**Thesis Format of BS/MS/Ph.D of LCWU**

**Faculty of Natural Sciences and Faculty of Engineering and Technology**

**Report or Thesis writing and Presentation**

**Introduction:**

The purpose of conducting res. is to come out with **inference and suggestions.** The **outcome of the res**. should be well documented in the form of res. report for **implementation and for future use.**

A res. Report or thesis is a piece of academic writing that requires a more abstract, critical and thoughtful level of inquiry than you might be used to.

**Types of report:** A res. Report can be classified into decision –oriented (technical) report and res. oriented report. is divided in 1) survey based res. report 2) algorithmic res. report.

1**) Decision –oriented (technical) report:**

**Steps of report:**

**1) Identification of problem**

**2) Establishment of objectives**

**3) Generation of decision alternatives**

**4 ) Evaluation of decision alternatives**

**5) Selection of the best decision alternative**

**6) Development of action plan**

**7) Provision for correction plan after implementation of the decision**

**2) Survey or experiments based report:**

**1) Problem definition**

**2) Objectives of the res.**

**3) Res. methodology or Materials and Methods**

**4) Data analysis**

**5) Interpretation of results and suggestion or Results and Discussion**

**6) Conclusion**

**Length of thesis:**

**A thesis should be as consistent with the subject and unnecessary length may be the candidate disadvantage.**

**Part of Thesis or report**

**Following are the part of thesis:**

**1) Title page:**

The title should be concise and accurate description of the content of the thesis. It must contains

1: Full name of author 2) The degree or qualification for which the thesis is presented 3)The department in which the has worked 4) The name of the university 5) The date (month and year) of submission.

**2) Summary /Abstract:**

It follows the title page. It should not exceed the five hundred words. Abstract gives the overview of the thesis outlining the title of the res.,objective,shortcomings of existing lit.,need of further res.,proposed measures of performance and res. methods, results of comparisons and highlights of inference.

**3) Table of contents and illustrations; T**able of contents is the catalogue of the res. report which summarizes the every aspect of the report. List of table and list of figures; diagrams should follow the table of contents.

**4) Acknowledgements:** Thanks to all associated persons

**5) List of Abbreviations:**

**6). Text: T**hesis should be divided into sections, chapters, and subsections as may be appropriate.

1) Introduction

2) Review of Literature

3) Materials and Methods

4) Results

5) Discussion

**References** are alphabetically arranged even within **sub-headings** if used. This should not be compiled as a last minute task but will develop from the material being listed, consulted and used while work in progress.

**Appendices: If required**

**Typing Instructions:**

All theses presented in typescript for the degree of BS/MS/PhD should comply with the following specifications unless permission to do otherwise is obtained from the relevant authority/body.

* **Size of Paper**

A4 size will be used; no restriction is placed on drawings and maps.

* **Paper Specification**

For thesis good quality paper (80 g) should be used.

* **Number of Copies**

Hard binding of theses copies should be submitted for

1. Supervisor
2. HOD
3. Library (LCWU)
4. Student
5. Affiliated colleges (If applicable)
6. Co-Supervisor (If applicable)
7. External Examiner (3 Copies) Only for Ph.D.

* **Method of Production**

The text must be composed on computer to be normally submitted as the first copy. The second and subsequent copies may be produced by means of other acceptable copying methods.

* **Layout of Script**

Typescript should appear on one side only. Lines at least **1.5** spaced. Footnotes, quotations, references and photographic captions may be **single-spaced** and paragraph spacing should be 6pt.

A separator should be added before each chapter (Please see **Annexure 7**)

* **Font Size**

Title Page 12-22

Headings/subheadings 12-20

Text 10-12

Footnotes 08-10

References 12

Footnotes should be given on the same paper where reference is cited.

* **Type Style**

Times New Roman/Arial/Courier New.

* **Margins**

1 inch (2-2.54 cm) at the top, bottom, right side of the page and 1.5 inch at the left side of the page. The best position for the page number is a top-center or top-right ½ inch (1.27 cm) below the edge. Pages containing figures and illustrations should be paginated. Page No will be 5 space after header.

**Following is the preferable layout of the thesis**

* Title
* Face (Hard binding page) of the thesis Annexure 1
* Spine Annexure 2
* Title Page Annexure-3
* Certificate Annexure 4
* Dedication
* Acknowledgements

**Contents** Annexure 5

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| --- |
| * **List of Tables** (Annexure 6) |
| * **List of Figures** (Annexure 6) |
| * **List of Abbreviations (Alphabetically arranged)** |
| * **Abstract** |
| * **Chapter 1 : Introduction** |
| * **Chapter 2: Review of Literature** |
| * **Chapter 3: Materials and Methods** |
| * **Chapter 4: Results (**may comprised of one chapter or a number of chapters depending upon the subject matter/requirements) |
| * **Chapter 5: Discussion (**(including Conclusions/Recommendations where applicable) |
| * **References**   Reference citation in text should be by author/s name/s not by reference number for **Life sciences** (Zoology, Botany, Environmental Sciences etc.) while by reference number [1] in the text for **Hard sciences** (Chemistry, Physics etc.).  In the author and the date system authors should be arranged alphabetically in the references list and should include. In addition to the name(s) of the author(s) and date of publication, the full title of the article followed by either the full name or the standard abbreviation of the journal, volume number and first and last pages. If a numbering system is used then the references in the reference list are preceded by a number. These examples are given only as a guideline. Changes may be made if necessary.  **Reference in text:**  References should be coated in the **start, between and end** of paragraph like below  **Single Author :Naz (2014)**  Start of Paragraph  **Two Authors: Naz and Munir (2014)**  **More than two Authors: Naz *et al*. (2002)**  **(Naz *et al*., 2002)**  Between and end of Paragraph  **(Munir *et al*., 2006; Naz *et al*., 2014)**  **HOW TO WRITE REFERENCES**  **For Life Sciences**  BOOKS  Block, S. S. 1991. *Disinfection, sterilization, and preservation*, 4th ed. Lea & Febiger, Philadelphia. pp. 33 – 34.   REPORT WHO. 1995. *Survey of hospital wastes management in South-East Asia Region*. New Delhi, World Health Organization Regional Office for South-East Asia (document SEA/EH/493).  **JOURNALS**  Cheema, K. J., Kazmi, L. and Scofield, A. M. 2002. Pathophysiology of Nematode infection (*Nippostrongylus brasiliensis)* in laboratory rats. *International Journal of Parasitology,* **8** (3): 2 - 8.  **For Hard Sciences**  **BOOKS**   1. Padanyi, Z. V. “Physical aging and glass transition: effects on the mechanical properties of paper and board,” in *Products of Papermaking*, 2nd ed. Pira, UK, pp. 521 - 523 (1993). **OR** 2. Padanyi, Z. V. *Products of Papermaking*, 2nd ed. Pira, UK. pp. 521 - 523 (1993).   **JOURNALS**   1. Covey, G. H. and Nguyen, K. L. Chloride management in a closed ECF bleach plant, *Appita J.* **49** (5): 332 - 335 (1996). 2. Xia, J. H., Liu, Z. and Feng, X.Z. Synthesis and characterization of ternary copper (II) complexes with β 2 amino acid Schiff base. *Chem World*, 384 (6): 321-323 (2007)   **Conferences and Conference preprints**  Lloyd, J., Allison, R. and Horne, C. 1997. Laboratory kraft pulping with low dissolved solids concentrations, *Proc. 51st Appita Ann. Gen. Conf*., Melbourne. p. 565 - 566.  **Patents**  Wallis, A. F. A and Wearne, R. H. Chemical cellulose. 1989. *Aust. Pat. Appl*. PJ 3803/98.  **Note:** Please notice a general rule that the hard sciences (especially physics & chemistry) use abbreviated journal titles while the biological and medicinal literature tends to include full journal titles. |
| * **Annexures**   Annexes may be required to make available to the readers materials related to the text but not suitable for inclusion in it. These should be given at the end of the text of the thesis. The generic headings and the titles of annexes are both centered and in the uppercase. The annexes must appear in the table of contents. |
| * **Plagiarism Report (required for MS and PhD) (Annexure 8)** * **Publications (required for PhD)** |
| For PhD Candidates Photocopy of acceptance / publication of at least one research paper based on the PhD research in an HEC approved “X” category journal is a requirement for the award of PhD degree (Y in case of Social Science only)\***.** |

Do not use coloured pages and/or card papers. Only LCWU monogram on title page should be coloured (Dimensions: 5.78 x 4.29 cm)

Plagiarism report and Publications should be attached at the end of thesis.

* **Length of Thesis**

Length of thesis for different degrees should meet the following minimum criteria.

BS: 60 Pages

MS: 80 Pages

PhD: 150 Pages

* **Binding**

All final theses and published work presented for higher degrees must be bound in a permanent form or in a temporary (hard binding will be provided after defense of the thesis) form approved by the advanced studies and research board.

* **Color**

The final copy of thesis should be dark green with golden printing, hardbound with name of University and University insignia (Affiliated Colleges) **If applicable**.