



# **Chittagong Veterinary and Animal Sciences University Guidelines on PhD Thesis Preparation (Effective from 2013)**

## **1. Introduction**

- The PhD thesis guidelines described in this document have been developed so that these are presented in a form suitable for library cataloging and shelving. The document takes its place in the library as a product of original thinking and research, and it is, therefore, designed to appear in a form comparable to published works.
- This document covers the general rules of format and appearance. Students should consult their thesis supervision committee for specific content requirements.
- It is the student's responsibility to read and follow the requirements presented here and to submit documents of the highest quality. The final copies will not be accepted with corrections, insufficient margins, or if they are of such poor quality that reproduced cannot be made.
- Because of refinement in requirements, students should not use existing library or departmental copies of thesis as examples for proper format.

## **2. Originality**

### **A. A PhD thesis shall**

- Consist of the student's own account of his/her investigations and must indicate how they appear to him/her to advance the study of the subject.
- Form a distinct contribution to the knowledge of the subject and afford evidence or originality by the discovery of new facts and/or the exercise of independent critical power.
- Be an integrated whole and present a coherent argument.
- Give a critical assessment of the relevant literature, describe the method of research and its findings, and include a discussion on those findings, and indicate in what respects they appear to the candidate to advance the study of the subject.
- Be of a standard to merit publication in whole or in part or in a revised form (for example, as a monograph or as a number of articles in learned journals).

## **B. Components:**

**A thesis should contain the following parts in the order shown:**

Title page

Authorization page

Signature page

Acknowledgements

Table of contents, list of figures and tables

Abstract

The thesis body (Introduction, Review literature, Structure of thesis, General Materials and Methods, Results of different chapters, General discussion, Conclusion and Recommendation and Future perspectives)

A thorough bibliography or reference list

Appendices

Brief bio-data of the student

### **Summary (Title font: 14 pt)**

Summary must be accommodated in 2-3 pages or less (Text font: 12 pt)

### **Acknowledgements (Title: Font: 14 pt)**

The student is required to declare, in the acknowledgements section, the extent to which assistance has been given by his/her faculty and staff, fellow students, external bodies or others in the collection of materials and data, the design and construction of apparatus, the performance of experiments, the analysis of data, and the preparation of the thesis (including editorial help). In addition, it is appropriate to recognize the supervision and advice by the thesis supervisor and members of the thesis supervision committee (Text: Font: 12 pt).

### **Final version:**

The final version of the thesis must be free from typographical, grammatical and other errors when submitted to the head of respective department, coordinator of Advanced Studies and Research and Library. While this is the responsibility of the student, the supervisor and the department/division head should not sign off on theses that are not, to the best of their knowledge and error free.



1. Title page

**INVESTIGATION OF ANTIMICROBIAL RESISTANCE  
PATTERN AGAINST *SALMONELLA* SPP ISOLATED FROM  
LAYER CHICKENS IN BANGLADESH AND ASSOCIATED  
RISK FACTORS (Font: 18 pt & bold)**

**Parvez Ahmead (Font: 14 pt & bold)**

Roll No. (Font 12 pt):

Registration No. (Font 12 pt):

Session: 2012-2013 (Font 12 pt)

**A thesis submitted in the total fulfillment of the requirements for the degree of Doctor  
of Philosophy in Pharmacology (Font: 12 pt & bold)**

**Department of Physiology, Biochemistry and Pharmacology  
Faculty of Veterinary Medicine (Font: 12 pt & bold)  
Chittagong Veterinary and Animal Sciences University  
Chittagong-4225, Bangladesh (Font: 13 pt & bold)**

**JUNE 2013 (Font: 13 pt & bold)**

## 2. Authorization page (Font: 12 & bold)

I hereby declare that I am the sole author of the thesis. I also authorize the Chittagong Veterinary and Animal Sciences University (CVASU) to lend this thesis to other institutions or individuals for the purpose of scholarly research. I further authorize the CVASU to reproduce the thesis by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research (Text: Font 12 pt).

I, the undersigned, and author of this work, declare that the **electronic copy** of this thesis provided to the CVASU Library, is an accurate copy of the print thesis submitted, within the limits of the technology available (Text: Font: 12 pt).

3. Signature page

**INVESTIGATION OF ANTIMICROBIAL RESISTANCE  
PATTERN AGAINST *SALMONELLA* SPP ISOLATED FROM  
LAYER CHICKENS IN BANGLADESH AND ASSOCIATED  
RISK FACTORS (Font: 18 pt & bold)**

**Tamanna Jahan (Font: 14 pt & bold)**

Roll No. (Font: 12 pt):

Registration No. (Font: 12 pt):

Session: 2012-2013 (Font: 12 pt)

**This is to certify that we have examined the above PhD thesis and have found that is complete and satisfactory in all respects, and that all revisions required by the thesis examination committee have been made (Font: 12 pt & bold)**

-----  
**Supervisor (Font: 12 & bold)**

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**Co-supervisor (Font: 12 & bold)**

-----  
**Chairman of the Examination Committee (Font: 12 pt & bold)**

**Department of Physiology, Biochemistry and Pharmacology  
Faculty of Veterinary Medicine  
Chittagong Veterinary and Animal Sciences University  
Khulshi, Chittagong-4225, Bangladesh (Font: 13 pt & bold)**

**JUNE 2013**

4. Acknowledgements (Font: 14 pt & bold)

5. Table of contents (authorization, acknowledgement, abstract, list of publications (if any), list of tables, list of figures and list of abbreviations with the page numbers) (Font: 14 pt)

6. Abstracts (Title: Font: 14 pt & bold)

7. The thesis body

**Chapter-1: Introduction [Title font: 14 pt & bold]**

1. Heading (Font: 12 pt & bold)

**Chapter-2: Review of literature [Title font: 14 pt & bold]**

2. Headings under Review of literature (Font: 12 pt & bold)

2.1. Sub-headings (Font: 12 pt, bold & straight)

**Chapter-3: General Materials and Methods [Title font: 14 pt & bold]**

3. Headings under Materials and Methods (Font: 12 pt & bold)

3.1. Sub-headings (Font: 12 pt, bold and straight)

**Chapter-4: Prevalence of antimicrobial resistance against *Sal* spp isolated from samples of layer chicken [Title font: 14 pt & bold]**

4. Headings under Results (Font: 12 pt & bold)

4.1. Sub-headings (Font: 12 pt & straight)

**Chapter-5: Risk factors associated with the pattern of antimicrobial resistance against *Sal* spp isolated from samples of layer chicken [Title font: 14 pt & bold]**

5. Headings under Results (Font: 12 pt & bold)

5.1. Sub-headings (Font: 12 pt, bold & straight)

## **Chapter-6: Molecular characterization of resistant gene of *Sal* spp isolated from samples of layer chicken**

### **5. Headings under Results (Font: 12 pt & bold)**

#### **5.1. Sub-headings (Font: 12 pt, bold & straight)**

## **Chapter 6: General Discussion (Font: 14 & bold)**

### **6. Headings under Discussion (Font: 12 pt & bold)**

#### **6.1. Sub-headings (Font: 12 pt, bold & straight)**

## **Chapter 7: Conclusions (Font: 12 & bold)**

## **Chapter 8: Recommendations and Future perspectives (Font: 12 & bold)**

### **References (Title font: 12 & bold)**

Listed references (Font size: 12)

**Appendix A: Title----- (Font: 12 & bold)**

**Appendix B: Title----- (Font: 12 & bold)**

**Brief bio-data of the student (Font: 12 & bold):** It is suggested to write your bio-data in a one paragraph (Text Font: 12 pt)

### **Thesis write-up style:**

1. In the whole body of thesis font Times New Roman, size **12**, **1.5** lines spacing and both right and left justified margins must be used.
2. Page layout should be with Normal Margins [Top & Bottom (**1"**), Right (**0.75"**) and Left (**1.75"**); Size of page should be A4 (**8.27"×11.69"**).
3. To reduce the errors, whole document (Microsoft Program) should be typed while using the formatting symbols (¶).
4. Literature review should be in paragraph form. Each paragraph of the literature review should classify and evaluate the themes of the texts that are relevant to your thesis.

5. Only authenticated scientific website should be quoted as a reference.
6. **In-text reference:** In the body of the document (Introduction, Review of Literature, Methodology and Discussion), refer to authors as follows:
  - **Single author in an article:** Hoque (2012). If the sentence structure requires that the authors' name be included in parenthesis, the proper format is (Hoque, 2012).
  - **Two authors in an article:** Smith and Jones (1992) or Smith and Jones (1990, 1992).
  - If the sentence structure requires that the authors' names be included in parentheses, the proper format is (Smith and Jones, 1982; Jones, 1988a, b; Jones et al., 1993).
  - **More than two authors in an article:** The first author's name is followed by the abbreviation et al. (Smith et al., 1982).
  - **More than one article** listed in the same sentence of text must be in chronological order first and alphabetical order for two publications in the same year.
7. **In the Literature cited section**, all references cited in the body of the document should be enlisted.
  - References shall first be listed alphabetically by author(s)' last name(s), and then chronologically.
  - The year of publication follows the authors' names. As with text citations, two or more publications by the same author or set of authors in the same year shall be differentiated by adding lowercase letters after the date.
  - All authors' names must appear in the literature cited section.
  - Full name of the Journal should be used in the reference list.
  - **Note:** Please see the example format of reference styles that should be followed according to the appendix style.
8. Inclusive page numbers must be provided.
9. Page numbering will be started from introduction onward.
10. Heading of the chapter (Introduction, Methodology, Results etc) should be written in font size **14 (Times New Roman)** and bold

### **Important notes:**

- i. **Six copies** of temporary bound PhD thesis must be submitted to the respective head of the department (3 copies for thesis examiners, 2 copies for defense committee members and 1 for a reserve copy)
- ii. **Three copies** of signed “**Declaration of Authenticity**” should be submitted along the submission of bound Thesis
- iii. **Three copies** of normal bound thesis can be circulated to the members of “Thesis Defense Committee” (**Optional**)
- iv. **Final hard bound copy** of PhD Thesis must be black color with Golden skin print
- v. **Five final hard bound copies** of PhD Thesis must be submitted to the respective head of the department (2 copies for supervisors, 1 for head of the department, 1 for coordinator of Advanced Studies and Research and 1 for Library; **Library copy should be submitted through the CASR office**)
- vi. **Digital version of PhD Thesis as a soft copy** of MS Thesis in a CD must be submitted to CVASU library

### **Appendix:**

#### **Published papers**

Anonymous. 2009. Annual report on zoonoses in Denmark 2008. National Food Institute, Technical University of Denmark. [cited 2010 Sep 22]. Available from: <http://www.food.dtu.dk>.

Bassett TJ, Zueli KB. 2000. Environmental discourses and the Ivorian Savanna. *Annals of the Association of American Geographers*. 90 (1): 67-95.

#### **Accepted papers but unpublished**

Same as published papers, but “In press” appears instead of the page numbers. DOI number could be cited if it is available.

#### **Book chapters**

Evans S, Smith J. 2000. Ecotourism in tropical rainforests: an environmental management option for threatened resources? In: Font X, Tribe J, editors. *Forest tourism and recreation: case studies in environmental management*. 4th ed. Wallingford (GB): CABI Publishing. pp. 127-142.

**Books**

Barrow GI, Feltham RKA. 1993. Cowan and Steel's Manual for the Identification of Medical Bacteria. Cambridge University Press. p.331.

**Electronic journal articles.**

Yencho GC, McCord PH, Haynes KG. 2008. Internal heat necrosis of potato - a review. American Journal of Potato Research. 85(1): 69-76. [cited 2008 Jul 22]; Available from: <http://www.springerlink.com/login.ezproxy.library.ualberta.ca/content/915131u455763131/fulltet.html>

**Proceedings**

Hokonohara S, Dekuras Y, Kanbayashi A, Tsutsui M, Sato T, Sato S. 2004. Effect of combined eradication program for establishing mycoplasma eradication program for establishing mycoplasma (MG, MS) free breeding flocks of layer chickens. Proceedings of the 22nd World's Poultry Congress, Istanbul, Turkey, 8th-13th June 2004. Istanbul, Turkey. Abstract Book, p 742.