

MANUAL
ON
THESIS PREPARATION
For P.G. & Ph.D. Degree Programme



2013

Directorate of Instructions & Student Welfare
RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA,
GWALIOR (M. P.) INDIA

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1. FORMAT OF THE THESIS

Package	:	MS Word Page Size : A 4 [8.268" x 11.693"]
Page set-up	:	Portrait (For large Tables- Landscape)
Margins	:	Left 1.5", Top, Bottom and right 1.0"
Font	:	Arial; Font size 12; Line spacing 1.5
Alignment	:	Justified
Main Title	:	12 bold, capital cases aligned centrally
Sub Title	:	12 bold, sentence case, aligned left
Page Number	:	Arabic numerals, font size 11 normal with centre alignment, placed at bottom of every page, i.e. from introduction to appendices except division sheets. No page number is allotted to preliminary pages and vita.
Left indent	:	1"; Spell check: British English grammar.
Spacing between Paragraph	:	Before -6 point; after-0 point
Start of Chapter	:	From new page with Chapter number in Roman numeral, 14 bold, sentence case, alignment centre and title in capital case 14 bold fonts, with centre alignment. Leave 12 point spacing after title before starting the text.
Division Sheet	:	Every chapter from "Introduction" to "Reference" should be preceded by a division sheet marked with chapter number and title of the chapter in Arial, capital case, and 18 bold fonts with centre alignment in the middle of the page under a text box [2" single line].
Table	:	Use separate sheet for large tables, page setup - landscape. Column title alignment centre, figure alignment centre. Small tables may be incorporated with running text but should not have page break.
Printer	:	Laser/ inkjet. Thesis/ abstract should not be printed using Dot Matrix Printer.
Paper	:	Use good quality white bond paper of 70-75 gsm thickness.

1. FORMAT OF THE THESIS

The thesis shall consist of the following parts-

1. Preliminary pages (without pagination)
 - Cover page
 - Title page
 - Certificate-I
 - Certificate-II
 - Certificate-II [For Doctorate Degree only]
 - Acknowledgment
 - Contents
 - List of Chapters
 - List of Tables
 - List of Figures
 - List of Plates [if any]
 - List of symbols/ abbreviations [if any]
2. The text (with pagination)
 - Introduction
 - Review of Literature
 - Material and Methods /Research Methodology
 - Results Discussion
 - Summary, Conclusions and Suggestions for future work
 - Bibliography
 - Appendices (Optional)
3. Vita (without pagination)

2. PRELIMINARY PAGES OF THE THESIS

2.1 Cover page

The cover page is printed after successful conduction of the oral examination and at the time of final binding (hard binding) of the thesis. Use bottle green coloured drawing sheet (plain) for thesis submitted to obtain Master's Degree, printed in blue coloured fonts: and use light yellow drawing sheet (plain) for Doctorate Degree, printed in blue coloured fonts.

The cover page consists

- (I) Title of the thesis
- (ii) Mono
- (ii) Name of the university
- (iii) Name of the Degree for which the thesis is being submitted, followed by name of the Department
- (iv) Name of the Scholar
- (v) Name of the Department
- (vi) Name of the College
- (vii) Year of submission

The title should be appropriate, complete, brief (not more than 20 words) and should be able to convey the substance of the work reported. Scientific names of insects/ pathogens/ weeds/ plants should be incorporated with their authorities. Italics case should be used while typing scientific names. Fonts should be standard bold, with centre alignment. The title should be typed in sentence case. The generic name should start with a capital letter followed by small letters and the species name must be typed in small case. An example is presented in the next page.

2.2 Title page

The title page is similar to the cover page in page set up and contents but it should be printed with black coloured fonts on white bond paper.

2.3 Certificates of approval

Following certificates typed in Arial narrow 12 size fonts italic case with line spacing 1.5", the alignment must be justified. Certificate-I and certificate-II are mandatory and should be typed without any alteration in their formats. Certificate -I is issued by the chairman of the advisory committee of the Scholar. The format is given as under

Relative Susceptibility of Different Chickpea Varieties To Pulse Beetle, Callosobruchus Chinensis Linnaeus

[18-20 pt. Title case Arial bold]

THESIS

[14 capital bold]



submitted to the
[12 italic case normal]

Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya

[14 title case bold]

In partial fulfillment of the requirements for the Degree of

[12 sentence case bold]

MASTER OF SCIENCE

[14 capital case bold]

In

AGRICULTURE

[14 capital case bold]

ENTOMOLOGY

[12 capital case bold]

by

[12 italic case normal]

SANJAY THAKUR

[14 capital case bold]

Department of Entomology

Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya

College of Agriculture, Gwalior (M.P.)

[14 bold grey color]

CERTIFICATE-1

[14 capital case bold]

This is to certify that the thesis entitled¹
..... submitted in partial fulfilment of the requirements for the Degree of MASTER OF SCIENCE/DOCTOR OF PHILOSOPHY² in³ of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior is a record of the bona-side research work carried out by Mr. Ms./ Mrs⁴ under my guidance and supervision. The subject of the thesis has been approved by the student's Advisory Committee^ and the Director of Instruction.

No part of the thesis has been submitted for any other degree or diploma or has been published. All the assistance and help received during the course of this investigations has been acknowledged by the scholar.

Signature

(Full name)

Chairman of the Advisory Committee

MEMBER OF STUDENT'S ADVISORY COMMITTEE

[12 capital case bold centre alignment]

Chairman (Name) :

Co-Chairman (Name) :

Member (name) :

Member (name) :

Member (name) :

1 : Complete title of the thesis [12 fonts sentence case bold].

2 : M.Sc. / Ph.D., whichever is applicable [12 fonts capital case bold].

3 : Name of the Department [12 fonts sentence case bold].

4 : Name of the student [12 fonts capital case bold].

The certificate-II is issued by the Chairman of the student's Advisory Committee after successful conduction of oral examination of the scholar. This certificate states that work reported in the thesis is approved for M. Sc. (Ag.) degree. In case of Ph.D. degree, the certificate-II is issued by the external examiner, after successful conduction of oral examination. The page set up and fonts should be similar to the certificate-I. The formats of certificate -II for M. Sc. (Ag.) degree and Ph.D. degree are given as under-

CERTIFICATE- II (For Master's Degree)

[14 capital case bold]

This is to certify that thesis the entitled”*
.....submitted by Mr./Ms./Mrs.** to the Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior in partial fulfilment of the requirements for the degree of Master of Science in*** in the department of (*) has been accepted after evaluation by the External Examiner and approved by the Student's Advisory Committee after an oral examination of the same.

Signature

(Full name)
Chairman of the Advisory Committee

MEMBERS OF THE ADVISORY COMMITTEE

- Chairman (Name) :
- Co-Chairman (Name) :
- Member (name) :
- Member (name) :
- Member (name) :
- Head of the Department (Signature) :
- Dean of the collage (Signature) :
- Director Instruction (Signature) :

Certificate-II for Master's degree in Agriculture/ Horticulture

- * Title of the thesis [12 fonts sentence case bold]
- ** Name of the student [1 2 fonts capital case bold]
- *** Agriculture/ Horticulture [12 fonts capital bold]
- (* Name of the department [12 fonts sentence case bold]

CERTIFICATE- II (For Doctorate Degree)

[14 capital case bold]

This is to certify that thesis the entitled *
"
 submitted by Mr./Ms./ Mrs.** to the Rajmata
 Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior in partial fulfilment of the
 requirements for the degree of Ph. D. in *** the department of (*) has
 been accepted after the evaluation by the External Examiner and by the Student's
 Advisory Committee after an oral examination on the same.

Place :

Date :

Signature
 (Full name)
 External Examiner

MEMBERS OF THE ADVISORY COMMITTEE

- Chairman (Name) :
- Co-Chairman (Name) :
- Member (name) :
- Member (name) :
- Member (name) :
- Head of the Department (Signature) :
- Dean of the collage (Signature) :
- Director Instruction (Signature) :

2.4 Acknowledgment

This space provides an opportunity to the scholar to express his/ her thanks and gratitude to the persons who have helped him/her during the course of investigation and preparation of thesis. Acknowledgment must also be given to concerned HOD, Dean, D.I., Hon'ble V.C. of the V.V. It must be written in first person and should not exceed one page. Long list of friends, natives and class mates should be avoided.

The full name, signature, date and place should be given at the bottom as demonstrated below :

Place : Sehore

(Sanjay Thakur)

Date : April 12, 2010

[12 sentence case bold]

2.5 List of contents

In the list of contents, the major divisions of the thesis, i.e. chapters, tables, figures, slates, and symbols used in text are given to get an overview of the text matter and its sequence. Titles and their location are depicted in the thesis through page numbers. The list of contents should be sub divided into following.

2.5.1 Contents

The chapter number, title and page range should be presented in this Table. Use separate sheet to type the contents in the format given below-

Contents

[14 sentence case bold]

Number	Title	Page range
I	Introduction	1-2*
II	Review of Literature	3-10
III	Material and Methods/Research Methodology	11-16
IV	Results	17-38
V	Discussion	39-60
VI	Summary, Conclusion and Suggestion for futurer work	61-68
6.1	Summary	61-64
6.2	Conclusions	65-66
6.3	Suggestions for further work	67-68
	Biblography	69-80
	Appendices	80-86

*The page range is given above as an example only.

* For social science departments.

2.5.2 List of Tables

All the data collected by the scholar on different aspects during the investigations should be summarized in different Tables. Table number should be given to each Table in Arabic numerals in ascending order from the beginning till end, i.e., from chapter III (Materials and Methods) to Chapter 4 (Results). There should not be any Table in rest of the chapters. The list of Tables be given in Separate sheet in the following manner-

List of Table

Table Number	Title	Page number

2.5.3 List of Figures

The list of figures embodies the title and location of graphs, line diagrams, diagrams etc. Figures should be numbered in Arabic numerals.

List of Figures

Figure Number	Title	Page number

2.5.4 List of Plates

To support the observations recorded and result obtained, good quality photographs either coloured or black and white good contrast should be given in the thesis. Photographs printed on a photographic sheet or be pasted neatly on relatively hard sheet, covered with plain butter paper sheet. Each plate should be numbered in Arabic numbers and appropriate title should be given to each photograph. The number, title and location of plates should be presented in List of Plates as under. Since no pagination is allowed to the plates, hence, the location of plates is indicated as "between pages.

List of Plates

Plate Number	Title	Page number

2.5.5 List of Symbols

If lot of symbols like male (σ); female (ρ); Bisexual ($\sigma\rho$); Calyx (K); Corolla (C); at the rate of (@), and number of abbreviations like active ingredient (a.i.); copy right ($\text{\textcircled{C}}$); cultivar (cv); maximum (max); minimum (min); temperature (temp.) variety (var); volume (vol) etc. have been involved in the text, attach a list of symbols and arrange them alphabetically.

List of Symbol

Symbol	Abbreviation	Stands for

- Each and every list should be presented in separate sheet.
- The title at the top with Arial narrow 14 size bold fonts; title case; alignment centre should be given. Two point space should be kept between the heading and the table.
- Arrange the content of the lists in the order they appear in the text
- The title/ caption and number mentioned in the list and the text should be the same.
- Title should be written in sentence case with no terminal punctuation.

3. PREPARATION OF MAIN TEXT

The main text of the thesis includes Introduction; Review of Literature; Material and Methods; Results; Discussion; Summary, Conclusion and Suggestions for Future work; Reference; Appendices and Vita.

3.1 Introduction

In this first chapter, background information, importance of the work, its significance with the objectives of the thesis topic should be incorporated. The introduction should be brief and should clearly define the aims of study with scientific justification of the topic selected. The chapter should preferably be of 3 pages in Master degree & 2 pages in Doctorate Degree without subheadings and Tables, It should be written in present tense. The chapter should end with lucid, complete and concise objectives.

3.2 Review of Literature

This chapter embodies the review of relevant literature pertaining to the topic of the thesis in a condensed form. It will be better to sub divide this chapter into subheadings according to the objectives of the thesis. Avoid details of methods and irrelevant information. Arrange reference chronologically. If the same results are reported by many workers, avoid repetition of text and after completing the last sentence give all relevant references under bracket with year of publication. If the same author (s) has published more than one papers during the same year, number it as 'a', 'b' etc, after the year. All the references cited in the text should be incorporated in the bibliography with the same spelling of author(s) and year of publication,

In case of single authored publication, mention last name of the author followed by the year of publication. According to the composition of the sentence, the work reported should either be begun with the name of author and year of publication under bracket or may be placed at the end of the sentence under bracket with a "coma" between the name and year. Some examples are quoted here-

"Singh (1988) reported that hairiness of leaf surface of okra influenced the sap sucking insect pests".

"In Punjab, more than 50 percent damage to cotton has been estimated in terms of cotton yield due to bollworms complex (Dhawan, 2000)",

In case of two authored reference, mention last name of first author followed by first name of second author and then year of publication. The text should be cited as detailed below-

"Mandsaur and Karchi (1991) in their studies on extent of damage caused by Tetranychus cinnabarinus reported it as a major pest causing reduction in yield and quality of cucurbitaceous fruits".

In case of a report published by more than two authors, place the word "et al" after the last name of first author, followed by year of publication. The word "et al" means and others should be typed in italics putting a full stop after 'ai this foreign (non English] word is pronounced a "Reed et al. (1989) reported that the legume pod borer, *Maruca testulalis* completes its life cycle within 21 days and only early cultivars of pigeon-pea which are determinate - type are attacked".

In case, the same author(s) is referred more than once for findings reported in different references published in same year, 'a', 'b', 'c' etc. numbers are allotted in the year based on sequence in which they appear in the text-

"De ponti (1980a, 1980b) screened 800 cucumber varieties in laboratory and on the basis of a practical test in a series of experiments on resistance in cucumber to *Tetranychus urticae*, selected PI - 220860, Hybrid Long Green Pickle, PI 178885, Ohio MR 200, Taipei No.1, Robon 50, Aodai, PI 163222 and PI 218036 for their distinguishable levels of resistance of these resistant varieties. P1163222 was of Indian origin".

Use past tense while presenting the review and preferably latest references should be incorporated. The chapter should not exceed 10 printed pages for M.Sc. thesis and 20 printed pages for Ph.D. thesis.

3.3 Material and methods/Research Methodology

Material used to conduct the experiment and methods applied to obtain results should be incorporated in this chapter. It should be clear and to the point. In case of well known/ standard methods, only the reference will suffice. This chapter includes the location, important features of the place, meteorological data, status of soil (in case of field experiments) name of crop, organism, variety, genotype, pathogen, media, pesticides, fertilizers, chemicals, medicines, growth regulators etc used as materials. This must be followed by methods including experimental design, number of replications, number of treatments, experimental lay out, observations recorded, methods adopted for experimentation and recording observations, statistical/ analytical methods employed etc.

Internationally accepted units such as Celsius ($^{\circ}\text{C}$); correlation ® ; filial (F); gram(g); hectare (ha); Kilogram (kg); micron (μ); molecular weight (mol wt); parts per million (ppm); per hectare (ha^{-1}); Walt (w) etc. and statistical symbols like CD (critical difference); cv (coefficient of variation); df (degree of freedom); SD (standard deviation); SEm_{\pm} (Standard error of mean); t test (Student "t" test); 'F' (analysis of variance) etc. should be used to condense the section. This chapter should be written in third person and in past tense.

3.4 Results

This is an important chapter contains processed and statistically analyzed data arranged in a systematic manner, experiment wise or objective wise. The results obtained from the data and inferences drawn from the statistical analyses are presented with the help of tables, graphs, diagrams, photographs etc.

3.4.1. Table

Tables should be numbered in Arabic numerals, typed on separate sheets with brief and self explanatory titles. The title should not end with full stop. Keep minimum possible columns in the Table. Splitting of Table into two or more pages should be avoided. Serial number to columns is not required. The column comprising particulars or treatments should be aligned left while columns consisting data should have center alignment. Restrict data up to maximum two decimal figures only, Transformation, if any, must be mentioned clearly. Use separate sheet for large tables designed in portrait or landscape set up according to need, however, small tables may be incorporated with running text.

3.4.2. Graphs

Results, when presented in the visual form can easily be conveyed to the readers. Inclusion of graphs in the thesis is an effective tool to present the facts, and the data can be interpreted easily. Each graph should be numbered with Arabic numeral, should have brief and self explanatory title and clear legend. Clumsy graphs should be avoided. The illustration should not repeat the data in tables and vice versa.

3.4.3. Line diagrams

Original line diagrams supplemented with scale, if required, may be presented using computer graphics. In the caption, explanation of symbols used should be cited.

3.4.4. Photographs

It is essential to include effective photographs of organisms/infested or infected plants/ machine or set up of instruments/equipments/crop response to fertilizers or agro-chemicals etc. in the thesis. Photographs with high contrast and details should be numbered separately in Arabic numbers and should be printed on A-4 sized photographic paper. Not more than two photographs per sheet be given.

Tables, graphs, line diagram, photograph etc. should be incorporated as near as possible to the discussion or presentation of the same in the text. Mention correctly the table number/figure number (graphs, line diagrams)/plate number in the text while describing the facts and data depicted in the same.

Results should be presented in past tense, however, the remarks should always be written in present tense. Avoid presentation of non significant results. Do not start a sentence with number. The number occurring in a series or in conjunction with a

recognized unit of measurement like 3 mm, 5 g, m² ha⁻¹ etc. can be written in numerics. Similarly the number allotted to table, figure, and plate be given in as numerals.

3.5 Discussion

This is the most important section of the thesis comprising results obtained, inferences drawn and the data comparable with the findings of earlier workers. This chapter also indicates that how far the objectives have been achieved. The data are explained on scientific ground and interpreted for drawing appropriate conclusions. In light of the objectives/assumptions made in the synopsis of the research work, the results are discussed in the theoretical background, literature reviewed and potential significance of application.

This section can be written in past and present tense as per requirement. No table, graph, figures, photographs should be presented in this section. The results should be discussed objectives wise/ experiment wise.

3.6 Summary, Conclusions and Suggestions for further work

This chapter should be divided into following three sub heads-

3.6.1. Summary

The whole manuscript is presented here in condensed form involving title of the topic, importance, objectives, location of experimentation, materials used, and procedure of data collection, observations made and important findings in relation to the objectives selected. This section must be informative, self explanatory and should be complete in all respects. Tables, figures, plates, and references should not be incorporated and referred in the section. The summary should be presented in past tense.

3.6.2. Conclusions

This section, written in past tense, leaves the reader an impression of the completeness of the topic selected and objectives set forth, and a positive gain out of it. Conclusions should be drawn in view of the data obtained and discussed earlier. It should be enumerated precisely in short, simple and lucid statements objective wise.

3.6.3. Suggestions for future work

The questions remained unanswered after experimentation of the present problem are enumerated by the scholar in the form of concrete suggestions, in this section. At least two or three suggestions should be given here on the basis of their importance which requires further investigation by the readers/future workers.

3.7 Bibliography

This is the last section of the main text portion of the thesis, comprising detailed citation of all the references mentioned in the thesis. The references should be

arranged alphabetically by the name (last name) of the first author and then, if required, by the second and the third author and so on. The names of the journals must be abbreviated strictly according to guidelines of "World List of Scientific Periodicals" only.

The format of this section, a little different from the continued format of the thesis, is detailed below-

1. The title "References" should be given on the division sheet as well as the first page of this section without mentioning "Chapter".
2. Font, size 11; font Arial narrow; line spacing single; gap after each reference 6; second line hanging one inch.
3. No serial number be allotted to references.
4. Spelling of the author (s) and year publication should tally with the text as well as in the reference.
5. Name of journal with only one word should not be abbreviated.
6. When one author or group of authors is referred more than once in the same year, the references should be numbered as 'a', 'b', and so on
7. Astric mark (*) the reference as superscript to the year of publication in the event the original article has not been seen.
8. Title of the article other than English should be written in roman with italic case. The references must be cited strictly as suggested below-

3.7.1. Paper in Journal

Bhadouria, N.S.; Bahadur, J.; Dhamdhare, S.V. and Jakhmola, S.S. (1992). Effect of different sowing dates of mustard crop on infestation by the mustard aphid, *Lipaphis erysimi* (Kalt). *J. Insect Sci.* 5(1): 37-39.

[Abbreviated name of journal in italic case; volume number in bold case; part of the journal under bracket in normal case; title of the article must end with full stop]

3.7.2. Citation of book

Manisegaran, S. and Soundararajan, R.P. (2008). *Pest Management in Field Crops: Principles and Practices*. Agrobios (India), Jodhpur. 302 p. [302 p indicates total number of pages in the book and the whole book is referred]

Manisegaran, S and Soundararajan, R.P. (2008). *Pest Management in Field Crops: Principles and Practices*. Agrobios (India), Jodhpur. p. 186. [p186 indicates that the citation is from the page number 186]. Manisegaran, S. and Soundararajan, R.P.(2008). *Pest Management in Field Crops: Principles and Practices*. Agrobios (India), Jodhpur. pp. 163-179.

[pp. 163-179 indicates that the pages between 163 and 179 are referred].

3.7.3. Citation of chapter from edited book

Price, P.W. and Waldbauer, G.P. (1975). Ecological aspects of pest management. In: Metcalf, R.L. and Luckman, W.H. (eds.), Introduction to Insect Pest management, John Wiley and Sons, Inc., New York, U.S.A. pp.37-73.

[The title of chapter without full stop; The Word "In" should be in italic case; in case of book edited by a single person write "(ed.)"; name or title of the book should be in italic case],

3.7.4. Paper in proceedings

Battu, G.S.; Arora, R. and Bath, D.S. (1998). Efficacy of the native isolate of nuclear polyhedrosis virus against the cotton ballworm, *Heliocoverpa armigera* (Hubner). Proc. International Conference on Environment and Agriculture, Kathmandu, November 1-3, 1998. Ecological Society, Kathmandu, Nepal pp. 147-148.

Barar, K.S. (2000). Biological control of insect pests of field crops. In: Nat. Seminar on Biocontrol of Pests, Ludhiana June 26-28, 2000, Indian Society for the Advancement of Insect Science, Ludhiana pp.4-6.

3.7.5. Citation of thesis

Rawat, R.B. (1968). Studies on *Leucinodes orbonalis* Guen. M.Sc. (Ag.) Thesis, J.N.Krishi Vishwa Vidyalaya, RAK College of Agriculture, Sehore (M.P.) 48 pp.

3.7.6. Citation of Annual Reports and official publications

Anonymous (2008). Package of Practicees for Kharif Crops. CCS Haryana Agricultural University, Hissar.

Annonymous (2007). Area, Production and Productivity of vegetables in Madhya Pradesh. Commissioner, Land Records, Gwalior (M.P.)

Anonymous (2001) Control of leaf curt virus diseases in cotton and development of protocols for man multiplication of predators, parasites and insect pathogens. Final Project Report. NATP, Central Institute for cotton Research, Nagpur.

Ananymous (2008). Annual Progress Report. All India Coordinated Research Project on Soybean. RVSKVV- RAK College of Agriculture, Sehore (M.P.) 68 p.

3.7.7. Citation of Cross reference

In case, the original research paper is not seen and an article is referred the reference should be cited as detailed below-

Cherian, M.C. (1931*. South Indian Acarina. JAsiat. Soc. Bangal27: 141-147 [cf: Prasad, V. (1974). A catalogue of Mites of India. Indira Acarology Publishing House, Ludhiana. 322 pp.]

3.7.8. Citation of Website

Bhalla, G.S. and Singh, Gurmail (1997). Recent developments in Indian Agriculture- A State level analysis, <http://www.jstor.org>.

All India crop situation on line <http://www.agrometeorology.org/topics/>>

3.8 Appendices

Although this section is not an essential part of the thesis but it contains useful information related to text but not discussed or included in the text.

Meteorological data collected during the tenure of experimentation, details of materials used, details of place where experiment was conducted, detailed ANOVA tables related to statistical analyses applied during experiment etc. should be included in this section. Each appendix should be numbered in roman and properly titled which must be self explanatory and complete.

Division sheet should be placed at the beginning. Title and other format of the page should be same as maintained in previous chapters.

3.9 Vita

It provides space to the author to present his/ her short biography mentioning date and place of birth, educational institution attended, professional experience, honors or awards received, research papers published etc. It should be written in third person and in paragraph form. Limit this section within one page. Though this section is included in the table of contents at the end but it should not be paginated.

4. THESIS ABSTRACT

Thesis abstract is prepared separately by adopting the typing instructions of thesis. It is not attached to the thesis but submitted along with loose bound thesis in quadruplicate. It is written in past tense and the main part should not exceed one printed page (700-1000 words). It consists two pages. The cover page should be typed using Arial narrow fonts, size 14 bold in sentence case with single space between the lines. The cover page of thesis abstract contains following information-

THESIS ABSTRACT

[Arial narrow 16 bold, capital case; center alignment]

1.	Title of the thesis [Arial narrow 14 bold]	[Title in 14 Arial Narrow italic, sentence case, single space]
2.	Name of the Scholar	[Arial Narrow 14 bold, capital case]
3.	Postal Address	[Arial Narrow 12 normal, sentence case, single space]
4.	Name of major Advisor	[Arial Narrow 14 bold, capital case]
5.	Official Address	[Arial Narrow 12 normal, sentence case, single space]
6.	Degree awarded	[Arial Narrow 14 bold, sentence case]
7.	Year of award of the degree	[Arial Narrow 14 normal]
8.	Major subject	[Arial Narrow 14 bold, capital case]
9.	Total number of pages in the thesis	[Arial Narrow 14 normal]
10.	Number of words in the abstract	[Arial Narrow 14 normal]

Signature
Name of Advisor
Date

Signature with seal
Head of Section/Department
Date

(Name of Student)
Date

[Arial 12 bold, sentence case, single space]

The second page is a condensed form of the thesis summarizing the title of the thesis, the significance and importance of the study, objectives set forth, methodology adopted and significant findings that draw the conclusions. It should not have any reference, tables, figures and others findings.

5. SUBMISSION OF THESIS

The student is allowed to submit the thesis in the fourth semester after clearing all the prescribed courses (credit and non credit both). Two copies (loose bound) of thesis & four copies of abstract in case of Masters degree and three copies of thesis and five copies of abstract for Doctorate degree are required to be submitted on or before the last date of thesis submission, In every Academic session the last date to submit thesis is notified in the academic calendar. The student has to submit the thesis and abstract in the department, and through the Dean of the College the thesis is forwarded to the Director of Instruction.

The advisor and members of student's advisory committee are required to put their signatures in the Certificate-I of all the copies of the thesis, while the major advisor and Head of the Section/ department should sign thesis abstract before submission. Finally, the Dean of the college is required to forward the thesis and abstract to the Director Instruction for evaluation.

6. EVALUATION OF THESIS

The Director of Instruction with consent of University Professor and Head of the Department is responsible to appoint one external examiner to evaluate the thesis (Master's degree) and two for Doctorate degree.

The scholar and major advisor both are equally responsible to incorporate all the suggestions and corrections if any, suggested by the external examiner in the thesis. In case of more than two corrections in one page, the whole page should be replaced.

After making all the corrections in the thesis, the scholar have to appear for oral examination before the staff members and advisory committee headed by the head of the section / department for master degree. For Ph. D. student the scholar have to appear for oral examination before the staff members, advisory committee headed by H.S./H.O.D and one external examiner.

After successful conduction of oral examination, the advisory committee should sign on the Certificate-II of the thesis for Master's degree and the signature of the external examiner too, for Doctorate degree.

Finally, these copies are bounded as hardbound by following the prescribed colour of the cover page. Two copies of M.Sc. (Ag.) thesis and three copies of Ph.D. thesis along with one soft copy in a compact Disc (CD) should be submitted to the Registrar, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior through proper channel for official notification.

7. PUBLICATION

The work done by the student and presented in the form of thesis submitted to the university is an unpublished work. It can be published in a journal. As a professional courtesy the right to publish the work lies upon the student. The name of the major advisor as coauthor and acknowledgment to the university is mandatory. A footnote should be given indicating that the article is a part of Master/ Doctorate thesis submitted to the Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior

ADDENDUMS

Addendum-I

IMPORTANT JOURNALS AND THEIR CORRECT ABBREVIATIONS

A. National Journals

Indian Journal of Agricultural Science	-	<i>Indian J. agric. Sci.</i>
Indian Journal of Agronomy	-	<i>Indian J. Agron.</i>
Indian Journal of Entomology	-	<i>Indian J. Ent..</i>
Indian Journal of Extension Education	-	<i>IJEE</i>
Indian Journal of Genetics and Plant Breeding	-	<i>Indian J. Genet,</i>
Indian Journal of Horticulture	-	<i>Indian J. Horti.</i>
Indian Journal of Soil Science	-	<i>Indian J. Soil Sci.</i>
Indian Journal of Ecology	-	<i>Indian J. Ecol..</i>
Indian Journal of Plant Protection	-	<i>Indian J. Pl.Prot.</i>
Indian Journal of Pulses Research (Now Journal of Food Legumes)	-	<i>Indian J. Pulses Res..</i>
Indian Journals of Weed Science	-	<i>Indian J. Weed Sci.</i>
Indian Phyto-pathology	-	<i>Indian Phytopath.</i>
Journal of Oilseed Research	-	<i>J. Oilseeds Res.</i>
Journal of Insect Science	-	<i>J. Insect Sci.</i>
Journal of the Indian Society of Soil Science	-	<i>J.Indian Soc. Soil. Sci.</i>
Journal of Bombay Natural History Society	-	<i>J.Bombay Nat. Hist. Soc.</i>
Current Science	-	<i>Curr.Sci.</i>
Science and Culture	-	<i>Sci. Cult.</i>
Entomon*	-	<i>Entomon</i>
Pesticides*	-	<i>Pesticides</i>
Pestology*		<i>Pestology</i>
Maharashtra Journal of Extension Education	-	Maharashtra J. Extn. Edun.

B. International Journals

Advances in Agronomy	-	<i>Adv. Agron.</i>
Agronomy Journal	-	<i>Agron. J.</i>
Annals of Agricultural Research	-	<i>Ann. Agric. Res.</i>
Annual Review of Entomology	-	<i>A.Rev. Ent.</i>
Annual Review of Genetics	-	<i>Ann. Agric. Genet.</i>
Crop Science	-	<i>Crop Sci.</i>
Journal of Economic Entomology	-	<i>J.econ. Entomol.</i>
Journal of the American Society for Horticultural Sciences	-	<i>J.AMER. SOC. HORT. SCI.</i>
Bulletin of Entomological Society of America	-	<i>Bull. ent. Soc. Am.</i>
The Journal of Agricultural Science (Cambridge)	-	<i>J.Agric. Sci. Camb.</i>
Journal of American Oil Chemists Society	-	<i>Ja.Am.Oil.Chem.Soc.</i>
Plant Disease Reporter	-	<i>Plant Dis. Reprtr.</i>
Theoretical and Applied Genetics	-	<i>Theor. Appl. Genet.</i>
Science*	-	<i>Science</i>
Nature*	-	<i>Nature</i>
Euphytica*	-	<i>Euphytica</i>

* Name of the Journal with only one word is not abbreviated.

Indian Journal of Weed Sci.	-	
Indian Phytopath.	-	
J. Grasses Res.	-	
J. Insect Sci.	-	
J. Indian Soc. Soil Sci.	-	
J. Bombay Nat. Hist. Soc.	-	
Can. J. Sci.	-	
Sci. Cult.	-	
Environ.	-	
Pesticides	-	
Pathology	-	
Indian Journal of Extension Education	-	

MARKS OF PUNCTUATION

Punctuation	Symbol	Use
Period/ Full stop	•	Use a period at the end of sentence and after most abbreviations but not at the end of the title.
Question Mark	?	Use a question mark at the end of a direct question, and enclosed in parentheses to show uncertainty about a word, fact or number.
Comma	,	Use a comma before the conjunctions and, but, for, or, yet, and nor, when they join the clauses of a compound sentence. Use a comma to set off dates and before and after a dependent clause that comes in the middle of a sentence like, e.g., i.e., namely. Also, use a comma to separate thousands in numbers of one thousand or over.
Semi colon	;	Use a semicolon between two independent clauses when they are not joined by a coordinated conjunction and the ideas expressed are closely connected. Use a semicolon to separate independent clauses joined only by conjunctive adverbs like however, further ore, consequently, also, thus, besides, accordingly, hence, than etc. use a semicolon with coordinating conjunction if the independent clauses contain commas.
colon	:	Use a colon before a long formal quotation, formal statement or list of items. Use a colon to separate chapter, verse of a Biblical citation, volume and page numbers in references. The colon is also used in numerals designating hours and minutes and the parts of a ratio.
Dash	-	Use a dash between numbers, pages, dates, time etc.
Parentheses	()	Use parentheses to enclose material that serves as an explanation, supplement or example.
Quotation mark	"....."	Use quotation marks to enclose all direct quotations. The comma and the full stop are always enclosed within quotation marks.
Apostrophe	'	Use the apostrophe to indicate the possessive case of the noun or pronoun. For ending nouns not ending in s add the apostrophe followed by S. For plural nouns ending in s, use the apostrophe alone. The apostrophe is often omitted in the names of organizations.
Italics	Slanted fonts	Use italics to indicate scientific names and words/phrases not adopted as English words.

Addendum-III

ROMAN NUMBERS

I	II	III	IV	V	VI	VII	VIII	IX	X
1	2	3	4	5	6	7	8	9	10
XX	XXX	XL	L	LX	LXX	LXXX	XC	1C	C
20	30	40	50	60	70	80	90	99	100
CC	CCC	CD	D	DC	DCC	DCCC	CM	XM	M
200	300	400	500	600	700	800	900	990	1000

Addendum-IV

METRIC PREFIXES

Symbol	Prefix	Multiple
da	deka	10
h	hecto	10 ²
k	kilo	10 ³
m	mega	10 ⁶
G	giga	10 ⁹
T	tera	10 ¹²
d	deci	10 ⁻¹
C	centi	10 ⁻²
M	milli	10 ⁻³
u	micro	10 ⁻⁶
n	nano	10 ⁻⁹
p	pico	10 ⁻¹²
F	femto	10 ⁻¹⁵
a	Atto	10 ⁻¹⁸

METRICATION TABLE

A.	Linear measure		
1	Inch	=	2.54 cm
1	Foot	=	30.48 cm (12 inch)
1	Yard	=	0.914 m
1	Mile	=	1.60934 km
1	Kilometer	=	1000 m (0.621371 mile) (1760 yard)
1	Meter	=	1.09361 yard (3.28 feet)
1	Furlong	=	201.16 m (220 yard)
B.	Square measure		
1	Square inch	=	6.452 cm ²
1	Cubic inch	=	16.387 cm ²
1	Square foot	=	0.092 m ²
1	Cubic foot	=	0.028 m ² (1728 cubic inch)
1	Are	=	100 m ²
1	Hectare	=	1000 sm ² (2.471 acre)
1	Acre	=	0.404 ha (4840 yard) (4000m ²)
C.	Liquid measure		
1	Pint	=	0.473 litre (16 ounce)
1	Quart	=	0.946 litre (32 ounce)
1	Gallon	=	3.785 litre (4 quart)
1	Bushel	=	35.25 litre
1	Imperial gallon	=	4.546 litre
D.	Weights (mass)		
1	Pound	=	454 gram (16 ounce)
1	Ounce	=	28.35 gram (16 dram)
1	Dram	=	1.177 gram
1	Grain	=	0.065 gram
1	Carat	=	0.200 gram
1	Metric ton	=	106 gram (1000 kilogram) (10 quintal)
E.	Temperature		
	To find degrees Celsius, subtract 32 from Fahrenheit and divide by 1.8		
	To find degrees Fahrenheit, multiply degrees Celsius by 1.8 and add 32		

SOME IMPORTANT NON ENGLISH WORDS

Word	Abbreviation	Meaning
ab initio (It)	ab.init	From the beginning
ab antiquo (It)	-	From olden time
ad hoc (L)	-	For the special aim
addendum (L)	-	To be added
ante meridiem (L)	am	Before noon
anno domini (L)	A.D.	In the year of the lord
	B.C.	Before Christ
example gratia (L)	e.g.	For example
et. alii (L)	et al.	And others
et cetera (L)	etc.	And the rest
ibidem (L)	ibid.	In the same work/place/reference
id est (L)	i.e.	In reference to; that is
in situ (L)		In the original
in toto (L)		In full
in vitro (L)		In glass; biology taking place else where outside a living organism, away from the host
in vivo (L)		Biology taking place in side a living organism or within the host
infra (L)		Below
kharif (H)		Rainy season cultivation
modus operandi (L)		Method of working
per annum (L)		By the year
per capita (L)	-	By the head
per se (L)	-	By itself
post meridiem (L)	pm	After noon
precis (F)	-	Exact
rabi (H)	-	Wither season cultivation
status quo (L)	-	Existing condition
viva voce (L)	-	Orally
vide licet (L)	viz.	Namely
versus (L)	vs	Against
vis-a-vis (F)	-	Directly opposite; face to face
vide (L)	-	See
zayad (H)	-	Summer season cultivation

Words given in parentheses indicate the source language; F = French; It = Italian; L = Latin; H = Hindi