

GUIDELINES
for
writing
Synopsis
&
Thesis/Dissertation
by
Postgraduate Students



LINGAYA'S VIDYAPEETH
FARIDABAD
October 2020

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A. GUIDELINES FOR MASTERS AND DOCTORAL DEGREE

POST GRADUATE DEGREE (M.A/M.Sc/MBA/M.Tech)

Course Work: The students admitted to the Postgraduate courses will undergo course work for three semesters as laid down in their course curriculum and will appear in the semester examinations, which is mandatory to clear course work for awarding of the degree.

Allotment of Major Advisor: Each student in the Postgraduate programme will be allotted Major Advisor in the very first semester by the Dean Research/Academic in consultation with the faculty and Head of the department. Later the Major advisor will decide about other three faculty members as his/her (students) advisory members. One of them must be from the department of the student.

Dissertation Synopsis: The advisors (s) for guiding student's dissertation research work will decide within the first semester of the admission and the synopsis will be submitted by the students before the end of second semester.

Duration of Research work: The student will take up research work for a minimum period of six months. At the satisfaction of Major Advisor, the student will write thesis, which will be evaluated by the external examiner.

DOCTORAL DEGREE (Ph.D.)

Course Work: Minimum of six months of residency for Ph.D. of one semester to take up the course work will be required at the Lingaya's Vidyapeeth, Faridabad by Ph.D. student. In the second semester after clearing the required course of first semester, students have to clear the written and oral examination before starting research project.

Allotment of Major Advisor: Each student in the Ph.D. programme will be allotted Major Advisor in the very first semester by the Dean Research/Academic in consultation with the faculty and Head of the department. Later the Major advisor will decide about other four faculty members as his/her (students) advisory members. One of them must be from the department of the student. It is the prerogative of the Major Advisor has one member from outside the University with the permission of Dean Research/Academic and Vice Chancellor.

Synopsis: Candidates will prepare the synopsis of research project under the guidance of Major Advisor. The synopsis will be presented to RDC for approval at the end of course work, clearance of written and oral comprehensive examination securing at least 60% marks but before the end of third semester.

Review of the progress: Each research scholar will submit a research report at an interval of six months on regular basis, which will be reviewed by RDC. An unsatisfactory progress report may attract penalty of six months extension for submission of thesis.

Duration of Ph.D.: After the acceptance of the synopsis the research scholar can pursue Ph.D. on full time basis. A minimum period of three years from the date of enrollment will be required before a full time Ph.D. scholar can submit the thesis. The time limit can be extended for two years on the

recommendation of RDC of the candidate and Dean Research/Academic and approval of the Vice Chancellor. The maximum time by which the candidate has to submit the thesis will be 5 years.

SYNOPSIS

The synopsis is the gist of research work to be carried out by the candidate. The guidelines for writing it is given in the **Appendix-I**. The pattern of writing the references will be same as in the thesis given in chapter III. The pilot level, if carried out by any candidate can be incorporated as an appendix in the synopsis.

Each student is to submit the progress report after six months in the format given in **Appendix-I** last page

B. GUIDELINES FOR WRITING THESIS

I. Preliminary pages

a) Title Page

The title page should be in capital letters. It should be concise, specific and reflect the proposed research program.

For Ph.D. Color – Black Binding - Hard Bound Title - Golden colour embossing

For Post Graduates. Color – Maroon Binding - Hard Bound Title - Golden colour embossing

b) Certificates

a) By the student and his/her Major Advisor (**appendix-III**)

b) By the RDC (**Appendix-IV**)

c) Acknowledgement (only one page)

d) **Abstract:** One page abstract not exceeding 250 words should be included as per. (**Appendix-V**)

e) List of Tables appendix-VI

f) List of Figures appendix-VII

g) List of Abbreviations appendix -VIII

h) Contents appendix- IX

II. Main body of the thesis/dissertation for Master/Doctoral thesis

a) **Text:** The detailed organization of the text will vary with thesis in different subjects, but a consistent style must be followed. In general, the text is divided into: (i) Introduction, (ii) Review of Literature, (iii) Material and Methods, (iv) Results and Discussion, (v) Summary and conclusions and (vi) References.

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

*The Headings, subheadings, sub-sub heading are to be written with the same font and its size but the upper and lower case are to be used as given in **appendix-X***

b) **Tables:** Tables should be self-explanatory. Headings and the column/row entries should be clearly related. Tables less than half a page should be preceded or followed

- by the text. All tables should be numbered with Arabic numerals, consecutively throughout the thesis. **appendix-XI**
- c) **Formulae:** Mathematical and chemical formulae should be carefully made out by computer. Complex mathematical formulae of two or more lines should not be included in text lines, but should be placed in the proper position in the centre of the page between lines of text.
 - d) **Scientific names:** Give generic names in full at the first mention, e.g. *Myzus persicae*. (Sulzer). Thereafter abbreviate them in the text, e.g. *M. persicae*.
 - e) **Illustrations:** Illustrations used in the thesis must appear in all the copies. Illustrative materials may be Arabic line drawings or photographs. Illustrations may be inserted wherever needed in the text, numbered in Arabic numerals typed on a thesis paper below the illustration. The illustrations must be prepared using computer. The size of illustrations could be reduced photographically.
 - f) **Paper to be used:** The original thesis/dissertation as well as the photocopies should be prepared on a good quality white bond paper of A 4 size. All pages must have 1.5” margin on the left and 1” on the right and on the top and bottom, with no gutter.
 - g) **Typing:** The general text of the manuscript should be typed in 1.5-space and tables/long quotations/foot notes/Abstract in single space. The general text should be typed using 12-font size with Times New Roman. Printing should be done on both sides of the page.
 - h) **Pagination:** Certificates of approval, title page, acknowledgements and abstract should not be given any page number. The first page of the table of contents is numbered vi. For text, Arabic numerals are used beginning with the first page of the text and continued throughout the rest of the thesis/dissertation including the figures, tables and references. Suppress the page number in first page of each chapter.
The pages on which the corrections have been suggested by the External Examiner will have to be retyped. It may happen in a few cases that the external examiner suggests adding new material: this would disturb the paging of the thesis and is, therefore, required to be corrected accordingly. Numbering pages like 15a, 15b, 15c etc. would not be permitted.

III. **References in the text should be cited as under:**

How to write a reference in Thesis/Synopsis?

Three main Styles:

- APA Style
- HARVARD Style
- VANCOUVER Style

The Thesis should be written in APA style

IV. **APPENDICES**

An appendix normally includes research related material that does not fit easily or suitably in the body of the paper:

- survey questionnaires

- observation sheets
- interview transcripts
- supplementary data which adds useful information or insight but is not essential to the understanding of the paper

An Appendix:

- is positioned as the final section of your dissertation or thesis.
 - is numbered and titled
 - uses a different page numbering system ('A-1', 'A-2' etc.).
- v. VITA: Some details of the student as shown in appendix-XIII

APPENDIX-I

**INFLUENCE OF INSECTICIDES ON DEFENCE RELATED ENZYMES
AND CARBOHYDRATE METABOLISM IN AMERICAN COTTON**

SYNOPSIS

Submitted to

**Lingaya's Vidyapeeth
in the partial fulfillment for the**

degree of

Doctor of Philosophy

In

Physics

By

Hemant Kumar (MSFT002)



Department of Physics

School of Basic & Applied Sciences

Lingaya's Vidyapeeth, Faridabad, Haryana

October 2020

Name of the Student (Capital letters) : SANGEETA SHARMA
Registration Number : MHNS005
Major Subject : Physics
Name of Major Advisor : Dr M S Mahal (Professor of Physics)
Name of Department : Department of Physics
Name of College : School of Basic & Applied Sciences

1. **Title:** The title should be in capital letters. It should be concise, specific and reflect the proposed research programme as given below

INFLUENCE OF INSECTICIDES ON DEFENCE RELATED ENZYMES AND CARBOHYDRATE METABOLISM IN AMERICAN COTTON

2. **Introduction:** This section (comprising 2-3 pages) should highlight the scope and significance of the proposed research work along with the knowledge gaps and objectives of the study under separate sub-heads.

3. **Expected new knowledge:** Likely outcome of the study should be mentioned here.

4. **Review of literature:** An up-to-date and comprehensive review of relevant literature indicating history and developments of the proposed of research problem should be given.

5. **Technical programme:** The experiments should be planned in accordance with the objectives under the following sub-heads:

- i) Name of the experiment
- ii) Location: Field / Lab
- iii) Methodology
- iv) Observations to be recorded

v) Statistical analysis

6. **Collaboration (if any):** The consent of the Head of the Collaborating Department should be taken and nature of the collaboration be specified, if any.

7. **References:** List all the references in alphabetical order, giving all authors with initials after respective surname, year, full title of paper, abbreviated name of journal, volume and pages. Abbreviate all journals as in Chemical Abstracts, Biological Abstracts or World List of Scientific Periodicals.

Example: Kaur N, Sohal B S and Singh N (2011) Biochemical and physiological changes on *Bacillus thuringiensis* cotton after imidacloprid foliar spray. ***Pestic Bioch Phys.* 99: 2840–2846**

Signature of the Student

ADVISORY COMMITTEE

Name	Designation	Department	Signature	
				Major Advisor
				Member
				Member
				Member
				Member

Forwarded five copies to the Dean, Postgraduate Studies, for approval by the RDC

Head of the Department/
Associate Dean

Dean
Research

Vice-Chancellor
Lingaya's Vidyapeeth

(To be submitted by every PG student every six months)

ADVISORY COMMITTEE MEETING

Name of the Student (Capital letters)_____Regd No._____ Semester

Major Subject_____

Major Advisor_____ Name of Department _____Name of School

Venue_____Date_____Time_____

Students Work Load Teaching

S.No.	Course No	Title of Course	Credit Hrs
1			
2			
3			
4			

Title of Thesis:

Research Work Carried out in the present Semester

Research Work to be carried out in the next semester

Signature of the Student

Signature of Major Advisor

Committee Members

1. Name _____ Signature _____
2. Name _____ Signature _____
3. Name _____ Signature _____

Three copies to be sent to the Dean Research

APPENDIX-II

**INFLUENCE OF INSECTICIDES ON DEFENCE RELATED ENZYMES
AND CARBOHYDRATE METABOLISM IN AMERICAN COTTON**

THESIS

SUBMITTED TO

LINGAYA'S VIDYAPEETH

IN THE PARTIAL FULFILLMENT
FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

**IN
PHYSICS
BY**

**HEMANT KUMAR
(MSFT002)**



**DEPARTMENT OF PHYSICS
SCHOOL OF BASIC & APPLIED SCIENCES
LINGAYA'S VIDYAPEETH, FARIDABAD, HARYANA**

MONTH, YEAR

APPENDIX-III

CERTIFICATE – I

Mr./Ms **XXXX**, Reg. No. (XXXX) a candidate for the degree of **Doctor of Philosophy** in Physics has presented the research data/findings in the pre-submission seminar/colloquium. We, the members of the Research Degree Committee (RDC) are satisfied and allow the candidate for submission the thesis entitled “**Molecular breeding for quality protein in local maize cultivars of Haryana**” for partial fulfillment of the requirements for the degree.

Signature
(Name)
External Examiner

Signature
(Name)
Major Advisor

Signature
(Name)
HoD
School Name

Approved

Lingaya’s Vidyapeeth
Dated:

Signature
(Name)
Dean Research



Lingaya's Vidyapeeth

Deemed-to-be-University u/s 3 of UGC Act 1956, Government of India

NAAC ACCREDITED

Approved by MHRD/ AICTE/ PCI/ BCI/ COA/ NCTE

Nachauli, Jasana Road, Faridabad – 121002; Ph: 0129-2598200-05

Website: www.lingayasuniversity.edu.in

APPENDIX-IV

(Sample Copy)

CERTIFICATE – II

This is to certify that the thesis entitled “**Molecular breeding for quality protein in local maize cultivars of Himachal Pradesh**” submitted in partial fulfillment of the requirements for the degree of **Doctor of Philosophy** in the Department of Physics, School of Basic and Applied Sciences, Lingaya's Vidyapeeth, Faridabad, is a record of bonafide research carried out by Mr./Ms. XXXX, Reg. No. (XXXX) under my supervision and no part of this thesis has been submitted for any other degree. The assistance and help received during the course of this investigation have been acknowledged.

Faridabad
Dated: 02 June, 2020

Signature
(Name)
Major Advisor
Department of Physics

APPENDIX-V

FORMAT FOR ABSTRACT

ABSTRACT

Name: Reg. No.:
Semester & Year of admission: Degree:
Subject: Specialization :.....
Department:
Thesis Title: :
Major Advisor: :

Abstract

(Signature)
(Name of Student)

(Signature)
(Name of Major Advisor)

(Signature)
(HoD, Name of Department)

APPENDIX-VI

LIST OF TABLES

Table no.	Title	Page no.

APPENDIX-VIII

ABBREVIATIONS

AACL	:	Anger Assessment Checklist
ADH	:	attention-deficit/hyperactivity
ADHD	:	Attention Deficit Hyperactivity Disorder
AMPS	:	Assessment of Motor and Process Skills
ANOVA		Analysis of Variance
ASD	:	Autism Spectrum Disorders
BT	:	Behavioral Therapy
CAP	:	Child & Adolescent Psychiatry
CBCL	:	Child Behaviour Checklist
CBPT	:	Cognitive Behavioral Play Therapy
CD	:	Conduct Disorder
CPC	:	Child Psychiatry Centre
CSA	:	Child Sexual Abuse
CU	:	Callous Unemotional
DBD	:	Disruptive Behaviour Disorder

APPENDIX-IX

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CHAPTER – IV

RESULTS AND DISCUSSION

The results of present study include biochemical investigations in insecticide treated Bt and non Bt cotton seedlings and insecticide sprayed Bt and non Bt cotton plants grown in the pots and the fields. The results are discussed under the following headings:

4.1 PHYSICO-BIOCHEMICAL EFFECTS OF SEED DRESSING WITH INSECTICIDES ON GERMINATING COTTON SEEDLINGS.

4.1.1 Percent Germination

Table 4.1 shows the effect of seed dressing with thiamethoxam (at treatments T₁ - 1g/kg of seeds and T₂ - 3g/kg of seeds) and imidacloprid on percent germination of both Bt and non Bt cotton seeds.

4.1.2 Peroxidase (PO)

4.1.2.1 Effect of thiamethoxam

The effect of seed dressing with thiamethoxam on PO activity in the cotyledons, radicle and plumule of germinating cotton seeds is shown in Table 4.3

4.1.3 Superoxide Dismutase (SOD)

Effect of seed dressing with insecticides on the superoxide dismutase (SOD) activity (unit enzyme/min/g FW) in germinating Bt and non Bt seedlings.

4.2 BIOCHEMICAL EFFECTS OF INSECTICIDAL SPRAYS ON COTTON PLANTS GROWN IN POTS

4.2.1 Peroxidase (PO)

The effect of different sprays on the peroxidase activity ($\Delta E/\text{min/g FW}$) in leaves of Bt and non Bt cotton plants grown in pots is shown in table 4.15 and is discussed below:

4.2.1.1 Chlorpyrifos: Effect of spraying chlorpyrifos at LC₅₀ and LC₉₀ concentration in Bt plants in the Ist and IInd spray caused.

4.2.2 Superoxide Dismutase (SOD)

Effect of insecticidal sprays on superoxide dismutase activity (unit

enzyme/min/g FW) is shown in table 4.16. Effect of various insecticides is discussed below:

4.2.2.1 Chlorpyrifos: After 1st spray of chlorpyrifos on Bt plants, SOD

APPENDIX-XI

Format of Tables and Figures

Note: Choose any one from the two. Fig. should be colourful

1.(a) **Table1.1 (Education Wise Awareness about Risk Reduction Techniques)**

Sr.No.	Education	Yes	No	Total
1.	Below Matric	0	22	22
2.	Matric/10+2	2	34	36
3.	Graduation	2	19	21
4.	PG	15	6	21
	Total	19	81	100

Source: Data Collected through Questionnaires.

Table1.1

1. (b) **Education Wise Awareness about Risk Reduction Techniques**

Sr.No.	Education	Yes	No	Total
1.	Below Matric	0	22	22
2.	Matric/10+2	2	34	36
3.	Graduation	2	19	21
4.	PG	15	6	21
	Total	19	81	100

Source: Data Collected through Questionnaires.

2. (a) **Table 1.1 (Education Wise Awareness about Risk Reduction Techniques)**

Sr.No.	Education	Yes	No	Total
1.	Below Matric	0 (0.0)	22 (100.0)	22 (100.0)
2.	Matric/10+2	2 (5.6)	34 (94.4)	36 (100.0)
3.	Graduation	2 (9.5)	19 (90.5)	21 (100.0)
4.	PG	15 (71.5)	6 (28.5)	21 (100.0)
	Total	19	81	100

Note: Figures in parentheses depict percentage.

Source:Data Collected through Questionnaires.

Table1.1

2. (b) Education Wise Awareness about Risk Reduction Techniques

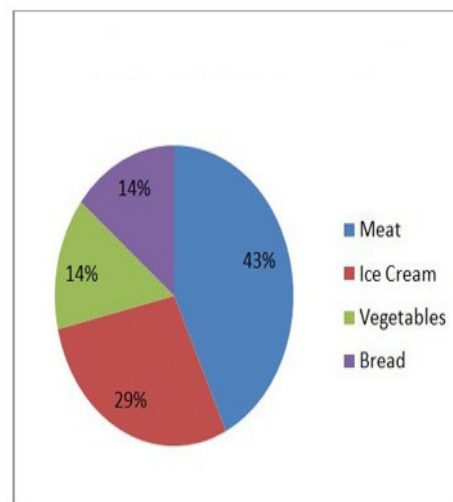
Sr.No.	Education	Yes	No	Total
1.	Below Matric	0 (0.0)	22 (100.0)	22 (100.0)
2.	Matric/10+2	2 (5.6)	34 (94.4)	36 (100.0)
3.	Graduation	2 (9.5)	19 (90.5)	21 (100.0)
4.	PG	15 (71.5)	6 (28.5)	21 (100.0)
	Total	19	81	100

Note: Figures in parentheses depict percentage.

Source: Data Collected through Questionnaires.

3.(a)

Fig.1.1



3.9(b)

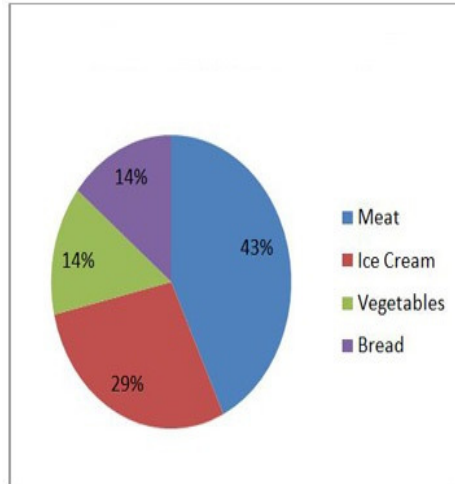


Fig.1.1

APPENDIX-XII

Text References

Plutella xylostella is a serious pest of cabbage and cauliflower in India and abroad. The presence of which is reported worldwide in more than 80 countries. The control of this insect pest includes the spray of many insecticides like organophosphates, pyrethroids, carbofenthrin etc. (Anonymous 2008). The first incidence of diamondback moth resistance in India was reported against *p*-dichloro-diphenyl 1,1,1-trichloroethane (DDT) (Verma and Sandhu 1968).

Owing to its detoxification enzymes like hydrolases, transferases and oxygenases this insect pest has managed to attain resistance against all the classes of insecticides (Mohan and Gujar 2003). The involvement of Glutathion-S-transferase, carboxylesterase, and microsomal monooxygenase has been widely reported in insecticide resistance (Brown and Brogdon 1987, Devonshire and Field 1991, Sun 1992). The resistance develops through various biochemical mechanisms like altered target site of acetylcholinesterase in organophosphate and carbamate resistance (Liu et al 1982, Maa et al 1996, Brogdon and McAllister 1998, Ffrench-Constant *et al* 2004, Fournier 2005). The resistance towards pyrethroids is mainly due to mutations in voltage gated sodium channels (Vais et al 2001, Soderlund and Knipple 2003), but general esterase are also known to detoxify pyrethroids (Mukherjee and Singh 2005, Lee et al 2007)

Reference Style

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- Verma AN and Sandhu GS (1968) Chemical control of Diamondback moth, *Plutella maculipennis* (Curtis). *J Ento Res Punjab Agric Univ* 5: 420-23.

APPENDIX-XIII

V I T A

Name of the Student : Hemant Gujar
Father's Name : Dr. G.T. Gujar
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EDUCATIONAL QUALIFICATIONS

Bachelor's degree : B.Sc. (Microbiology)
University : University of Delhi, New Delhi
Year of award : 2007
%age : 72.07%
Master's degree : M.Sc. (Microbiology)
University : Panjab University, Chandigarh
Year of award : 2009
OCPA : 7.94/10.00
Title of Master's Thesis : Biochemical aspects of insecticide resistance in *Plutella xylostella* (Diamondback Moth) in Punjab (India).