### GUIDELINES FOR PREPARATION AND SUBMISSION OF THE THESIS

In supersession of its previous guidelines for the preparation and submission of thesis, the following guidelines should be followed.

### 1. Paper and Typing

Each thesis should be typed on white bond paper measuring 22 cm x 28 cm (A4 size). Margin of at least 3.5 cm on left side, 2.0 cm on right side, 3.0 cm on the top and 2.5 cm on the bottom should be kept. Font New Times Roman and font size of 12 should be used. Typing should be done in one and half space on both sides of the sheet. The entire thesis should be typed on the same computer (letter quality or laser printer) and photostat copies in required number can be prepared. Errors in typing should be avoided. Spell checker should be used for corrections prior to final printing. Simple error in typing may be corrected using black India ink. Cutting is not permitted. In case of more serious errors or errors exceeding 4, the sheet will have to be retyped. Not more than 10 corrections in the whole thesis would be permitted. No word should remain incomplete and be carried over to the next page.

### 2. Illustrations and Photographs

The illustrations and photographs should be included in the thesis text at the appropriate places.

#### 3. Structure of the Thesis

### 3.1 Title Page

The title page (not to be confused with the top cover carrying the title) should give the following details.

- (a) The title of the thesis near the top and centered
- (b) The following should be typed below the title:

### Thesis Submitted to the



### G. B. Pant University of Agriculture & Technology Pantnagar – 263 145, Uttarakhand, India

- (c) Still below, the following should be given:

  By

  (name of the student)
- (d) Below this, the following should be typed

### IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

(mention approved degree title)

(e) At the bottom, the month and year of submission of the thesis should be given.

All the above should be properly centered and spaced (see **Specimen 1**)

### 3.2 Acknowledgement

A short acknowledgement, signed with date and place by the student, should be next to the title sheet. Efforts and contribution of all concerned may be acknowledged. However, it should not be too lengthy and should avoid unnecessary thanks giving. Financial assistance received by the student from any financing institute/agency should be duly acknowledged.

#### 3.3 Certificates

Each thesis will have two certificates from advisor and advisory committee one each (see Specimens 2 and 3)

#### 3.4 Table of Contents

The table of contents should give the chapter headings and also the sub-titles, if any, with appropriate page references, and should be placed next to the certificate sheets. This should be followed as applicable by:

- (a) List of Tables
- (b) List of Figures
- (c) List of Plates
- (d) List of Nomenclatures/Symbols

Format for (a), (b) and (c) is			
Table No.	Title	I	Page
and for (d)			
abbreviation			

### 3.5 The thesis should generally consist of the following chapters:

- 1. Introduction
- 2. Review of Literature
- 3. Materials and Methods
- 4. Results and Discussion
- 5. Summary and Conclusions

Literature Cited

Appendices

A brief statement giving the bio-data of the student Abstract in English and Hindi

Each of the above main chapters can have sub-titles. However, all chapter-headings and sub-headings should

be listed, wherever necessary, in the table of contents and appropriate page references be given. This should be followed by the list of illustrations and tables along with page number in pencil. However, permanent page number will be given in finally bound copies.

### 3.6 Format for the Chapter style

Chapter title – All Capitals
Heading of the Section – Title case
Heading of the subsection – Sentence case
Example of the above is as follows

#### 3. MATERIALS AND METHODS

- 3.1 Experimental Materials
  - 3.1.1 Seeds production
  - 3.1.2 Fungal antagonists
- 3.2 Experimental Methodology
  - 3.2.1 Collection of samples

Numbering may be restricted to 4 places (e.g. 3.2.1.1) as far as possible.

#### 4. Literature Cited

Standard style of quoting references should be used in the text and under the heading "Literature Cited"

The references should be arranged strictly alphabetically. The items of information of different types of publications should be given as follows:

**A. Journal Article:** Name(s) of author(s). Year of publication of the article. Title of the article. Name of the journal (in italics), Volume No. (issue No.): page(s). The name of the journal should be abbreviated according to International Standards Organization rules.

- **B. Simple Book:** Name(s) of author(s). Year of publication. Title of the book. Volume No. (in case of multivolume book), Edition No. (if it is later than I edition). Place of Publication, Publisher's name. Pagination (when a particular page of the book is cited then 'p' should be mentioned before page number cited; 'p' following the page number means total number of pages contained in the document).
- C. Contribution to Composite Book: Name(s) of author(s). Year of publication. Title of contribution. Connecting word 'In': and the following items of the host document: Name(s) of authors. Title of book. Volume No. (in case of multivolume book), Edition No. (if it is later than I edition). Place of publication, Publisher's name. Pagination ('pp' should be used before writing plural pages).
- **D.** Conference / Workshop / Symposium / Seminar Proceedings. Name (s) of author(s). Year of Conference etc., Place, Date of Conference. Year of publication. Title of the publication. Name(s) of editor(s). Place of publication, Publisher's name. Pagination. (as indicated in B.)
- E. Contribution to Conference/ Workshop/
  Symposium/ Seminar Proceeding: Name(s) of author(s). Year of publication. Title of contribution. Connecting word 'In': and the following items of information of the host document: Name of the Conference, Place, Date of the Conference etc., Title of the publication. Name(s) of editor(s). Place of publication, Publisher's name. Pagination. (as indicated in C.)

- **F.** Thesis: Name of author. Year of submission. Title of the thesis. The word Thesis, Name of the degree. Name of the University, Place, Pagination. (as indicated in B.)
- **G.** Institution/Society Publications: Name of the institute/society, Place. Year of publication. Title of the publication. Place of publication, Publisher's name, Pagination (as indicated in B.)
- **H. Government Publications:** Name of Territory. Name of the Ministry, etc. Name of the Department, Section, etc. Year of publication. Title of publication. Place of publication, Publisher's name, Pagination.
- **I. Website reference:** Name of the website. Title. Date of visit to the website.

### (see Specimen 4)

When quoting reference in the text of the thesis, the last names of the authors (up to two authors and if more than two authors are there, then last name of the first author et al. in italic) should be given followed by the year of publication within parentheses. If reference made to more than one publication by the author(s), in the same year, the publication should be numbered as (a) and (b) of that the earliest publication of that year being designated (a) and so on.

In case of doubt, the student or his advisor may consult the Dean, PGS.

#### 5. Submission of Thesis

A student registered in a semester can submit the thesis on any day during office hours prior to the commencement of the next semester. Students who fail to submit the thesis before the commencement of the next semester, must necessarily register and pay all University dues. The student will present thesis seminar (non-gradial) before submission of thesis both at Master's and Doctoral levels with mandatory submission of satisfactory report by the advisory committee to the Dean, PGS/Registrar.

Temporary bound copies (three in case of Master's and four in case of Ph.D.) of the thesis should be submitted to the College of Post-Graduate Studies. One copy shall be sent to concerned department and two/three copies will be sent to the office of the Registrar for onward transmission to the External Examiner(s) and Advisor concerned.

A candidate for Doctorate degree shall be required to submit at least one research paper for publication in reputed Journal of research before submitting the thesis. The student will have to submit a certificate from the advisor to this effect alongwith the copy of the paper(s). In case of candidate for Master's degree, it will be desirable to submit the manuscript of research paper(s) to the advisor before submitting the thesis to the office of the Dean, Post Graduate Studies. Before the student leaves the University campus, after temporary submission of the thesis, he/she should leave his/her address alongwith contact number and e-mail address with the Advisor, Dean, PGS and Registrar, and also inform them of any change in address to facilitate communication with him/her about his/her thesis viva-voce examination.

#### 6. Abstract

Every student, in addition to the thesis, must also submit an abstract in English as well as in Hindi of about 300 words (10 copies for Ph.D. and 6 copies for Master's degree) on white bond paper measuring 22 cm x 28 cm (A4 size) as per directions for typing the thesis. The abstract should be signed by the student and his advisor (see Specimen 5).

#### 7. Panel of Examiners

The Advisor, in consultation with the Head of the Department, will suggest a panel of three examiners for masters and four in case of Ph.D. at least one month before the student is ready to submit the thesis to the Dean, PGS who, at his discretion, will obtain consent from one examiner for Master's and two examiners for Ph.D. from the panel. Once the consent is obtained, Dean, PGS will advise the Registrar to appoint the examiner(s) for evaluation of the thesis and for the conduct of the vivavoce examination. In case of Ph.D. thesis after getting the satisfactory reports, Dean, P.G.S. will advise Registrar for inviting one examiner for Ph.D. viva-voce examination of the student.

#### 8. Evaluation of Thesis and Viva-Voce Examination

The Registrar will inform appointment of External Examiner to the Advisor. The Advisor can then fix a suitable date for the viva-voce examination in consultation with External Examiner after the receipt of satisfactory report from the External Examiner(s), and inform the same to the Registrar, the Dean PGS/Dean of Constituent College, the Head of the Department, the members of the Advisory Committee and the student. At least 15 days must elapse between the date of dispatch of the thesis from Registrar's office to the External Examiner and the final date of the viva-voce examination. It will be conducted by the External Examiner, the Advisor, the members of the advisory Committee and the Head of the Department. However, other faculty members may attend the same as visitor. On conclusion of the viva-voce examination, four copies of the report in the prescribed proforma should be submitted (see Specimen 6).

#### 9. Final Submission of Thesis

Master's thesis will be bound in bottle green hard cover and Ph.D. in maroon red cover.

Each student will incorporate all the correction(s) and modifications as suggested by the External Examiner(s) and others in his/her thesis and then submit one copy of the hard bound thesis to the office of the Dean, PGS after successful completion of viva-voce examination alongwith correction slip through Head of the Department from the Advisor mentioning that all corrections have been incorporated and the final withdrawal form from the University. This copy will forwarded to University library. Other documents to be submitted with the final thesis are as follows:

- 1. Soft copy (PDF format/M.S. Word) of the complete thesis on CD mentioning the name and Id. No. of the student alongwith degree programme and major with the help of marker pen should be submitted in the University Library and the receipt of the same is given in office of Dean, PGS
- 2. The student will submit a pukka bound thesis in the department concerned and get a receipt which is to be submitted in the office of the Dean, PGS.
- 3. Certificate of assistantship (in case of the student who is recipient of graduate assistantship) to be submitted in Registrar's office.

### POPULATION STRUCTURE OF Xanthomonas oryzae pv. oryzae, THE PATHOGEN OF BACTERIAL BLIGHT OF RICE, FROM MAJOR RICE GROWING AREAS OF UDHAM SINGH NAGAR (UTTARAKHAND)

### **Thesis**

### Submitted to the



G.B. Pant University of Agriculture & Technology Pantnagar – 263 145, Uttarakhand, India

By

Shailesh Pandey M.Sc. Ag. (Plant Pathology)

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Doctor of Philosophy

(Plant Pathology)

August, 2010

### **CERTIFICATE – I**

This is to certify the				
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**Advisory Committee** 

### **CERTIFICATE – II**

(Name)
Chairman

Signature Signature (Name) (Name) (Name)

Member Member Member

Signature (Name)

**Head of the Department** 

(Ex – Officio Member) (in case of Ph.D)

### LITERATURE CITED

#### A. Journal Article

1. Babu, E. and Singh, V.C. 1992. Tridimefon ameliorated cadmium toxicity in wheat seedling. *Indian J. Plant Physiol.* 35: 195 – 207

### **B. Simple Book**

- **1. Ou, S.H. 1985 Turng, D. 1965.** Rice Diseases. Kew, Commonwealth Mycological Institute. 368 p.
- **2. Tung, D. 1965.** Handbook of Diet Therapy. 4<sup>th</sup> ed. Chicago, University of Chicago Press. 525 p.

#### C. Contribution to Composite Book

- **1. Scott, K.J. 1992.** The molecular analysis of barley resistance to powdery mildew. *In*: Shewry, Peter R. ed. Barley: Genetics, Biochemistry, Molecular biology and Technology. Oxford, C.A.B. International. pp. 481 496.
- **2. Bjorkhnam, O. 1981.** Responses of different quantum flux dignities. *In*: Lange, L.O.; Nosel, P.S. and Zeigler, H. eds. Encyclopedia of Plant Physiology. V. 2A: Physiological Plant Ecology. Berlin, Springer Verlag. pp. 57 107.

## D. Conference/ Workshop/ Symposium/ Seminar/ Proceedings

**1. Suzk, H. 1965.**Origin of Variation in *Pyricularia oryzae*. *In*: Symposium on the Rice Blast Disease, Los Banos, July 1963.Baltimore, Johns Hopkins Press. pp. 111-146.

**2. Tung, D. 1971.** Recent advances in numerical analysis of structural eigen value problem. *In*: Tokyo Seminar on Finite Element Analysis, Tokyo, November 5-7, 1973. Theory and Practice in Finite Structural Analysis: Proceedings. Tokyo, University of Tokyo. pp. 247-271.

#### E. Thesis

- **1. Roumen, E.C. 1991.** Partial resistance in rice to blast and how to select for it. Thesis, Ph.D. Agriculture University, Wageningen 108 p.
- **2. Turna, H.S. 1989.** Evaluation of elite tomato (*Lycopersicum esculentum* Mill.) lines for growth, yield and ketchup processing. Thesis, M.Sc. G.B. Pant University of Agriculture and Technology, Pantnagar. 84p.

### F. Institution/ Society Publication

- **1. Central Building Research Institute. 1985.** Building for the 21<sup>th</sup> Century Roorkee, Nemchand Bros. 125p.
- **2. International Rice Research Institute. 1977.** Annual Report for 1974. Los Banos, IRRI. p 20

### **G.** Government Publication

- 1. India. Ministry of Food and Agricultural Expert Committee on the Preventionof Slaughter of Cattle in India. 1955. Report. New Delhi, Manager of Publications. 250p.
- 2. India. Ministry of Finance. Bureau of Direct Taxation. Committee on Agricultural Wealth and Income. 1972. Report of committee on agriculture wealth and income. New Delhi, Manager of Publications. 178p.
- **H.** Website Reference <u>www.sugarudyog.com</u> Title. Date of visit to the website

### FORMAT FOR ABSTRACT

Name	:	Id. No.	:
Semester &	:	Degree	:
Year of admi	ssion	Department	:
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Advisor	:		

### **ABSTRACT**

Signature Signature (Name of Advisor) (Name of Author)

### Specimen 6 G.B. PANT UNIVERSITY OF AGRICULTURE & **TECHNOLOGY, PANTNAGAR – 263145**

### FORM FOR THESIS AND VIVA-VOCE EXAMINATION REPORT (to be filled in quadruplicate)

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REGISTRAR

### **GUIDELINES**

### **FOR**

# PREPARATION AND SUBMISSION OF THESIS



COLLEGE OF POST GRADUATE STUDIES G.B. Pant University of Agriculture & Technology, Pantnagar – 263 145, India

March, 2012

Prepared by : Dr. B.K. Kumbhar, Dean

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