

# THESIS MANUAL

(POST GRADUATE STUDIES)



MAHARASHTRA ANIMAL & FISHERY SCIENCES  
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## INTRODUCTION

This thesis manual is prepared for guidance of the students preparing thesis in partial fulfillment of the requirements for (the award of ) Master's and Doctoral degree awarded by Maharashtra Animal and Fishery Sciences University, Nagpur. While accuracy of text is the responsibility of the Guide (major departments/sections for the subject matter content) the format of the (written) thesis should be governed by a set of criteria and standards, in order to maintain uniformity in the thesis submitted to the Maharashtra Animal and Fishery Sciences University, Nagpur. This manual deals with general principles governing the preparation of the thesis and is expected to provide a guideline to the students and teachers.

'Webstar' has defined "Thesis" as "A proposition advanced which is publicly disputed, defended or maintained by a candidate for a University degree". It is a scientific document, which comprises of the report of bonafide research carried out by the student on a given topic. The researcher, therefore, must check all statistical data and should be objective in its method. The facts and evidences (objective data) must support document and not merely the unsupported opinion (subjective data) of the writer. If the author's opinion is given, it shall either be supported with the data collected in the investigation, of the (thesis) research topics or the reader shall cite other investigations, which substantiate the opinion quoted. Any prejudices, feelings and preconceived notions about the (thesis) research topic should not be allowed to form an part of the thesis. The investigation shall be so reported that, if desired, it may readily be duplicated and verified. For this purpose techniques (material and methods) of investigation, the sources of data and other aspects of investigation should be carefully indicated.

This thesis manual will help students to maintain uniformity in the style of presentation. The thesis is not likely to be accepted if it does not conform to the standard laid down in this manual.

## THESIS FORMAT

The Thesis will have three main parts excluding cover (Appendix A-i/ii & iii) and the order of contents of each part will be as follows :-

### A. The preliminary pages .

1. Title page (Appendix A-i/ii)
2. Declaration of student (Appendix B)
3. Certificate (Appendix C-i & ii)
4. Acknowledgements (s)
5. Table of contents (Appendix D)
6. List of tables
7. List of figures/Photographs.
8. List of symbols/abbreviations.

## B. The text

1. Introduction
2. Review of Literature.
3. Materials and Methods
4. Results and discussion (combined/separate)
5. Summary & conclusion (s)
6. Proposed area of future research (for Ph.D)

## C. The reference matter

1. Bibliography
2. Appendices (Optional)
3. Vita
4. Thesis abstract (English & Marathi) to be given separately.

## A. Preliminary pages .

### 1) Title page

The first page of the typed thesis will be the title page. It will include title of thesis, degree, name of the department and the college/institute to which the candidate belongs, enrolment number and the year of submission. A sample title page is given in Appendix – A (i & ii). Case where title exceeds one line, an inverted pyramid principle should be followed but words and phrases should not be split. Binomial nomenclature in the title, if any, being in capital letters need not be underlined. The other details should be arranged centrally below the title leaving standard margin.

Thesis cover of the hard bound copy of the Master's and Doctorate Degree shall be **black** in coloured with **silver embossing for Master's and golden embossing for Doctorate Degree**. Side border shall be as per the specimen enclosed (Annexure – A iii)

### 2) Declaration of student.

Every student will have to give declaration in the format given in Appendix – B

### 3) Certificate

The certificates are required in each thesis and must be as per the prescribed format as given in appendix.

### 4) Acknowledgements

Acknowledgement recognizes and persons to whom the writer is indebted for guidance and assistance during the study and credit institutions for providing funds to implement the study. Student should sign at right side of last page of acknowledgement.

## 5) Table of contents.

There should be table of contents for each thesis showing principal divisions/chapters/headings and subheadings of the matter in the thesis. A sample of the same is given in Appendix –D. Each entry shown should have a page number with leader dots or dashes from the entry to the page number. The divisions' headings and subheadings should agree in wording and style with the divisions' headings and subheadings in the text.

## 6) List of tables

A list of tables is given for the convenience of the reader if there are several tables in the thesis. It should be separate from, but immediately after the tables of contents. It should have the pattern of table of contents.

## 7) List of figures/ photographs

It should be similar to the list of tables and should be presented in the same form. Each figure/photograph in the thesis should have caption or title, which appears in the list of figures/photographs exactly as in the text.

## 8) List of symbols/abbreviations

Abbreviations are not normally used in the body of thesis. However, they may be, and frequently should be used in tables or figures.

If the thesis involves symbols and abbreviations, it may be desirable to give a list. Under the heading list of symbols, the symbols should be listed in alphabetical order Greek letter symbols appearing first and Roman letter symbols afterwards with actual symbols on left hand and the meaning attached to it on the right hand. If the meaning of the symbols exceed one line then it should be single spaced, however; between two symbols double spacing should be maintained. In photomicrograph, magnification should be invariable indicated.

## B. The text

The text forms the main body of the thesis. In this part the research topic should be clearly stated. Relevance of other scientific investigation to the research topic mentioned. Investigation technique used fully described, observations recorded, result obtained and their interpretations, conclusions drawn and suggestions for further study are included. The presentation of the text should depend on the nature of subject on which the thesis is being written, however; the style of presentation must be consistent.

Each chapter of the thesis must begin with a new page. The text must be precise to the point. The organization of the text needs to be carefully planned so that each section or subdivision represents an important agreed division of the topic being investigated and reported.

Normally Master's thesis **and Doctorate thesis** should be limited to **150 pages and 250 pages respectively excluding plates, illustrations, appendices etc.** The suggested break-up of the thesis is as below :-

Acknowledgments - Notmore than 2 pages.

1. Introduction
2. Review of literature
3. Materials & Methods
4. Results & discussion
5. Summary & Conclusion (s)
6. Bibliography
7. Abstract (English & Marathi) to be given separately.

The student's name & spelling in Appendix – A (i), (ii), (iii) should be as per **previous Degree Certificate/Mark-sheet. The font size for Thesis Title Page shall be 12 (Times New Roman)**

## **1) INTRODUCTION.**

It should include the purpose of study, the research topic involved, justification for research work, scope of the study and its limitations. The specific objectives of the research work must be mentioned here. Introduction should be brief, precise and pertinent to the research work undertaken. An introductory chapter should usually contain the following :-

- a) A lucid, complete and concise statement of the problem being investigated or the general purpose of the study.
- b) A justification for the study, establishing the importance of the problem.
- c) A preview of the organization of the rest of the thesis to assist the reader in grasping the relationship between various parts of the thesis.
- d) In many disciplines, a resume of history and present status of the problem is delineated by a concise critical review of previous studies into closely related problem. If this approach is accepted, it is important to discuss the contribution of each of these to the question being investigation and to show how the present investigation arose from contradictions of earlier investigations.

## **2) REVIEW OF LITERATURE.**

It is essential to review all relevant material, which has a bearing on the topic. Brief history and present status of the research topic as evidenced by documented literature on similar and closely related problems should be included in this part. It is necessary to show how the problem under investigation relates to previous research studies. The finding of various investigations should be critically examined and interpreted in the light of objectives set forth and presented with proper references. Unrelated references should be avoided.

### **3) MATERIALS AND METHODS.**

This part of thesis must present appropriate method or techniques to solve the particular problem under investigation. The details of techniques and equipments employed in the investigation being presented must be clearly stated. It should be in the past tense. In case of special experimental setup, their assembly and component details should be described. Analysis of the problem and statistical technique applied may also be included in this part. While presenting the methodology, if there is a reference, which gives details of the technique used, it should be cited together with any modification made. In such case details other than modification made could be omitted. Details of routine procedure/observation or computations may be given as an Appendix.

### **4) RESULTS AND DISCUSSION.**

The data from different experiments/investigations/study should be presented in compiled tabulated form and augmented with graphical presentation of specific trend or behavior of different variables or important observation made. This chapter may be divided into various subheads. In presenting the results, care should be taken to avoid repetition. Certain data can often be presented to the best advantage in a table or graph and there no need to describe them in details in the text except to indicate the highlights. Only outstanding points which are important in the table or graph should be indicated. All tables and graphs should be numbered, title and the data presented, be complete enough to be meaningful without referring to the text. Title of table should be above and that of figure should be below. Reference of table in text should start with capital letter.

There should be no hyphen between Table and Table number e.g. Table 1. The level of significance should be indicated by certain symbols in footnotes to the table. All measurements should be expressed in metric system. Inclusion of lengthy and inconvenient sized table should be avoided. A format of the table is given in Appendix – E.

The discussion section ties the results of the study to both theory and application by pulling together the theoretical background, literature review, potential signification for application and results of study. One important function of discussion is to explain the findings of the study in the light of previous work. If the shift has been set to test specific hypothesis then the discussion must report the outcome on each hypothesis along with ancillary findings. These must be integrated and interpreted in this section.

The findings should be discussed in the context of the objective setout, or assumptions made at the start of the experiment. Any attempt to prove or substantiate a point should take into consideration and cite the findings of earlier workers.

In the discussion all rational explanations for an observation should be given. The explanation thus offered should be based on work done by others or by the author himself/herself giving overall picture emerging out of studies in the light of findings of others.

### **SUMMARY & CONCLUSION(S).**

The summary should emphasize the significant aspects of the investigation and the important findings in relation to the objectives of the investigations. It should enable any one who does not have time or desire to read whole of the thesis, the developments of the previous chapters should be succinctly restated, important findings discussed and conclusions drawn from the whole study. The conclusion should leave the reader with the impression of completeness and of positive gain.

All experimental findings are concluded in this section in brief and restricted to two to three pages along with applicability of research finding in field shall be mentioned.

### **C. The Reference matter .**

#### **1) BIBLIOGRAPHY.**

This should include all references cited in the text, arranged in alphabetical order by author's surname. Two or more works by the same author are listed chronologically by date author's surname. Two or more works by the same author are listed chronologically by date of publication. Two or more works by the same author published in the same year may be identified as, for example, (1965a), (1965b). When there are more than two authors, it should be quoted in the text as say Singh et al. Each reference should contain the following in the given order. In case of articles author(s) name(s), year of publication in parenthesis, title of the article, name of journal, volume and pages and in case of books, author(s) name(s), year of publication in parenthesis, title of book, name of publisher, place of publication and pages should be given. In case of unpublished works, author name(s), year of completion of work in parenthesis, title of the work, name or organization where this work was undertaken and pages should be given.

### **Examples of References.**

#### **a) Books:--**

**The required elements for book reference are:--**

**Author, Initials, Year.Title of Book.Edition. Place of Publication  
:Publisher. Pagination.**

Example: -

1. Jadhav, U.S., 2012. Library and Information Sources and Services. 3rd ed. New Delhi: Regency Publication. pp. 223.

### **Books with Two, Three Authors:--**

Example:--

Peiffer, R. L. and S. M. Petersen -Jones, 1997. Small Animal Ophthalmology: A problem oriented approach. 2<sup>nd</sup> ed. London: W.B. Saunders Company Ltd. pp. 238.

### **Books with more than Four Authors: -**

For book where there are more than four authors use the first author only and followed by *et al.*

Example:--

Ackermann, E. *et al.*, 1999. The Information Specialist's guide to search and researching on the internet and the world wide web. Chicago: Fitzroy Dearborn Publishers. pp. 444.

### **Books which are Edited**

Example:--

Keene, E. ed., 1988. Natural language. 1<sup>st</sup> ed. Cambridge: University of Cambridge Press. pp. 365

### **Chapter/s of edited Book**

The required elements for reference are: -

Chapter author(s) Surname and initials. Year of Chapter. Title of chapter followed by In: Book editor initials and surname with ed. year of book. Title of book. place of publication: Publisher Chapter number and pages of chapter followed by full stop.

Smith, J., 1975. A source of information. In: W. Jones, ed. 2000. One hundred and one ways to find information about the health. Oxford: Oxford University Press. Ch. 2.

Samson, C., 1970. Problems of information studies in history. In: S. Stone, ed. Humanities information research. Sheffield: CRUS. pp. 44-68.

## **b) E-books**

**For e-books access through a password protected database from any library the required elements are:**



Author, Year, Title of book. [type of medium] Place of Publication: Publisher. followed by "Available from" source/ database/ web address or URL [Viewed date]

**For an e-book freely available over internet the required elements are:**

Authorship, Year, Title of book [Type of medium] Place of Publication: Publisher followed by "Available from" URL [Viewed date]

**EXAMPLE 1**

Baum, L. Frank. The Wonderful Land of Oz [online] Etext no. 17426. Read by Roy TRUMBULL Project Gutenberg, 2005 MP3 format, 4.08 MB Available from: <http://www.gutenberg.org/files/17426-mp3/17426-mp3-chap10.mp3> [viewed 2 April 2006]

**EXAMPLE 2**

Internet Engineering Task Force (IETF). RFC 3979 Intellectual Property Rights in IETF Technology [online] Edited by S. Bradner March 2005 Available from <http://www.ietf/rfc/rfc3979.txt>. [viewed 18 June 2006].

**EXAMPLE 3**

Kafka, Franz, The Trial [online], translated by David Wyllie. Project Gutenberg, 2005 Updated 2006-03-08 15:35:09 Plain text format, 462 KB Available from <http://www.gutenberg.org/sirs/etext05/ktra11>. [viewed 2 June 2006].

**EXAMPLE 4**

Department of Health, 2008. Health inequalities: progress and next steps [pdf] London: Department of Health. Available through [http://www.dh.gov.uk/en/publication\\_and\\_statistics/publications/publicationpolicyand\\_guide/DH\\_085307](http://www.dh.gov.uk/en/publication_and_statistics/publications/publicationpolicyand_guide/DH_085307). [viewed 20 June 2006].

**EXAMPLE 5**

Carlsen, J. and Charters, S., eds. 2007. Global wine tourism. [e-book] Wallingford: CABI Pub. Available from Anglia Ruskin University Library website [www.libweb.anglia.ac.uk](http://www.libweb.anglia.ac.uk) [viewed 2 June 2006].

**c) Example of references to contributions within printed serial**

**publications for Journal articles required elements are:**

Author, Initials, Year. Title of Article. Full Title of Journal, Volume number (issue Number), Pagination.

**EXAMPLE 1**

Amajor, L. C., 1985. The Cenomanian hiatus in the Southern Benue Trough, Nigeria . Geological Magazines, **122**(1), 286-288.

#### **EXAMPLE 2**

Andrew, M., 1984 et. al. Growth of CharaLispida II. Shack adaptation. Journal of Ecology, **72** (3), 885-895.

#### **EXAMPLE 3**

Bry, I. and L. Afflerbach., 1968. In search of an organizing principle for behavioral science literature, Community Mental Health Journal. 1968, **4**(1), 75-84.

#### **EXAMPLE 4**

Stieg, M. F., 1981. The information needs of historians. College and Research Libraries, **42** (6), 549-560.

#### **d) Examples of references to Online Serial Publications for Journal articles form electronic resources access through database the required elements are:**

Author, Initials., Year. Title of Article. Full Title of Journal, [Type of medium] Volume number, (Issue number), : page numbers. Available from name of database /URL [viewed date]

#### **EXAMPLE 1**

Author, Initials., Year. Title of Article. ACTA Zoologica [online]. Oxford, U. K.: Blackwell Publishing Ltd., 87(1) Academic Search Premier, EBSCO host Research Databases, : 28-31. Available from: <http://www.search.epnet.com> [viewed 6 July 2006].

#### **EXAMPLE 2**

Author, Initials., Year. Title of Article. AJET: Australasian Journal of Educational Technology [online] Australia: ASCILITE, winter 16, (2): 45-60. Available from, <http://www.ascilite.org.au/ajet/ajet16/ajet16.html> [viewed 23 Oct. 2003].

#### **EXAMPLE 3**

Myers, Michael P., Jay YANG PerStampe, 1999. Visualization and functional analysis of a maxi-K channel (mSlo) fused to green fluorescent protein (GFP). EJB. Electronic Journal of Biotechnology [online] Valparaiso (Chile) Universidad Catolica de Valparaiso, 2(3) Available from <http://www.ejbiotechnology.info/content/vol2/issue3/full/3/3.pdf> [viewed 28 June 2006].

#### **EXAMPLE 4**

Stinger, John, A., et al. 2006. Reduction of RF-induced sample heating with a scroll coil resonator structure for solid -state NMR probes. Journal of Magnetic

Resonance [online] Elsevier. 173(1), 40-48. Available from: doi:10.1016/J.Jmr.2004.11.015 [viewed 18 July 2006].

**e) Magazine or Journal articles available on the Internet For Magazine Journal articles form electronic resources access though database the required elements are:**

Author, Initials., Year. Title of Article, Full title of Magazine/ journals [Online]. Available through URL [viewed date].

EXAMPLE : -

Kipper, D., 2008. Japan's new dawn, Popular Science and Technology, [Online] Available through <http://www.popsci.com/popsci37b144110vgn/htmlm> [viewed on 23 Jan.2016]

**Journal Abstract from database**

Author, Initials., Year. Title of Article. Full Title of Journal, [Type of medium] Volume number (Issue number), : page numbers, Abstract only.

EXAMPLE : -

Broughton, J. M., 2002. The Bretton woods proposal: a brief look. Political Science Quarterly, [e-journal] 42 (6):18-21, abstract only.

Available through: BlackwellScienceSynergy database [viewed on 23 Jan.2017].

**Examples of references to an entire website the required Elements are: -**

Authorship or source, Year, title of the web document or web page. [type of medium] (date of update if available) available at : include website address/URL [Viewed date ]

EXAMPLE: -

Words without Borders: The online Magazine for international literature. PEN American Center, © 2005. Available from: <http://www.wordswithoutborders.org>. [viewed 12 July 2006]

**Examples of references to Specific Contributions Parts of a website**

EXAMPLE 1

Clark, Carol. On the threshold of a brave new word. In Blueprint of the body [online] CNN.com, 2000, 10:25 EST] in-depth specials. Available form <http://ww.cn.com/SPECIALS/2000/genome/storey/overview/> [viewed 24 August 2000]

EXAMPLE 2

FREEMAN, John, Book reviews pushed to the margins [online]. The blog books Guardian Unlimited, 25 April 2007, 12.27 BST Available from [http://www.blog.guardian.co.uk/books/2007/04/last\\_week\\_the\\_london\\_boo.html](http://www.blog.guardian.co.uk/books/2007/04/last_week_the_london_boo.html) [viewed 26 April 2007].

### **EXAMPLE 3**

McLEAN, Renwick, Canary Islands species threatened by soft borders. International Herald Tribune [online], Paris, France, 21 June 2006 Available from <http://www.iht.com/articles/2006/06/20/news/ecology.php> [viewed 7 July 2006]

### **EXAMPLE 7**

Internet forum, Wikipedia. The Free Encyclopedia. 7 July 2006, 11:32, 12:28] Available from [http://www.en.wikipedia.org/wiki/web\\_forum](http://www.en.wikipedia.org/wiki/web_forum) [viewed 10 July 2006].

## **f) Patent**

**The required elements are: -**

Inventors name, Initials. , Assignee. , Year .Title. Place. Patent number (status if an applicable)

**Example: - 1**

Graham, C. P., Fonti, L. and Martinez, A. M., 1972. American Sugar Co. Tableting sugar and Compositions containing it. U. S. Pat. 3,642,535.

**Example:--2**

Leonard, Y., Super Sports limited. 2008. Tin can manufacture and method of sealing. Canada. Pat. 12,789,675.

### **EXAMPLE 3**

CARL ZEISS, JENA, VEB, Anordnung zur lichtelektrischen Erfassung der Mitte eines Lichtfeldes Switzerland, Patentschrift, 608626. 1979-01-15

### **EXAMPLE 4**

PHILIP MORRIS INC, Optical perforating apparatus and system. European patent application 0021165 A1. 1981-01-07

### **EXAMPLE 5**

RES IN MOTION LTD (CA). Dual-mode keypad for a mobile device. Inventors: Frank M. TYNESKI. Mihail LAZARIDIS and Jason T. GRIFFIN EC HO4M1/23. IPC HO1H13/70; G06F3/023: HO1H13/84, HO4Q7/32, G06F3/023, HO4Q7/23

European patent application CA20062532242 20060105 2006-07-07, European Patent Office Available form: <http://ep.epacenet.com> [viewed 20 July 2006]

## **EXAMPLE 6**

WINGET LTD, Detachable bulldozer attachment for dumper vehicles. Inventor: Reginald John ENGLAND 8 March 1967, Appl: 10 June 1963. Int CI: E02F 3/76. GB CI: E1F 12. GB Patent Specification 1060631.

### **g) Conference Report:-**

Authorship/author, editor of organization, Year.Full title of Conference report. Location, Date, Place of Publication :Publisher

#### **Example:-**

UNDESA (United Nations Department of Economic and social Affairs), 2005. 6<sup>th</sup> Global forum on reinventing government: to wards participation and transparent governance. Seoul, Republic of Korea 24-27 May 2005. New York: United Nations.

#### **Conference Paper: -**

Authorship, Year.Full Title of Conference Paper. In: followed by editor of name of Organization, Full Title of Conference. Location, Date, Place of Publication: Publisher.

#### **Example: -**

Brown, J., 2005. Evaluating surveys of transparent governance. In: UNDESA (United Nations Department of Economic and social Affairs), 6<sup>th</sup> Global forum on reinventing government: to wards participation and transparent governance. Seoul, Republic of Korea 24-27 May 2005.NewYork: United Nations.

#### **Dissertation: -**

Author, Year of publication.Title of dissertation.Level.Official name of University.

### **Annual Report**

Author or corporate author, Year. Full title of annual report, Place of publication: Publisher.

#### **International Standards the required elements are: -**

Corporate author, Year of publication. Identifying letters and numbers and full title of standers, Place of Publication: Publisher.

#### **Example: - 1**

British Standards Institution, 1990.BS 555:1990 Recommendations for wiring identification. Milton Keynes: BIS.

## Example: - 2

International standers Office, 1998. ISO 690-2 Information and documentation: Bibliographical reference: Electronic documents. Geneva:ISO.

### Arrangement of alphabetical lists of references.

Alphabetical lists of references should be arranged according to the principles in a) to e), based on the first elements given in the reference.

- a) A creator's own writings precede any document he/she has cited.
- b) A single creator entry precedes a dual or multi-creator entry beginning with the same name.
- c) Multiple entries by a single creator are arranged chronologically, with the earliest information resource first.
- d) Multiple creator entries with the same first creator may be arranged chronologically after entries by the first creator alone or with one co-creator, in order to match citations in the information resource which give the first creator's name "and others" or "et al." after the date
- e) Corporate creators (such as institutions) are alphabetized according to the first significant word of the name.

In special circumstance, an alternate order may be used if done so consistently for all references. For instance, in lists of references arranged in classified or subject order, it is often appropriate to place the title first and the creator second. In accession lists of maps, the area may be placed first. In lists of moving-image materials, the title is normally placed first.

## 1 Basic Principles for Creating References

- 1 The information included in a reference should be sufficient to clearly identify the material being cited.
- 2 The creator of the reference should determine the appropriate level of specificity at which the reference is made (e.g. to an entire document or to a specific part of a document) based on the purposes of the citation and the use that was made of the material cited.
- 3 The data included in a reference should whenever possible be taken from the information resource being cited.
- 4 The data recorded in the reference should reflect the specific copy or instance of the document that was used. For online document that are subject to change. Such data include the network location of the particular version that was used and the date on which the document was accessed.
- 5 A uniform style format and punctuation scheme shall be used for all reference in a document regardless of the particular style guide being used.

## 2 Elements of a reference

### 2.1 Sources of data

#### 2.1.1 General

The data used in a reference should, if possible, be taken from the cited information resource itself. An eye-readable source of data should be

preferred to any other. Where possible, the text of machine-readable, microform or audiovisual sources should be viewed to verify the elements of the reference. Data that are taken from a source other than the item itself should be recorded in brackets.

Suitable source of data for the reference in order of preference in order of preference are the following.

- a) Title page or equivalent, such as title screen, home page, disc label, map face.
- b) Verso of title page, header, etc.
- c) Cover or label permanently associated with the item including captions on graphic works, microfiche headers, etc.
- d) Container
- e) Accompanying documentation, e.g. explanatory leaflet or manual

If any element of data appears in different form in different places on the item. The form appearing most prominently in the preferred source should be used unless that source is obviously incorrect e.g. an incorrect label has been attached.

#### 2.1.2 data supplied from other sources

Any information that does not appear in the cited information resource, but is supplied by the citer, should be enclosed in bracket.

## 2.2 Transliteration

Any elements in non-roman alphabet may be transliterated or Romanized in accordance with the appropriate international standard.

## 2.3 Abbreviation

General accepted bibliographic terms should be abbreviated in accordance with the rules established in ISO 832.

## 2.4 Punctuation and Typography

A consistent system of punctuation and typography should be used throughout a list of references. Each element of a reference should be clearly separated from subsequent elements by punctuation or change of typeface.

Note : in order to emphasize the importance of consistency, a uniform scheme of punctuation is used in the examples in the international standard. The scheme is purely illustrative and does not form part of the recommendations.

## 2.5 Order of Elements

The usual order of elements in a reference is as follows.

- a) name (s) of creator(s), if available;
- b) title;
- c) medium designation, if necessary;
- d) edition;

- e) production information (place and publisher);
- f) date [in the name and date system (see annex A), the year should not normally be repeated in this location unless a fuller date is necessary (e.g. for a serial)];
- g) series title, if applicable;
- h) numeration within the item;
- i) standard identifier (s), if applicable;
- j) availability, access or location information;
- k) additional general information

## 2) APPENDICES.

Appendix is useful device to make available the material related to the text but not suitable for inclusion in it. Such material may be tables too detailed for text presentation, technical notes on method, and schedules and forms in collecting data, copies of documents not generally available to the reader and sometimes figures or other illustrative materials. In case there are more than one appendix, each should be given a number (Appendix – 1, Appendix – 2 etc.)

## 3) VITA.

Vita is biographical sketch of about 150 words. It should be written in third person, it should be presented in paragraph form & should include a short biography of candidate including date and place of birth, educational institutions attended, qualifications, professional experience and achievements including honors, number of papers published and any other pertinent information.

### TYPING INSTRUCTIONS

Computer Typing shall be used for thesis typing with spacing and clean sharp letters with font size **12 (Times New Roman Font)** with 1½ spacing between the lines on **both** sides of paper. **The new chapter shall start on right side of new page.**

All copies of thesis should be printed on Executive or equivalent white bond paper Indian standard. A4 size 210 x 297 mm (which can be rounded to 8½ x 11½ inches size)

All pages must have 5 cm margin on the left, 2 cm. to the right, 3 cm on both upper and lower ends of the paper. No borderline or ornamentation of the text pages should be done.

The general text of thesis should be typed in **1½** space. However; tables, long quotations footnotes and figure captions should be single-spaced. Erasures should be kept to minimum and should be made both on original and other copies strikeovers, interlinear corrections, crossing out of letters or words must be avoided. Corrections should be made perfectly by use of erasures or



with black ink only. All the pages should be numbered in Arabic Numerals from chapter introduction to chapter summary.

Form and spacing of the headings should be consistent all through the thesis. The following headings are suggested.

### **MAJOR HEADING**

The major heading (Title of thesis, chapters etc) will be in the center of the page in block letters, this heading will be 2 spaces(**line spacing**) clear from the other text with font size of 12 (**Times New Roman Bold**). If the title is longer than one line, type it in single space and use inverted pyramid form.

**The major heading, major sub heading & sub heading shall be numbered upto only 03 places & thereafter sub-sub-sub heading shall be alphabetical.**

**Example. 1.1.1.**

(a)

(b)

#### **Major Sub Heading**

The sub heading will begin at the left margin and it will be underlined. It will be 2 spaces clear from the text with font 12 (**Times New Roman Bold**)

Pagination should be done & every page should be assigned a number. On the title page, the numbers should not be shown but pages should be accounted in pagination. The preliminary pages should be numbered with Roman numeral (I, II, III, IV etc.) in the middle of the lower margin. In the appendix, literature cited and vita, the pages should be numbered with Roman numerals in the top center at least two spaces above the first line of the text. In case of illustrations, diagrams, photograph etc., the pages between which the figures come should be indicated in the list of figure and no separate page number should be given.

### **THESIS SUBMISSION**

The student should submit **one and two copy of the loose bound thesis complete in all respects in partial fulfilment for the requirements of Master's degree and Doctoral Degree respectively** to the Associate Dean/Dean of the college/institute through the Head of the Department/Sectional Head. After scrutinizing and verifying the documents of submission and due satisfaction, the loose bound thesis of PG student shall be sent to the external examiner (as communicated by the University) directly by the Dean/Associate Dean of the college/institute for evaluation. A final viva-voce examination shall be conducted by the Chairman, Advisory Committee after receipt of (all) satisfactory evaluation report(s). Thereafter three copies of hardbound thesis along with the essential documents shall be submitted by the

candidate through the Head of Department/Sectional Head to Dean/Associate Dean of the college/Institute. The Dean/Associate Dean shall forward the one copy of thesis to the Controller of Examinations along with the information given in Appendix-F for notification of final result of the student. The Head of the Department/Sectional Head shall have to ensure that a duly corrected hard bound copy of the thesis along with CD of soft copy/mirror image of bound thesis in single PDF is sent to the University and retain two copies in the College/Department. After declaration of the result, Controller of Examination will send the copy to University library.

### **THESIS ABSTRACT**

Three copies of the thesis abstract must be submitted separately along with the thesis. All abstracts should be neatly typed on one side of white bond paper as used in the thesis and should not exceed **300** words for the Master's degree and **500** words for Doctoral degree. The abstract should summaries the contents and conclusions of the research in such a way that it will be self-explanatory and intelligible in itself. The content should indicate the objectives and topics covered methodology and significant findings. The thesis abstract must accompany the information as given in Appendix-G. Out of the three copies of the abstract one copy will be retained by the Head of the Department and one copy each will be sent to the Dean, faculty and Director of Research, MAFSU.

**IMPACT OF TRAINING PROGRAMMES SPONSORED BY  
MAHARASHTRA ANIMAL AND FISHERY SCIENCES  
UNIVERSITY ON FARMERS**

**T H E S I S**

Submitted

In partial fulfillment of the requirements for the Degree of

**MASTER OF VETERINARY SCIENCE**

**IN**

**VETERINARY EXTENSION**

**BY**

As per the XII Certificate vide AC Resolution No. -dt

Enrolment No.....

**Bombay Veterinary College, Mumbai**

**MAHARASHTRA ANIMAL AND FISHERY SCIENCES**

**UNIVERSITY, NAGPUR – 440 006**

**(INDIA)**

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Submitted

In partial fulfillment of the requirements for the Degree of

**DOCTOR OF PHILOSOPHY**

**IN**

**VETERINARY EXTENSION**

**BY**

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Enrolment No.....

**Bombay Veterinary College, Mumbai**

**MAHARASHTRA ANIMAL AND FISHERY SCIENCES**

**UNIVERSITY, NAGPUR - 440 006**

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## DECLARATION OF STUDENT

I hereby declare that the experimental Research work and interpretation of the thesis entitled

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orpart thereof has not been submitted for any other degree or diploma of any University, not the data have been derived from any thesis/publication of any University or scientific organization. The sources of materials used and all assistance received during the course of investigation have been duly acknowledged.

Date :

Signature

(Name of Student)  
Enrolment No. :

Counter signed by  
Chairman, Advisory Committee  
with date

### Declaration of Advisory Committee

Shri/Smt/Ku \_\_\_\_\_ has satisfactorily prosecuted his course of research for a period of not less than one semester (for M.V.Sc.)/two semesters (for Ph.D.) and that the thesis entitled, " \_\_\_\_\_ " submitted by him/her is the result of research work is sufficient to warrant its presentation to the examination in the subject of \_\_\_\_\_ for the award of \_\_\_\_\_ degree by the Maharashtra Animal and Fishery Sciences University, Nagpur.

We also certify that the thesis or part there of has not been previously submitted by him/her for a degree of any other University.

Place : \_\_\_\_\_

Date : \_\_\_\_\_

**Signature (Name)  
Advisor/Guide Designation**

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Name and Designation

Signature

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
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- 4) \_\_\_\_\_
- 5) \_\_\_\_\_
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- 7) \_\_\_\_\_

## CERTIFICATE

This is to certify that the thesis entitled, " \_\_\_\_\_"  
\_\_\_\_\_ submitted by Shri/Miss \_\_\_\_\_ to the Maharashtra Animal and Fishery Sciences University in partial fulfillment of the requirement for the degree of \_\_\_\_\_ has been approved by the Students's Advisory Committee after examination in collaboration with the External Examiner.

Name & Signature of  
External Examiner

Signature with Seal  
Head of Department

Name & Signature  
Advisor/Guide Designation

### Advisory Committee

	Name and Designation	Signature
1)	_____	
2)	_____	
3)	_____	
4)	_____	
5)	_____	
6)	_____	

Signature with Seal  
Dean/Associate Dean  
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Table 3 *In vitro* N-fractions as influenced by probiotics

Parameter	High concentrate	Medium Concentrate	Low concentrate
Total-N (mg)/10ml incubation medium			
Control	50.07 ± 0.31	45.15 ± 0.85	42.70 ± 1.01
T <sub>1</sub>	51.22 ± 0.91	45.38 ± 0.47	43.63 ± 0.51
T <sub>2</sub>	51.99 ± 0.51	46.38 ± 0.47	43.63 ± 0.51
Level of Significance			
Non-protein-N (mg)/100ml incubation medium			
Control	25.72 ± 0.10 <sup>c</sup>	22.87 ± 0.26 <sup>b</sup>	21.53 ± 0.56 <sup>b</sup>
T <sub>1</sub>	23.45 ± 0.18 <sup>b</sup>	21.35 ± 0.18 <sup>a</sup>	19.25 ± 0.71 <sup>a</sup>
T <sub>2</sub>	22.05 ± 0.10 <sup>a</sup>	20.48 ± 0.44 <sup>a</sup>	18.03 ± 0.17 <sup>a</sup>
Level of Significance	**	*	*

a, b, c Means with different superscripts in a column differ significantly \*P < 0.05; \*\* P < 0.01

To,  
The Controller of Examination,  
Maharashtra Animal & Fishery Sciences  
University, Seminary Hills, Nagpur-6

**Through** : Dean/Associate Dean/ Principal.

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ABSTRACT

**M. V.Sc. Thesis**

**2002**

**Ishwar Ganesh Bhagwat**