen for Ph.D. If the topic of research chosen for Ph.D is different, the candidate shall have to write the Paper III ie. the Special paper (Research Area).

For engineering candidates the Doctoral committee shall suggest the course work, the candidate shall do a minimum of four courses (12 credits)

For Pharmacy candidates the Examination shall consist of:

- 1) Written Paper of three hours duration for 100 marks.
- 2) Viva Voce for 100 marks

The Part I examination for FT / PT is conducted at the end of the I Semester / II Semester respectively.

The passing minimum for each paper is 50%.

Part II : Research Work

The FT/PT candidates shall select a genuine original research topic within the chosen area of research specialization and work for two/three or three/four years respectively, as the case may be. At the end of the minimum eligible period, the candidates are eligible to submit the thesis.

In case the candidate chooses an inter disciplinary subject involving two / more disciplines, the candidate may have two Guides – main Guide in the department, where the candidate is registering and the other Guide or the co-Guide from the department in which the candidate wants to carry out a part of the work or utilize the expertise.

9. Place of Research

Candidates registering for FT shall do research in Karpagam University and shall be available during the working hours.

For Pharmacy candidates Every institution giving consent and approval to do research work in their institution should have an Ethical committee.

For candidates registering for PT the place of research normally shall be, where the Guide is working or the candidate has access to pursue research.

10. Progress of the Research Work

The PT candidates must meet the Guide at least once in two weeks. Online monitoring is also allowed for Part-time registered candidate. The progress report shall be forwarded by the Guide to the Director (Research) on the same day.

The candidates who have registered for Ph.D with PG qualification shall submit the progress report from the seventh month (i.e.) after the completion of the Part I course work. The report shall be forwarded by the Guide to the Director Research on the same day.

The candidates who have registered for Ph.D with M.Phil shall submit the progress report commencing from the date of provisional registration. This is in addition to the monthly Progress report.

The candidates shall make a presentation, once in six months and once in a year before the Research Board comprising of the Guide, all the faculty members and the research scholars of the department concerned. The report shall be forwarded by the Guide to the Director (Research) on the same day. It is the responsibility of both the candidate and his Research guide to be present in the presentation. In the absence of the guide the candidate is not permitted for presentation of the work in progress.

Pre-Submission Presentation

Prior to submission of the thesis, the student shall make a presentation (pre-submission presentation) in the Department that may be open to all faculty members and research students, for getting feedback and comments, which may be suitably incorporated into the draft thesis under the advice of the supervisor. The report (in the prescribed format) shall be forwarded by the Guide to the Director (Research) on the same day.

11. Cancellation of Registration

The registration of a research scholar, who has exceeded the maximum period stipulated for the Ph.D. programme, will be cancelled. In exceptional circumstances, if the Doctoral Committee recommends and deems it fit, a maximum extension period of 2 years beyond the normal maximum period may be granted, by the University, to enable the research scholar to submit the thesis. A penalty of 50% over and above the regular fee of that year is to be paid for each extension.

The registration is liable for cancellation automatically by the University, if

- i. the research scholar has not paid the prescribed fee within the stipulated time.
- ii. the progress report is not submitted consecutively thrice or the reports are not satisfactory.
- iii. the performance is not satisfactory to the Research Board.
- iv. the research scholar wishes to withdraw from the course and wishes to cancel his / her registration.

In all the above cancellation cases, the fees paid by the research scholar shall not be refunded.

12. Language

The Ph.D Part I course work and Part II synopsis / thesis be written in English (for subjects other than languages).

13. Conversion of Ph.D. from FT to PT or PT to FT

The FT regular Ph.D., candidates, during the course of the research programme, may convert FT into PT with the recommendation of the Doctoral Committee. In case the PT candidates registered wishes to convert to FT, the candidate may convert into FT with the recommendation of the Guide and all regulations of FT scholars will apply to such candidates. A fee of Rs.1000/- shall be paid towards the conversion.

Conversion from Ph.D. to M.Phil Programme

The FT/PT Ph.D., candidates, during the course of the research programme, may convert into FT / PT M.Phil Programme with the recommendation of the Doctoral Committee. A fee of Rs.1000/- has to be paid towards the conversion. On any condition the M.Phil. registered candidate shall not be allowed for conversion from M.Phil. to Ph.D.

14. Change of Guide

Transfer / Change of Guide is not normally encouraged. In extraordinary circumstances the above could be effected on the merit of the case by referring to the Committee with the following members : Director (Research), Director / Dean of the concerned School and HOD of the subject concerned. A fee of Rs.1000/- has to be paid towards the change.

15. Co-Guide

The candidate can have a Co-guide. The guide has to send a request along with the consent letter and bio-data of the qualified recognized teacher / researcher whom he is proposing as co-Guide.

16. Re-Registration

Candidates who have not submitted the thesis at the end of the maximum period, may be permitted apply to re-register under the same Guide on the same topic on the recommendation of the Doctoral Committee after paying the prescribed fee (Regular Annual Fee + (Rs.10,000/-). In such instances, the re-registered candidates shall be permitted to submit the thesis after a period of ONE year but not later than TWO years.

17. Submission of synopsis

The candidate who has successfully completed the course work alone is eligible to submit the synopsis.

The research scholar shall be permitted to submit the synopsis during the last quarter of the eligible minimum period after confirmed registration, as the case may be.

The synopsis shall be accepted only when the research scholar has minimum one paper either published or accepted for publication in a refereed journal. If the number of papers published is more than the minimum requirement, a reduction in the duration of the programme may be considered by the University. The request for earlier submission from the candidate shall be accompanied by the recommendation of the Guide on the satisfactory completion of the work. However, this provision is subject to scrutiny and approval by the Research Board on a case by case basis.

The research scholar shall submit five copies along with a soft copy of the synopsis of the Ph.D. work along with prescribed application through the Guide to the Controller of Examination. The guide shall also provide a panel list of six examiners outside Tamil Nadu for evaluation and three within Tamil Nadu or at a radius of 500 km of Coimbatore for viva-voce to the Director Research. The Guide can suggest foreign experts also for adjudication.

Only full time faculty, not below the rank of Reader / Associate Professor, shall be suggested.

Synopsis will be accepted only when the Panel of Examiners is attached.

In case the panel is exhausted, the Vice-Chancellor can either call for a fresh panel of examiners from the Guide or nominate examiner(s).

18. Submission of thesis

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.,) and demonstrating a 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 plainly stated and honestly appraised.

Five copies of thesis with flexible cover along with soft copy shall be prepared in accordance with the format and specifications prescribed. Thesis shall be submitted together with the prescribed application form along with the prescribed fee, within three months from the approval of the synopsis. Under no circumstances, the thesis submission can be delayed except under extraordinary circumstances, when an extension of three months may be permissible. The extension fee of Rs.500/- is to be paid for each extension.

The thesis shall include (i) declaration by the candidate (Annexure IV) and (ii) certificate of the supervisor (Annexure V) as prescribed, to the effect that the thesis is a record of the bonafide research work carried out by the research scholar under his / her supervision and guidance and that the work reported in the thesis has not been submitted elsewhere for a degree or diploma.

Thesis will be accepted for submission only after:

Publication of two papers in refereed journals

Surrendering the Identity Card

Payment of dues and submission of "No Due Certificate".

Completing the pre-submission presentation in the department and after carrying out the suggestions/corrections indicated during the pre-submission presentation.

A certificate by the guide for having carried out the the corrections in the thesis shall be submitted separately.

19.Evaluation of the thesis

The thesis submitted by the candidate shall be referred for evaluation to a Board of Examiners consisting of three experts, from the Panel of Examiners suggested. Each member of the Board shall adjudicate the thesis and shall submit a detailed report as given in the prescribed form on the merits and demerits of the thesis and finally explicitly indicate whether the thesis is Recommended or Not Recommended or Recommended for Resubmission.

If the University does not get the evaluation report from the examiner even after the second reminder within 45 days, another examiner will be appointed from the panel of examiners.

In case, two examiners have not recommended the thesis, the thesis shall be rejected and the registration shall be cancelled.

In case, one of the three examiners has not recommended the thesis, the thesis shall be referred again to a fourth examiner.

In the event of one examiner rejecting the thesis, till the report of the other examiner is received, the thesis shall not be sent to the fourth examiner for adjudication.

In case, the fourth examiner recommends the thesis, it will be accepted and the candidate shall appear for the Public viva-voce examination. However, if the fourth examiner does not recommend the thesis, the thesis shall be rejected and the registration shall be cancelled.

As soon as the reports of evaluation are received, from the examiners by the University, they shall be sent to the Guide (Chairman) for consolidation of the reports.

If the examiners insist on corrections to be made in the thesis, the same shall be made before appearing for the Public viva-voce examination, along with a certificate as given below from the guide that the corrections have been satisfactorily made.

If the examiner (s) recommend and suggest a revision and re-submission of the thesis, then the revised thesis duly certified by the Guide (certificate as given below) shall be accepted and the candidate shall appear for the viva-voce.

CERTIFICATE

This is to certify that all corrections, modifications suggested by the examiners of the thesis entitled, “.....” submitted by Mr./Ms..... have been incorporated and the thesis be accepted.

Signature of the Guide

In case of a thesis, which has not been specifically ‘recommended’ or ‘not recommended’ but revision and resubmission is suggested, the thesis shall be revised and the thesis duly certified by the Guide be sent to the examiner who has suggested the revision for obtaining the recommendation.

The candidate whose thesis has been approved shall submit himself / herself to a public viva-voce examination to be conducted by one External Examiner, the Guide (Chairman) and the members of the department in the subject concerned and outside specialists, if any. The first notification for Ph.D. viva-voce examination may be issued only after the research guide of the candidate, receive the approval to issue the first notice from the University authorities.

Fifteen clear days may be required to be given for issue of the second notification from the date of first notification. Fifteen clear days may be required to be given for conducting the public viva-voce examination from the date of issue of the second notification.

The Guide shall fix the date and time of the viva-voce examination in consultation with the External Examiner appointed by the University for conducting the public viva-voce examination. After conducting the public viva-voce examination, the Guide shall convey to the University, the result of such examination endorsed by the External Examiner along with list of participants for the award of Ph.D.

A candidate who is not successful at the Public viva-voce examination may be permitted to undergo the Public viva-voce examination a second time, within a period of three months but not before one month after the first viva-voce.

The time-limit to resubmit the revised thesis, as per the suggestions for revision and resubmission of thesis by the examiner(s) shall not exceed twelve full months. A candidate shall not ordinarily be permitted to submit the thesis for the degree or to take the public viva-voce examination on more than two occasions.

The Guide is to furnish a certificate, as given here, along with the report of the public viva-voce examination, in connection with the publication of the thesis by the candidate, at a later date.

CERTIFICATE

This is to certify that the thesis entitled, “ “ submitted by Mr. / Ms. does not have any objectionable material. Hence the thesis is fit for publication, if the candidate so desires.

Signature of the Guide

20. Award of the Degree

A candidate who is successful in the Public viva-voce examination shall be declared to have qualified for the award of Ph.D. degree of Karpagam University.

21. Publication of the thesis

The candidate during the course of his / her research may publish papers in refereed journals as advised by his / her Guide, but the thesis as a whole shall not be published without obtaining permission of the University.

Permission for publication of the thesis should be obtained within FIVE years of the award of the degree.

The publications arising out of the research work shall have the University Affiliation. Due credit shall be given to the University and Guide if any patent is filed out of the work undertaken during the period of research.

22. Conferment of the degree

A candidate shall be eligible for the conferment of Ph.D. degree, if the candidate has undergone the prescribed programme for the specified period and the thesis is accepted for the award and the candidate successfully completed his / her viva-voce examination.

Candidates who qualify for the Ph.D. degree shall be awarded the degree in the discipline in which the candidate was registered.

In the case of interdisciplinary candidates the degree will be awarded in the name of the interdisciplinary subject and also the word “Interdisciplinary in Subject” should be mentioned in the degree certificate along with the title of the thesis.

For example, a scholar who has post graduate degree in Commerce can register for Ph.D. in Management. The degree will be awarded as Ph.D. in Management (Interdisciplinary in Commerce).

23. Grievance Committee

The candidate or the Guide can approach the Grievance Committee which consists of the Director (Research), Controller of Examinations, Dean / Director and Head of the Department concerned, in case of any hardship.

Any irregularity on the part of the candidate that will affect the name and fame of Karpagam University shall invite appropriate action.

The University may alter or amend the regulations, if found necessary, at any time.

The above guidelines will be effective from the academic year 2010 - 2011 and onwards.

GUIDELINES FOR THE PREPARATION OF SYNOPSIS

Synopsis should outline the research problem, the methodology used for solving it and the summary of the findings. The size of Synopsis should not exceed 10 pages of typed matter from the first page to the last page including the List of Publications. The sequence in which the Synopsis should be arranged as follows:

1. Cover Page and Title page (as shown in the Annexure I)
 2. Text divided into suitable Headings (numbered consecutively)
 3. References (not more than 15)
 4. List of Publications (those published/accepted for publication in Journals and papers presented in Conferences/Symposia)
- Standard A4 size (297mm x 210mm) paper may be used for preparing the copies. 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 on good quality white bond paper preferably not lower than 80 gsm. One and a half 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. All page numbers (Arabic numbers) should be typed without punctuation on the upper right hand corner. Synopsis should be bound using flexible cover of thick white art paper. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

REFERENCES

- Frlan R., A. Kovac, D. Blanot, S. Gobec, S. Pecar, A. Obreza, Design and Synthesis of Novel N-Benzylidenesulfonohydrazide Inhibitors of MurC and MurD as Potential Antibacterial Agents. *Molecules*, 13 (2008).
- Kristan K., M. Kotnik, M. Oblak, U.J. Urleb, New High-Throughput Fluorimetric Assay for Discovering Inhibitors of UDP-N-Acetylmuramyl-l-Alanine: d-Glutamate (MurD) Ligase. *Biomol. Screen*, 14 (4) (2009) 412-418.
- Lee M. K., B. Y. Hwang, S.A. L, W. Hoi, S. S. Hong, K.S. Lee and J. Seup Ro, 1-Methyl-2-undecyl-4(1H)-quinolone as an Irreversible and Selective Inhibitor of Type B Monoamine Oxidase. *Chem. Pharm. Bull.*, 51(4) (2003) 409-411.
- Vuković-Gačić, B., D. Simić, Identification of natural antimutagens with modulating effects on DNA repair, In: *Antimutagenesis and Anticarcinogenesis Mechanisms III* (Eds. G. Bronzzeti, H. Hayatsu, S. De Flora, M.D. Waters and D.M. Shankel), Plenum Press, New York. (1993), 269-277.
- Wall, E.M., M.C.Wani, T.J. Hughes, H. Taylor, Plant antimutagenic Agents; General bioassay and isolation procedures. *J.Nat.Prod.*, 51, (1993) 866-873.
- Wattenberg, L.W. Chemoprevention of cancer. *Cancer Res.* 45, (1988),1-8.

ANNEXURE I**A typical Specimen of Cover Page and Title Page**

**ANTIOXIDANT ACTIVITY OF INDIAN MEDICINAL
PLANTS FROM WESTERN GHATS**

Font Size 18> <1.5 line spacing>

A SYNOPSIS

Submitted by

 <Italic>

RAGHAVENDRA S A

in partial fulfilment of the requirements for the award of the degree of

 <Italic> <1.5 line spacing>

DOCTOR OF PHILOSOPHY

in Biotechnology

University emblem

**DEPARTMENT OF BIOTECHNOLOGY
KARPAGAM UNIVERSITY, COIMBATORE-21
TAMILNADU**

<1.5 line spacing>

JULY 2010

**ANTIOXIDANT ACTIVITY OF INDIAN MEDICINAL
PLANTS FROM WESTERN GHATS**

A Synopsis

Submitted by

RAGHAVENDRA S A

in partial fulfilment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

in Biotechnology

University emblem

**DEPARTMENT OF BIOTECHNOLOGY
KARPAGAM UNIVERSITY, COIMBATORE-21
TAMILNADU**

JULY 2010

GUIDELINES FOR THE PREPARATION OF THESIS

1. GENERAL

The section is to provide broad 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 a 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 THESIS

The size of the Thesis should not exceed 300 pages of typed matter reckoned from the first page of Chapter 1 to the last page of the Appendix. It is inclusive of tables, photographs and figures.

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 II)
2. Bonafide Certificate (as shown in Annexure III)
3. Declaration and certificate (as shown in Annexure IV & V)
4. Abstract
5. Acknowledgement
6. Table of Contents
7. List of Tables
8. List of Figures
9. List of Symbols and Abbreviations
10. Chapters
11. Appendices
12. References
13. List of Publications

The Tables and Figures should be included at appropriate places in the text of the thesis.

4. PAGE DIMENSIONS AND MARGIN

Standard A4 Size (297 mm x 210 mm) paper may be used for preparing the copies. The dimensions of the final bound Thesis report (3 copies) should be 290 mm x 205 mm.

The final Thesis (at the time of submission) 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 Thesis should be prepared on good quality white bond paper preferably not lower than 80gsm. Tables and Figures should conform to the margin specifications. Large size Figures should be photographically or otherwise reduced to the appropriate size before insertion.

5. MANUSCRIPT PREPARATION

In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final Thesis. Hence some of the information required for the final typing of the Thesis is also included in this section. The headings of all items from 2 to 11 listed in section 3 should be typed in capital letters without punctuation and centered 50 mm below the top of the page. The text should commence 4 spaces below this heading. The page numbering for all items from 1 to 8 should be done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.

5.1 Cover Page & Title Page - A specimen copy of the Cover page and Title page for the Thesis is given in Annexure II.

5.2 Bonafide Certificate - The Bonafide Certificate shall be typed in **double line spacing** using Font Style Times New Roman and Font Size 13 as per the format shown in Annexure III.

The certificate shall carry the Supervisor's signature and shall be followed by the Supervisor's name, academic designation, department and full address of the institution where the Supervisor has guided the research scholar.

5.3 Abstract - Abstract should be an essay type of narration not exceeding four pages outlining the research problem, methodology used for solving it and a summary of the findings. This shall be typed in double line spacing using Font Style Times New Roman and Font Size 13.

5.4 Acknowledgement – It should be brief and should not exceed two pages when typed in double spacing. The scholar's signature shall be made at the bottom right end above his/her name typed in capitals.

5.5 Table of Contents - The Table of contents should list all captions following it as well as any caption which precedes it. The title page, Bonafide Certificate and Acknowledgment 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 spacing should be adopted for typing the matter under this head.

5.6 List of Table - The list should use exactly the same captions as they appear above the Tables in the text. One and a half spacing should be adopted for typing the matter under this head.

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 spacing should be adopted for typing the matter under this head.

5.8 List of Symbols and Abbreviations - One and a half spacing should be adopted for typing the matter under this head. Standard symbols, abbreviations, etc. should be used. The list should be arranged alphabetically with respect to the contents on the right side.

5.9 Chapters - The chapters may be broadly divided into 3 parts (i) Introductory chapter, (ii) Chapters developing the main theme of the Thesis and (iii) Results, Discussion and Conclusion. The main text shall be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

a. Each chapter should be given an appropriate title.

b. Tables and Figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.

c. Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page which refers to the material they annotate.

5.10 Appendices - Appendices are provided to give supplementary information. The list of publications (those already published/accepted for publication in Journals and papers presented in Conferences/Symposia) made by research scholar during the period of research, shall be brought in the Appendix titled, as List of Publications and the same shall be reported 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 at appropriate places in the Thesis should be indicated. The author's publications during the period of research should not be included in the references and can be separately mentioned as in 5.10. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the Thesis. The citation may assume any one of the following forms.

Examples of Citation

The listing should be typed 4 spaces below the heading "REFERENCES" in single spacing. The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the other details and year. A typical illustrative list given below relates to the citation example quoted above.

REFERENCES

Frlan R., A. Kovac, D. Blanot, S. Gobec, S. Pecar, A. Obreza, Design and Synthesis of Novel N-Benzylidenesulfonohydrazide Inhibitors of MurC and MurD as Potential Antibacterial Agents. *Molecules* 13 (2008)

Kristan K., M. Kotnik, M. Oblak, U.J. Urleb, New High-Throughput Fluorimetric Assay for Discovering Inhibitors of UDP-N-Acetylmuramyl-l-Alanine: d-Glutamate (MurD) Ligase. *Biomol. Screen* 14 (4) (2009) 412-418.

Lee M. K., B. Y. Hwang, S.A. L, W. Hoi, S. S. Hong, K.S. Lee and J. Seup Ro, 1-Methyl-2-undecyl-4(1H)-quinolone as an Irreversible and Selective Inhibitor of Type B Monoamine Oxidase. *Chem. Pharm. Bull* 51(4) (2003) 409-411.

Vuković-Gačić, B., D. Simić, Identification of natural antimutagens with modulating effects on DNA repair, In: *Antimutagenesis and Anticarcinogenesis Mechanisms III* (Eds. G. Bronzzeti, H. Hayatsu, S. De Flora, M.D. Waters and D.M. Shankel), (1993), 269-277. Plenum Press, New York.

Wall, E.M., M.C.Wani, T.J. Hughes, H. Taylor, Plant antimutagenic Agents. General bioassay and isolation procedures. *J.Nat.Prod.*, 51, (1993) 866-873.

Wattenberg, L.W. Chemoprevention of cancer. *Cancer Res.*, 45, (1988),1-8.

5.13 Tables and Figures – “Table” means tabulated numerical data in the body of the Thesis as well as in the appendices. All other non-verbal material used in the body of the Thesis and appendices such as charts, graphs, maps, photographs and diagrams may be designated as Figures.

a. A Table or Figure including caption should be accommodated within the prescribed margin limits and appear on the page following the page where their first reference is made.

- b. Tables and Figures on half page or less in length may appear on the same page along with the text. However, they should be separated from the text both above and below by triple spacing.
- c. All Tables and Figures should be prepared on the same paper or material used for the preparation of the rest of the Thesis.
- d. Two or more small Tables or Figures may be grouped if necessary in a single page.
- e. Wherever possible, the photograph(s) shall be reproduced on a full sheet of photographic paper or colour xerox.
- f. More than one photograph can be included in a page.
- g. Samples of Fabric, Leather, etc., if absolutely necessary may be attached evenly in a page and fixed/pasted suitably and should be treated as Figures.

6. TYPING INSTRUCTIONS

6.1 General

This section includes additional information for final typing of the Thesis. The impressions on the typed/xeroxed/printed copies should be black in colour.

A sub-heading at the bottom of a page must have atleast two full lines below it or else it should be carried over to the next page.

The last word of any page should not be split using a hyphen. One and a half 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. Single spacing should be used for typing:

- (i) Long Tables
- (ii) Long quotations
- (iii) Foot notes
- (iv) Multiline captions
- (v) References

All quotations exceeding one line should be typed in an indented space - the indentation being 15 mm from either side of the margin.

7.1 Page Numbering

All page numbers (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 of the Thesis (such as Title page, Acknowledgement, Table of Contents, etc.) should be numbered in lower case Roman numerals. The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered as (ii) and it should appear **at the top right hand corner** as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

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 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow the number assigned to it.

Every chapter beginning with the first chapter should be serially numbered using Arabic numerals. Appendices, included 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 bear appropriate numbers. The rule for assigning such numbers is illustrated by an example. Thus, if a Figure in Chapter 3, happens to be the fourth then assign 3.4 to that Figure. Identical rules apply for Tables except that the word Figure is replaced by the word Table. If Figures (or Tables) appear in appendices then Figure 3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into the next page this may be done, but no line should be drawn underneath an unfinished Table. The top line of the Table continued into the next page should, for example read Table 2.1 (continued) placed centrally and underlined.

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 eighth equation in that Chapter should be numbered as (3.2) thus: (3.2)
While referring to this equation in the body of the Thesis it should be referred to as Equation (3.2).

8. BINDING SPECIFICATIONS

Thesis should be bound with **black calico cloth** and using flexible cover of thick white art paper. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page. Soft copy of the Thesis in CD form (2 Nos) should be submitted for University archives.

ANNEXURE II

A typical Specimen of Cover Page and Title Page

**ANTIOXIDANT ACTIVITY OF INDIAN MEDICINAL
PLANTS FROM WESTERN GHATS**

Font Size 18> <1.5 line spacing>

A THESIS

Submitted by
 <Italic>

RAGHAVENDRA S A

in partial fulfilment of the requirements for the award of the degree of
 <Italic> <1.5 line spacing>

DOCTOR OF PHILOSOPHY

in Biotechnology

University emblem

**DEPARTMENT OF BIOTECHNOLOGY
KARPAGAM UNIVERSITY, COIMBATORE-21
TAMILNADU**

<1.5 line spacing>

JULY 2010

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JULY 2010

ANNEXURE III
A typical Specimen of Bonafide Certificate

KARPAGAM UNIVERSITY,
COIMBATORE-21

BONAFIDE CERTIFICATE

Certified that this Thesis titled **“ANTIOXIDANT ACTIVITY OF INDIAN MEDICINAL PLANTS FROM WESTERN GHATS”** is the bonafide work of Mr.RAGHAVENDRA S.A. who carried out the research under my supervision.

Certified further, that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other scholar.

<<Signature of the Joint Supervisor>>
<<Name>>
JOINT SUPERVISOR
<<Designation & Address >>
(If applicable)

<<Signature of the Supervisor>>
<<Name>>
SUPERVISOR
<<Designation & Address >>

ANNEXURE IV
A typical Specimen of Declaration

DECLARATION

I hereby declare that the thesis entitled
 “.....” submitted to the Karpagam University, in
 partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy
 in is a record of bonafide and independent research work
 done by me during the period from to..... under the
 supervision and guidance of Dr.
 Department of and it has not formed the basis for
 the award of any Degree / Diploma / Associate ship / Fellowship or other similar title to
 any candidate in any University.

Signature of the Candidate

ANNEXURE V
A typical Specimen of Certificate

CERTIFICATE

This is to certify that the thesis entitled “” submitted to the Karpagam University, in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in is a record of bonafide research work done by Mr. / Ms. during the period from to of his / her study in the Department of at (Karpagam University / Research Institute /) under my supervision and guidance and the thesis has not formed the basis for the award of any Degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

Countersigned

Signature of the Guide