

DISSERTATION GUIDELINES

Central Department of Zoology
Institute of Science & Technology
Tribhuvan University
Kirtipur, Kathmandu, Nepal

Contents

	Page
Preface	
➤ Guidelines on Writing a Research Proposal	3
➤ Guidelines on Thesis Format	10
• Background	
• General Guidelines	11
• Specific Guidelines	14
I. Preliminary pages	
II. Main text	
III. End matter	
• Samples	
➤ Guidelines on Article Manuscript Preparation	28

Preface

The Central Department of Zoology (CDZ) of Tribhuvan University is one of the leading and the oldest department in Nepal. The Department has offered Master's and Ph.D degrees in Zoology with specializations in Entomology since 1966, Fish & Fisheries since 1968, Ecology since 1978 and Parasitology since 1985. Thesis (a written record of the work that has been undertaken by a candidate) writing in Zoology started in 1970s. The first M.Sc. thesis was submitted in 1974. At present thesis has been made a compulsory requirement for the degree of Master. The students have to submit their thesis for evaluation. The thesis provides the students with an opportunity to demonstrate their ideas, research skills and creative abilities. The preparation of thesis is one of the most important aspects of Master's degree.

This guideline is a revised form of the year 2011 where research proposal writing and article writing matter is also included. It is realized that there is an urgent need to publish a standard updated format for the department to make students aware in improving research proposal, thesis and article writing and maintain uniformity.

This 'Dissertation Guidelines' is an effort to aim to provide help and guidance to students doing dissertation in writing research proposal, thesis and article in the format developed by CDZ. It offers an adequate coverage with sufficient examples and illustrations of many conceptual and practical problems encountered while writing and printing the proposal, thesis and article. Reading and following these guidelines will help students to prepare a thesis that will be in conformance with university standards and thus acceptable for format and style.

I would like to thank all the faculty members for their inputs during the preparation of the guidelines.

Ranjana Gupta Ph.D.
Professor and Head
Central Department of Zoology,
Institute of Science & Technology,
Tribhuvan University, Kirtipur,
Kathmandu, Nepal

Guidelines on Writing a Research Proposal

- **‘Dissertation Proposal & Seminar’** is a **compulsory** paper of one credit in MSc 3rd semester with full marks 25 and pass marks 12.5. The research proposal written by students will be used for the dissertation work in the 4th semester.
- The students should develop the proposal for dissertation work under the guidance and consultation of supervisor of their department and if required joint supervisor (may be other than their department).
- The students will select topic for their research work related to their special/elective paper. The nature of project work can be field work, observational work and experimental work. Whatever the nature of the work, students should critically review literature of the area of interest, discuss with colleagues, academic supervisor(s) and other experts and identify the problem specifically. Extensive and relevant literature review should be done to meet the purpose of the project title, objectives and materials cum methods. Latest literature should be emphasized.
- The proposal must be submitted for the original research work. There must not be duplication or repetition of previous research work.
- Students should submit one copy of the proposal to the department within first three months of the 3rd semester or as time allocated by the concerned department head. The general format of the proposal should be in standard format given in this guideline.
- The department will call for open defense of the proposal. The proposal evaluation committee will include Head of the department/ Campus chief / appointed faculty members. If necessary, the student shall be asked to do further corrections and amendments before the approval of the proposal.

Format of Research Proposal

- **Language:** The research proposal must be written in **English language**. Spelling should be either US English or British English, but not mixed.
- **Proposal Length:** The proposal should not exceed 10 pages excluding the Title page and Appendices. Page no. 1 should have the precise proposal summary followed by introduction.
- **Paper:** The proposal must be printed on one side of the A4 size paper.
- **Pagination & margins:** Page number should be placed at the centre of the bottom of the pages. Each page must be kept within 1” margin or 2.5 cm at top, bottom, right and the left hand margin should be 1.25”.
- **Title page:** The title page must include the **proposal title**, name and **identity of the student** (roll no., batch, special paper); name, designation and organization of the **supervisor(s)** with the signature space; and name of the **submitted department (eg. Central Department of Zoology, Institute of Science & Technology, Tribhuvan University**. All the contents should be centered aligned. Title should be in upper case and bold print in Times New Roman 14 pt. font size and other matter in 12 pt font size.
- **Font size and spacing:** Standard font size for text should be set at 12 pt in Times New Roman. Line spacing of regular write up should be of 1.15 space (spacing before and after of 0 pt.)
- **Headings & sub-headings:** Headings should be all in upper case and sub-headings in lower case, be bold, left aligned in 14 pt and 12 pt respectively. The sub-headings can be numbered according to the heading number (eg. 1. INTRODUCTION; sub-headings: 1.1, 1.2, 1.3.....)

Project Title

- Title should be concise, specific, impressive and informative - short titles are preferred.
- Limit to one or two lines/generally not exceeding 20 words.
- Use scientific names of the organisms (if needed).

Summary

The summary should contain the essence of the whole proposal in about 250 words and should summarize the following: introduction, objectives, methods and expected outcomes.

Introduction

This section introduces the domain of the study and provides a general overview of the circumstances, issues, and background leading to the problem under investigation.

The introduction section should include:

- Background of the study
- Objectives
- Significance of the study/rationale/ justification
- Research questions & hypotheses (if necessary)

Background: This should explain the background against which the work is to be performed and set out the results of any previous studies related to the research to be undertaken. Any person who reads the brief background should be left with a clear understanding of how the new study follows on from the current state of knowledge and why it needs to be done. As many as important related references should be cited.

Objectives

What is the point of the study? Give the overall aim of the project in one sentence.

Then to achieve that aim give the specific objectives (generally three or four) which are the breakdowns of the general objective into smaller logically connected parts. In general, the more specifically the objectives are stated, the easier it will be to plan the study.

Use SMART guidelines to develop research objectives. *SMART* stands for:

Specific – avoid general statements; include detail about what you are going to do.

Measurable – there should be a definable outcome.

Achievable – be realistic in what you hope to cover, don't attempt too much. A less ambitious but completed objective is better than an over-ambitious one that you cannot possibly achieve.

Realistic – think about logistics. Are you practically able to do what you wish to do? Factors to consider include time, expense, skills, access to sensitive information, participant's consent, etc.

Time constrained – be aware of the time-frame of the project.

Significance of the study

Give the importance of the work. Discuss the pertinence of this work to scientific community. If possible, elaborate the worldwide applicability of the results. Provide a brief statement of the innovative aspects of the proposed research.

Research question(s) & hypothesis(es)

One can give research questions and or hypotheses depending on his/her research topics.

Literature Review

Extensive and relevant literature review should be done to meet the purpose of the project title, objectives and materials cum methods. The students must also review the M.Sc Zoology dissertations submitted to T.U. Latest literature should be emphasized and put into most relevant issue based order.

Materials and Methods

This section describes in details how and where the research is to be carried out. Following points can be considered while designing the research methods:

- Describe the study area showing study sites in the map (if necessary).
- Mention briefly the materials used.
- Discuss experimental design.
- Give reasons for excluding subjects (if necessary).
- Follow standard methods and cite references of methods employed.
- Mention the institution(s) from where the facilities (eg. lab.etc) will be provided.
- Discuss research alternatives if your original assumptions/hypotheses prove incorrect
- Mention how the data will be statistically analyzed.

Ethical, Legal & Social Implications (ELSI)

Any research related to human, animals, plants or any form of bios or biomes should have pre-informed consent from the concerned authority if they are liable to ELSI.

Expected Outcomes

Possible outcomes of the proposed research should be postulated in this section. Expected outcomes include enhancement in academic knowledge in proposed area of the study, utility of the research and direct or indirect beneficiaries or innovations.

Time Frame of the Study

- Provide an estimated time schedule/working scheme of your work. Time schedule presentation can be given in a tabular form as shown below.
- Headings of the activities can be different depending upon the nature of the work.

S. N.	Headings	3 rd Semester			4 th Semester					
		1 st month	2 nd month	3 rd month	1 st month	2 nd month	3 rd month	4 th month	5 th month	6 th month
1	Literature review									
2.	Conceptual frame work									
3.	Experimental design /Research design									
4	Field survey/data collection									
5	Lab. work									
6	Data analysis and interpretation									
7	Submission of thesis/dissertation									

Budgeting (if necessary)

The budget should include overall expenses incurred in the proposed research specially, the expenses of consumables and laboratory supplies. Budget can be mentioned under multiple headings depending upon the nature of proposed study. However every items and amounts allocated in the budget should be justified.

References

All literatures cited for proposal writing should be listed in an alphabetical order in a standard format given below.

Appendices (if necessary)

An appendix should include materials that supplement the main text of the dissertation. This section can consist of questionnaires, maps, sketches, photographs, description of equipment, consent form (if necessary) etc. Number the appendices alphabetically (Appendix A, Appendix B, etc.).

General format for the references:

(i) **Journal article, single author**

Spackman, E. 2012. Viral diagnostics: will new technology save the day? *Avian Pathology*, **41**(3): 251-8.

(ii) **Journal article, two authors**

Ladhani, S. and Williams, H.C. 1998. The management of established postherpetic neuralgia: a comparison of the quality and content of traditional vs. systematic reviews. *British Journal of Dermatology*, **139**(1): 66-72.

(iii) **Journal article, more than two authors**

Siliwal, M., Molur, S. and Raven, R. 2010. Transfer of two Indian *Idiops* spp. to the genus *Heligmomerus* Simon, 1892 (Araneas: Idopidae) with redescription of *H. barkudensis* (Gravely, 1921). *Journal of Threatened Taxa*, **2**(1-2): 940-947.

(iv) **Journal article, more than six authors**

If there are more than 6 authors, then include names of the six, followed by et al.

(v) **Proceedings**

Joshi, D.D., Maharjan, M., Sharma, M. 2003. Status of laboratory animals welfare used for experimental research in Nepal. In: Joshi, D.D., Maharjan, M., Sharma, M. eds. Proceedings of national seminar on 'Wildlife in captive and status of wildlife conservation in Nepal', 16 March 2003, Kathmandu, Nepal. NZFHRC: 50-59.

(vi) **Report**

Sharma, A.P. 1993. Status of water pollution in Nepal. A report submitted to Man and Biosphere (MAB), Kathmandu, Nepal.

WHO. 1998. Guidelines for drinking water quality, Vol. 1, World Health Organization, Geneva.

(vii) **Book**

Schuh, R.T. and Brower, A.V.Z. 2009. Biological systematics: Principles and application 2nd ed. Cornell University Press, Ithaca, 311 pp.

(viii) Chapter in edited book

Nesheim, M.C. 1989. Ascariasis and human nutrition. *In* Ascariasis and its prevention and control, Crompton, D.W.T., Nesbemi, M.C. and Pawlowski, Z.S. (eds.). Taylor and Francis, London, U.K., pp. 87–100.

(ix) Dissertation/Thesis

Bam, A.B. 2005. Screening of tomato germplasm to the *Meloidogyne*: a root-knot nematode. M.Sc. Thesis. Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal.

(x) Website

USGS. 2015. Freshwater mussels of the upper Mississippi river system. http://www.fws.gov/midwest/mussel/current_threats.html. accessed on 19 June, 2015.

Thesis Format Guidelines

The dissertation research is mandatory for all M.Sc. Zoology students of Tribhuvan University. Thesis is to be submitted in partial fulfilment of the requirements for the award of Master's Degree of Science in Zoology. This guideline has been prepared to help M.Sc, Zoology students of all four major specializations- Ecology, Entomology, Fish and Fisheries and Parasitology to prepare their thesis for acceptance by Central Department of Zoology, Tribhuvan University. The regulations contained within the guidelines have been updated that include current international trends and norms of scientific writing of Zoology related dissertation.

The dissertation must consist of the student's own research. A student will not be permitted to submit a dissertation consisting of work for which a degree has already been conferred on him/her in this or any other university.

- It is the supervisor's responsibility to make certain that any thesis submitted in partial fulfilment of a Master's degree at Central Department of Zoology with special papers confirm to the regulations outlined in this guideline.
- Responsibility for the content of any thesis remains with the student and the supervisor(s).
- After fulfilment of all the administrative and financial requirements, each student has to submit three unbound copies of draft thesis to the department administration after recommendation of the supervisor.
- The student will have to make presentation before a panel of experts both from department and outside after the Department Head approves his/her work for the examination.
- At the time of presentation, supporting materials (specimens, slides etc) need to be submitted to the Department.
- During presentation all the necessary comments on the work are made by the experts and the student's confidence over his/her work is gauged by the way he/she answers the questions put forward.
- All comments and corrections made by the experts need to be incorporated before submitting the final hard bound (black colour cover) thesis. Thesis title and student's name with year also should be printed on the side of the hard bound thesis.
- Altogether three hard copies and an electronic version (CD) need to be submitted to the department administration.

General Guidelines

Number of copies: Central Department of Zoology requires THREE copies of the unbound thesis at the time of submission.

Language: The dissertation must be written in English language. Spelling should be either US English or British English, but not mixed.

Paper: The dissertation must be printed on **one side** only of good quality white bond paper (usually of 80g weight) of A4 size (210mm x 297mm). The same grade of paper must be used throughout the dissertation.

Margins: For binding purposes, every page of thesis must be kept within the following margin:

Top: 1" Right: 1"
Bottom: 1" Left 1.25"

All thesis materials must fit within these margin requirements (including tables, figures, graphs, photographs and page numbers).

Spacing and Pagination:

- (a) Line spacing should be of 1.15 space (spacing before and after of 0 pt.) (except indicated).
- (b) Each page of the entire thesis must be numbered.
 - i) Preliminary pages must be in Roman numerals (i.e., i, ii, iii.....x).
 - ii) Main text and end matter should be continued with Arabic numbers (i.e., 1, 2, 3, 4,).
- (c) Page number should be placed at the centre of the bottom of the pages.

Typeface and Font Size

- (a) Standard typeface for the dissertation is **Times New Roman**.
- (b) The font size for text should be set at 12 pt.
- (c) Photographs and other illustrative material annotation text can be smaller (minimum 10 pt).
- (d) Headings and sub-headings should be set bold in Times New Roman 14 pt and 12 pt font size; respectively.
- (e) **Bold** print and **uppercase** should be used for headings.
- (f) The thesis should be printed in letter quality with black characters that are clear and easy to read (except colour photographs and maps).

Photographs and Other Illustrative Material

- (a) Photographs and other illustrative materials must be fitted within the specified margins.

- (b) Photographs and other illustrative materials (Table, graphs and figures) should be integrated with the text or in the separate page where ever related description appears.
- (c) Photograph number should be numbered in Arabic numerals followed by concise **heading just below the photograph.**
- (d) Graphs and figure should be numbered in Arabic numerals followed by concise **heading just below the graphs and figures.** Numbers should be given sequentially (e.g. Figure 1, Figure 2, etc.).
- (e) **Tables** should be numbered in Arabic numerals followed by concise **heading just above the body of the table.** Table numbers should be given sequentially (e.g. Table 1, Table 2, etc.).
- (f) Coloured materials can be used.
- (g) Concise but enough description needs to be provided in figure legends to allow interpretation of the figure without reference back to the text.

System unit

International system units should be used throughout the thesis

e.g.,

Meter	m
Kilogram	kg
Second	sec

Citation style in the text

- Singh (2010)If sentence begins with citation.
- (Singh, 2010)If citation is in the middle or end of the sentence.
- (Singh and Joshi, 2009).....If article is of two authors.
- (Singh *et al.*, 2008)If article is of more than two authors.
- (Shrestha, 2007; Singh, 2007)....If citation of two papers in chronological order.
- (Puri, 2005; Chhetri, 2010; Thapa, 2010).... If citation of two papers in the same year, chronological and alphabetical within year.
- (Sharma *et al.*, 1988a, 1988b).... If two papers are of same authors and same year.

Taxonomic name and authority

Italics must be used for scientific names (Genera and species) of the organisms and plants.

- A) When scientific name of animal is written for the first time, authority should be written as the name (s) of the author (s). e.g., *Seriola gracilis* Lowe, 1843.
- B) While in case of plants year of publication is not cited. e.g., *Abies beshanzuensis* M.H. Wu
- C) When referring to a group of species with the same generic scientific name, the abbreviation “spp.” should be used. e.g., *Bensonies* spp. But for one unspecified species belonging to same genus only “sp” is used. e.g., *Bensonies* sp.

- D) Taxonomic level higher than genus (i.e. family, order, class etc) are not italicized but term should be capitalized.

Scientific and common names

- a) While writing common name and scientific name together, scientific name should be kept within bracket, e.g.,
Common Green Magpie (*Urocissa erythrorhyncha*)
Blue Bull (*Boselaphus tragocamelus*)
- b) All initials of the common name must be always written in capital letter, e.g.,
“Himalayan Pika” not Himalayan pika or himalayan pika.
“Spiny Babbler” not Spiny babbler

Numbers

- a) Numbers between one and nine should be written in words, e.g.,
“Regular surveys have been carried out in three sites in the forest and seven sites in human habitation.”
- b) Numbers above nine should be written numerically e.g.,
“After 105 sightings 450 bird species were recorded.”
- c) But if the sentence begins with numbers, the number should be written in words, e.g.,
“Fifteen grouse were spotted outside the reserve.”
- d) For numbers with four or more numerals, commas should be used to separate the hundreds, e.g., “Fish is found up to the depth of 2,000 m.”

Dates

- a) When writing a date in full, dd/mm/yr structure should be followed, e.g., “11 January, 2005” not January 11, 2005 or 11th January 2005.
- b) When referring to a particular century, following structure should be followed e.g.,
“19th century” not nineteenth century, or 19th Century.
“1980s”not 1980’s or 1980 s.

IUCN Red List terminologies

Red List Categories must be always cited in capitalized form, e.g.,

Category	Abbreviation
Extinct	EX
Extinct in the Wild	EW
Critically Endangered	CR
Near Threatened	NT
Date Deficient	DD
Not Evaluated	NE

Specific guidelines

A thesis should be written in a standard format. It should include three major components:

1. Preliminary pages
2. Main text
3. End matter

1. Preliminary pages

(i) Cover page

- a) All the contents should be centered alignment.
- b) It contains – Title, name of candidate, name of department and year of submission.
- c) Title should be in New Times Roman 14 pt font size, all caps and bold, while other matter like name of candidate, department should be in 12 pt font size.
- d) University logo should be just below the Title.

(See sample 1)

(ii) Declaration by the Candidate

(Content must be in justified alignment exactly same as shown in sample 2).

(iii) Recommendation by the Supervisor(s)

Should be typed in the **format** of Departmental letter head

(Content must be in justified alignment same as shown in sample 3).

(iv) Letter of Approval from Head of Department

Should be typed in the **format** of Department letter head (as shown in the sample 4)

(v) Certificate of Acceptance by the Evaluation Committee

Should be typed in the **format** of Departmental letter head (See sample 5).

(vi) Acknowledgements

- a) Heading should be centered and body should be justified.

(Ethics required to be strictly followed, individual's and institution's significant contribution to the work should be acknowledged).

(vii) Contents

- a) Heading should be center aligned.
- b) Components of the contents should be left aligned.
- c) Page number should be right aligned. (see sample 6).

(viii) List of Tables

- a) Heading should be center aligned.
- b) Table number should be left aligned.
- c) Description of the table should be one tab after table number.
- d) Page number should be right aligned. (see sample 7)

- (ix) **List of Figures**
(Same as List of Tables, see sample 8).
- (x) **List of Photographs**
(Same as List of Tables, see sample 9).
- (xi) **List of Appendices** (if required)
(Same as List of Tables).
- (xii) **List of Abbreviations**
 - a) List symbol abbreviations first.
 - b) Followed by abbreviations in alphabetic order.
 - c) Full points (dots) should not be used in abbreviations such as “expt” for experiment.
(All the abbreviations used in throughout thesis must be listed, see sample 10).
- (xiii) **Abstract**
 - a) Heading should be centered and body should be justified.
 - b) Abstract should be a succinct description of the work.
 - c) Should contain objective of the study, materials and method used, results and conclusion
 - d) Shouldn't contain literature citations
 - e) Shouldn't exceed more than one page
(Note: All page numbers of the preliminary pages must be in Roman numerals (i.e., i, ii, iii...))

II Main Text

The main text of the thesis should include given headings. Headings should be all in caps, bold, centered and of Times New Roman 14 pt font size.

1. INTRODUCTION
2. LITERATURE REVIEW
3. MATERIALS AND METHODS
4. RESULTS
5. DISCUSSION
6. CONCLUSION AND RECOMMENDATIONS (Recommendation not mandatory)
7. REFERENCES

1. INTRODUCTION

- (a) Can have sub-headings.
- (b) Sub-headings should be bold, Times New Roman 12 pt font size and numbered (i.e., 1.1, 1.2, 1.3.....).

- (c) Can have figures, photographs and other illustrative materials.
- (d) Objectives of the study: objectives can be divided into General object and Specific objectives. Specific objectives should not exceed five.
- (e) Rational of the study.
(Note: Should include, background of the field of study and study subject, statement of the problem, justification, limitation etc. ii) Should give only strictly pertinent references. (iii) Shouldn't mention the data or conclusions from the study being reported)

2. LITERATURE REVIEW

- (a) Literature review can be divided into two category (not mandatory)
If necessary: National and Global context.
- (b) Should address relevant existing knowledge of the research issue.
- (c) Should include published articles (books, journals, abstracts etc.)
- (d) Unpublished articles (thesis, reports, records, communications etc) should also be included.
- (e) Accurate, relevant, useful, reliable and latest information should be filtered from all available literature.
- (f) Must not copy and paste complete sentences and paragraphs from the source.
- (g) Citation style should follow as mentioned above in general guideline.

3. MATERIALS AND METHODS

- a) Materials and Methods can be divided into sub-headings with numbering, 3.1, 3.2,...
 - 3.1 The Study Area
 - 3.2 Field Techniques
 - 3.3 Study Design
 - 3.4 Experimental Design
 - 3.5 Statistical Analysis*(Headings and sub headings of the materials and methods could be different from above mentioned, depending upon the nature of the study)*
- b) Sub-headings can be further divided if required with numbering, 3.1.1, 3.1.2,.....
- c) Observational or experimental methods employed should be clearly described.
- d) Established methods if employed must be correctly referenced.
- e) If new or substantially modified methods are utilized, must give reasons.

4. RESULTS

- a) Results can be divided into sub-headings with numbering e.g., 5.1, 5.2, 5.3.....and should be bold.
- b) Sub-headings can be further divided if required with numbering e.g. 5.1.1, 5.1.2, 5.1.3...

- c) The results should contain an explanation and description of the data, and highlights of findings, patterns, trends and relationships observed using statistical tools (whenever required).
- d) The results should be presented in logical sequence in the text, tables or illustrations.
- e) Same results should not be interpreted with multiple illustrations.

(See general guidelines for photographs and other illustration style)

5. DISCUSSION

- a) Should include statement of primary findings of the study.
- b) Orderly comparison of study findings to other relevant work.
- c) Considerations and implications of specific findings of study.

6. CONCLUSION AND RECOMMENDATIONS

- a) Specific conclusions permitted by the study.
- b) Should include researcher's suggestions or policy recommendations either for further research or for the development of society or for future action and implementation.
- c) Should be based on results of the study.

7. REFERENCES

Should be arranged in alphabetical order based on author(s).

General format for the references:

(ii) **Journal article, single author**

Spackman, E. 2012. Viral diagnostics: will new technology save the day? *Avian Pathology*, **41**(3): 251-8.

(xi) **Journal article, two authors**

Ladhani, S. and Williams, H.C. 1998. The management of established postherpetic neuralgia: a comparison of the quality and content of traditional vs. systematic reviews. *British Journal of Dermatology*, **139**(1): 66-72.

(xii) **Journal article, more than two authors**

Siliwal, M., Molur, S. and Raven, R. 2010. Transfer of two Indian *Idiops* spp. to the genus *Heligmomerus* Simon, 1892 (Araneas: Idopidae) with redescription of *H. barkudensis* (Gravely, 1921). *Journal of Threatened Taxa*, **2**(1-2): 940-947.

(xiii) **Journal article, more than six authors**

If there are more than 6 authors, then include names of the six, followed by *et al.*

(xiv) **Proceedings**

Joshi, D.D., Maharjan, M., Sharma, M. 2003. Status of laboratory animals welfare used for experimental research in Nepal. In: Joshi, D.D., Maharjan, M., Sharma, M. eds. Proceedings of national seminar on 'Wildlife in captive and status of wildlife conservation in Nepal', 16 March 2003, Kathmandu, Nepal. NZFHRC: 50–59.

(xv) **Report**

Sharma, A.P. 1993. Status of water pollution in Nepal. A report submitted to Man and Biosphere (MAB), Kathmandu, Nepal.

WHO. 1998. Guidelines for drinking water quality, Vol. 1, World Health Organization, Geneva.

(xvi) **Book**

Schuh, R.T. and Brower, A.V.Z. 2009. Biological systematic: Principles and application 2nd ed. Cornell University Press, Ithaca, 311 pp.

(xvii) **Chapter in edited book**

Nesheim, M.C. 1989. Ascariasis and human nutrition. *In* Ascariasis and its prevention and control, Crompton, D.W.T., Nesbemi, M.C. and Pawlowski, Z.S. (eds.). Taylor and Francis, London, U.K., pp. 87–100.

(xviii) **Dissertation/Thesis**

Bam, A.B. 2005. Screening of tomato germplasm to the *Meloidogyne*: a root-knot nematode. M.Sc. Thesis. Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal.

(xix) **Website**

USGS. 2015. Freshwater mussels of the upper Mississippi river system. http://www.fws.gov/midwest/mussel/current_threats.html. accessed on 19 June, 2015.

III End matter

APPENDICES

- a) Page break for each appendix
- b) Title for each appendix
- c) Generally the appendices include:
 - i) Paraphrase and Informed Consent Forms
 - ii) Other Forms used
 - iii) Ethical Committee Approval Letter
 - iv) Detailed aspects of a protocol, calibration data, etc.
(depends upon nature of the study).

TITLE OF THE THESIS

University logo

Candidate's full Name

T.U. Registration No:

T.U. Examination Roll No:

Batch:

A thesis submitted

In partial fulfilment of the requirements for the award of the degree of Master of Science in
Zoology with special paper

Submitted to

Central Department of Zoology
Institute of Science and Technology
Tribhuvan University
Kirtipur, Kathmandu
Nepal

Month, Year

DECLARATION

I hereby declare that the work presented in this thesis has been done by myself, and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by reference to the author(s) or institution(s).

Date.....

Signature
Candidate's name

IoST logo

TRIBHUVAN UNIVERSITY
CENTRAL DEPARTMENT OF ZOOLOGY
Kirtipur, Kathmandu, Nepal

RECOMMENDATION

This is to recommend that the thesis entitled “.....(Title of thesis)...” has been carried out by.....(Candidate’s name)..... for the partial fulfilment of Master’s Degree of Science in Zoology with special paper..... This is his/her original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

Date.....

(Signature)
Full name of supervisor
Designation
Central Department of Zoology
Tribhuvan University
Kirtipur, Kathmandu, Nepal

IoST logo

TRIBHUVAN UNIVERSITY
CENTRAL DEPARTMENT OF ZOOLOGY
Kirtipur, Kathmandu, Nepal

LETTER OF APPROVAL

On the recommendation of supervisor “.....(full name of supervisor)...” this thesis submitted by(Candidate’s name)..... entitled “.....(Title of thesis).....” is approved for the examination and submitted to the Tribhuvan University in partial fulfilment of the requirements for Master’s Degree of Science in Zoology with special paper.....

Date.....

(Signature)
Full name of HOD
Head of Department
Central Department of Zoology
Tribhuvan University
Kirtipur, Kathmandu, Nepal

IoST logo

TRIBHUVAN UNIVERSITY
CENTRAL DEPARTMENT OF ZOOLOGY
Kirtipur, Kathmandu, Nepal

CERTIFICATE OF ACCEPTANCE

This thesis work submitted by(Candidate's name)..... entitled
“.....(Title of thesis).....” has been accepted as a partial fulfilment for the
requirements of Master's Degree of Science in Zoology with special paper.....

EVALUATION COMMITTEE

.....
Supervisor
Full name with designation

.....
Head of Department
Full name with designation

.....
External examiner

.....
Internal Examiner

Date of Examination: dd/mm/yr

CONTENTS

	Pages
Declaration	i
Recommendation	ii
Letter of Approval	iii
Certificate of Acceptance	
.....	
.....	
.....	
1. INTRODUCTION	
1.1.....	1
1.2.....	2
2. LITERATURE REVIEW	
2.1.....
2.2.....

Sample 7
(in new page)

LIST OF TABLES

Table	Title of tables	Pages
1
2
3

Sample 8

LIST OF FIGURES

Figure	Title of figures	Pages
1
2
3

Sample 9

LIST OF PHOTOGRAPHS

Photograph	Title of photograph	Pages
1
2
3

LIST OF ABBREVIATIONS

Abbreviated form

Details of abbreviations

WHO

World Health Organization

MAB

Man and Biosphere

.....

.....

ARTICLE MANUSCRIPT PREPARATION

The preparation and presentation of manuscript

The manuscript of a full length research article based on data/results generated during dissertation must be submitted by the students along with the dissertation document submission as in the format given below. Manuscripts should be drafted as concisely as possible. Supervisor(s) should be included as co-author(s) in the manuscript. English language used in the manuscript should be of publishable standard.

Author Guidelines

Journal of Zoology publishes original research papers, review articles, brief reports, book reviews, conference reports, etc. in the field of Zoology. Papers published in this journal become the property of CDZ.

Submission of papers

- Manuscripts should be in English, typed on one side of the A4 paper, double spaced with ample margins (Left 1.25'', Top, Bottom & Right 1''). Authors are suggested to use Times New Roman font (14pt for headings, 12pt for text & 10pt for illustrations).
- Contribution should fall in any of the two categories: (i) full communication (not exceeding 15 pages of type scripts) including figures, tables and (ii) brief communication (not exceeding 5 pages).
- The International System of Units (meters, kilograms, seconds) should be used for all measurements.
- The title and name(s), address(es) and email(s) of the author(s) could be placed on the first page of the manuscript.
- An abstract not exceeding 250 words reporting concisely on the purpose, methods and results of the paper, must be included.
- Not more than five keywords in alphabetical order should be provided that are not included in the title.
- For research papers, the text should normally consist of Introduction, Methods, Results, Discussion, Conclusion & Recommendations (if any) and References.
- Acknowledgements must be placed after the main text and before the references.
- **Illustrations:** Tables and figures must be presented in separate pages. Each table and figure must be clearly numbered and named. Legends should be typed on a separate sheet.
- **References:** Only the most relevant references should be used in the articles. The references should be limited to published work, work in press, or theses and dissertations. References should be listed in alphabetical order. Check the manuscript to make sure that all references are cited and that all citations in the text are included in the references.

Follow the citation style given in the *Thesis Format Guidelines* published by CDZ in 2015 (also given below).

(i) Journal article, single author

Spackman, E. 2012. Viral diagnostics: will new technology save the day? *Avian Pathology*, 41(3): 251-8.

(xx) Journal article, two authors

Ladhani, S. and Williams, H.C. 1998. The management of established postherpetic neuralgia: a comparison of the quality and content of traditional vs. systematic reviews. *British Journal of Dermatology*, **139**(1): 66-72.

(xxi) Journal article, more than two authors

Siliwal, M., Molur, S. and Raven, R. 2010. Transfer of two Indian *Idiops* spp. to the genus *Heligmomerus* Simon, 1892 (Araneas: Idopidae) with redescription of *H. barkudensis* (Gravely, 1921). *Journal of Threatened Taxa*, **2**(1-2): 940-947.

(xxii) Journal article, more than six authors

If there are more than 6 authors, then include names of the six, followed by *et al.*

(xxiii) Proceedings

Joshi, D.D., Maharjan, M., Sharma, M. 2003. Status of laboratory animals welfare used for experimental research in Nepal. In: Joshi, D.D., Maharjan, M., Sharma, M. eds. Proceedings of national seminar on 'Wildlife in captive and status of wildlife conservation in Nepal', 16 March 2003, Kathmandu, Nepal. NZFHRC: 50-59.

(xxiv) Report

Sharma, A.P. 1993. Status of water pollution in Nepal. A report submitted to Man and Biosphere (MAB), Kathmandu, Nepal.

WHO. 1998. Guidelines for drinking water quality, Vol. 1, World Health Organization, Geneva.

(xxv) Book

Schuh, R.T. and Brower, A.V.Z. 2009. Biological systematic: Principles and application 2nd ed. Cornell University Press, Ithaca, 311 pp.

(xxvi) Chapter in edited book

Nesheim, M.C. 1989. Ascariasis and human nutrition. *In* Ascariasis and its prevention and control, Crompton, D.W.T., Nesbemi, M.C. and Pawlowski, Z.S. (eds.). Taylor and Francis, London, U.K., pp. 87-100.

(xxvii) Dissertation/Thesis

Bam, A.B. 2005. Screening of tomato germplasm to the *Meloidogyne*: a root-knot nematode. M.Sc. Thesis. Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal.

(xxviii) Website

USGS. 2015. Freshwater mussels of the upper Mississippi river system. http://www.fws.gov/midwest/mussel/current_threats.html. accessed on 19 June, 2015.

Manuscripts are submitted to reviewers for evaluation of their significance and soundness. Authors will be notified of acceptance, rejection, or need for revision. Decisions of the Editorial board are final.

Revised manuscripts with an electronic copy on disk (MS Word or IBM compatible using WordPerfect) should be submitted within prescribed time as notified.

Proofs: Page proofs are sent to the author(s). They must accept responsibility for checking all materials for accuracy.

Submission Preparation Checklist

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

1. Submission of a manuscript will be taken to imply that it has not been previously published or submitted for publication elsewhere.
2. The submission file is in Microsoft Word, RTF, or WordPerfect document file format.
3. All submitted works are subject to peer review and revision at the discretion of the editors.
4. Author(s) must be accurately identified. No pseudonyms are permitted.
5. The text adheres to the stylistic and bibliographic requirements outlined in the Author Guidelines.
6. Illustrations and text reproduced from other sources must be properly credited; it is the author's responsibility to obtain permission for the use of such materials.
