

## **Instructions for Thesis Preparation of Master Program**

### **(Parts of master thesis, in the order they should appear)**

The best way of writing master thesis is to prepare an extended outline. Supervisor should carefully review the outline and check whether there are any unnecessary materials that are not directly related to the problem statement. It is expected that the master thesis is done with a defined research question that has been solved through well designed research work and the results have been presented systematically. Writing the thesis requires complete organization of the arguments and results. Choose section titles and wordings to clearly give the idea about the findings of the study. This guideline address the major issues related to the structure and style of master thesis.

**The fundamental element of master thesis generally comprises the following:**

- 1. Title:** The wording of the title should be simply a characterization of the theme. This may contain major elements the candidate will address. Preferably titles should be simple and direct, without a lot of qualifying terms or phrases. It is better to solicit the opinion of the research supervisor. Any abbreviation in the thesis title should be avoided.
- 2. Approval sheet:** This part should be followed as per proforma shown.
- 3. Table of contents:** This should list in sequence, with page number, all major subdivision of the dissertation such as chapters, the references, appendices etc.
- 4. Declaration:** I declare that the thesis hereby submitted by me for the MS degree at the Patuakhali Science and Technology University is my own independent work and has not previously been submitted by me at another university/faculty for any degree. This declaration must be signed by the candidate with date of submission of the thesis. This thesis is an independent compilation and attachment to your thesis. Work without this thesis will not be accepted. The name and signature of the candidate will appear in all hard binding copies of the thesis. Declaration page should not be given in soft binding copies. Candidates are strongly advised to check the regulations for specific requirements for the master degree.
- 5. Acknowledgements:** Any help received from any person or institution, in the provision of facilities, should be formally acknowledged. The full name and position of all persons acknowledged are essential.
- 6. Abstract:** This is the only section of the thesis that is read by most of the readers. The abstract extracts the key points of the thesis, highlighting its purpose, methods, major findings and brief conclusions. It does not include figures, table or citations. If more than one hypothesis is tested this should be stated in the abstract.

The abstract page contains: (i) Title of the Thesis; (ii) Full name of the author; (iii) The word ABSTRACT in bold uppercase just before the text; (iv) The text should be single paragraph in between 250-300 words, in single line spacing.

7. **Introduction:** This section provides the background for the research work and focused on the topic investigated. The purpose is to convince the reader of the importance of the work done. It includes a historical basis for selecting the problem and shade light on some point of missing pieces of information that will prove pertinent to the problem studied. Brief background information is necessary to make the readers fully familiar to the problem addressed in the thesis.
8. **Objectives:** This can be included with the introduction or presented as a separate section. The objectives should be very specific and quantifiable. Objectives should not be confused with the ultimate goal of the work.
9. **Review of literature:** A separate section is necessary to cover the amount of published literature related to the topics studied. The review should be comprehensive but not too elaborate. It is not necessary to cite every study even remotely connected to the subject at hand. It is essential to cite those that are most important for the work done. The reference should be current, with the exception of historical, original work done. Ideally source should be primary ones, representing the relevant work done the field to date and relevant to the specific area of study. Sources whose theories or opinions conflict with the study should also be included. All information is to be appropriately cited, as plagiarism (it is define as presenting someone else's work as one's own) is illegal. It may require some discussion with the research supervisor to sort out the relative importance of the articles. Critically evaluate the articles and make some independent assessment of their importance to the research question that has been done for the thesis. Traditional "name and year" system should be followed for citation in the text.
10. **Materials and Methods/Methodology:** Once the research experiments/studies are thoroughly planned, presenting the methodology can be the most straightforward part of the thesis work. The materials, methods and experimental designs should be described in a way that they can be repeated by other workers. This chapter may have one or several sections and subsections that can vary with the nature of the experiments. For instance, in case of the field experiment, the following information should be provided: (i) Site characteristics: geography, climate, soil properties (ii) Design of the experiments: Randomized Block Design, Split-plot Design, and number of replicates (iii) Agronomic practice: Plant materials, fertilization, irrigation, treatments (iv) Observation and Sampling Methods: phonological stages, light measurements, root sampling method, harvesting.  
Precise description of the devices and methods including the citation are required as well. Appropriate data analysis procedures need to be written considering the hypotheses tested. Statistical methods should be described with sufficient clarity to allow the reader to verify the reported results. The appropriate tests together with the software used for the analysis should be cited.
11. **Results and Discussion:** This section includes analyses of data and presentation of results. Before writing this section, the writer should organize his/her data in tables,

graphs, photographs etc. Various alternatives should be tried to find out the best. Once the data are organized into tables and other illustrations, the textual part of the results can now be written quite easily. Results should be presented logically rather than chronologically, using sub-headings and paragraphs for observations of different experiments. Tables and figures should be presented with clear, concise, self-evident captions and labels. The data presented in the tables should not be repeated in the text, rather the salient features and trends of the data presented in the table should be indicated in the text. Statistical analysis should indicate the relationships between variables. Test statistics, level of significance, degrees of freedom and sample size need to be provided in brackets after each data analysis result.

Discussion should provide clear interpretation of results in the context of present state of knowledge. Writing a good discussion requires a lot of thinking. The writer must remember few basic points while writing discussion. A writer cannot discuss any data that have not been presented in the results; neither can he include any new data in the discussion section. Moreover, one should not reconsider every scrap of his/her results in the discussion. The thumb rule is “do not discuss if no discussion is needed”. An ideal discussion should have the following components: Key message summarizing the major achievement, necessary interpretation of the findings, comparisons of the results with relevant findings of others to show how this result fits in the current state of the knowledge, and necessary explanation for any deviation. An honest writer would qualify his/her results in the discussion section by mentioning any limitations and shortcomings of his/her experiments.

**12. Conclusions:** It is not a rambling summary of the thesis: they are short, concise statements of the inferences that have been made out of the study. It helps to organize these as short numbered paragraphs, ordered, from most to least important. All conclusions should be directly related to selective objectives.

Future direction of research should be included, so that researchers can pick up the ideas that have been generated while this work was done.

**13. References:** Most examiners scan the list of references looking for the important works in the field, inclusive of their own if applicable. Make sure they are listed and referred to in section of review of literature. All references given must be listed in alphabetical order by author's surname. Works by the same author's should be listed in chronological order.

#### A. Citing References in the Text

Type of citation	Narrative citation in text	Parenthetical citation in text
One author	Walker (2007)	(Walker, 2007)
Two authors	Walker and Allen (2004)	(Walker & Allen, 2004)
Three and more authors	Wasserstein et al. (2005)	(Wasserstein et al., 2005)
Groups	National Institute of Mental Health (NIMH, 2003)	(National Institute of Mental Health [NIMH], 2003)
Reference with single page number/chapter,	Hedetoft (2013)	(Hedetoft, 2013)

etc		
Reference with page range	Haan (2005, pp. 36-37)	(Haan, 2005, pp. 36-37)
Same author, two works from different years	Todres (2011, 2012)	(Todres, 2011, 2012)
Same author, two works from same year	Derryberry and Reed (2005a, 2005b)	(Derryberry & Reed, 2005a, 2005b)

### Important Notes:

1. Each reference cited in text must appear in the reference list and vice-versa.
2. When citing two or more works together, arrange the in-text citations alphabetically in the same order in which they appear in the reference list:  
Recent research in developmental psychology has explored this issue (Bergstrom et al., 2006; Clément, 2010; Harris & Corriveau, 2011; Harris & Koenig, 2006; Heyman, 2008; Heyman & Legare, in press; Koenig & Harris, 2005).
3. If you want to include several different citations in one set of brackets, they should be in alphabetical order, separated by a semi-colon:  
(Durie, 2003; McShane & Travaglione, 2007; Ministry of Education, 1996).
4. To cite more than one work by the same author(s), list the surname of the author(s) and then each different year of publication, separated by a comma:  
(Ministry of Education, 1996, 1999).

### B. The Reference List

Type of Reference	Format	Examples
Journal Article (1 author)	Lastname, A. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume(Issue), Firstpage-Lastpage.doi</i>  Attention: The issue number is not compulsory.  If the journal article has an article number instead of a page range, include the word “Article” and then the article number instead of the page range.  Journal articles (but also other types of references, such as books) can have a doi or url at the end, but that is not compulsory.	Paivio, A. (1975). Perceptual comparisons through the mind’s eye. <i>Memory &amp; Cognition</i> , 3(1), 635–647.  Jerrentrup, A. (2018). Teaching medicine with the help of “Dr. House.” <i>PLoS ONE</i> , 13(3), Article e0193972.  Andreff, W. (2000). The evolving European model of professional sports finance. <i>Journal of Sports Economics</i> , 1, 257–276. <a href="https://doi.org/10.1177/15270025000100304">https://doi.org/10.1177/15270025000100304</a>

Journal Article (2-7 authors)	<p>Lastname, A., &amp; Lastname, B. (year).  Title of the article in sentence case.  <i>Journal in Title Case, Volume(Issue)</i>,  Firstpage-Lastpage. doi</p>	<p>Becker, L. J., &amp; Seligman, C. (1981).  Welcome to the energy crisis. <i>Journal of Social Issues</i>, 37(2), 1–7.</p> <p>Cheryan, S., &amp; Meltzoff, A. N. (2015).  Cultural stereotypes as gatekeepers.  <i>Frontiers in Psychology</i>, 6, Article e0214466.  <a href="https://doi.org/10.3389/fpsyg.2015.00049">https://doi.org/10.3389/fpsyg.2015.00049</a></p> <p>Frischlich, L., Hahn, L., &amp; Rieger, D. (2021).  The promises and pitfalls of inspirational media: What do we know, and where do we go from here? <i>Media and Communication</i>, 9(2), 162–166.  <a href="https://doi.org/10.17645/mac.v9i2.4271">https://doi.org/10.17645/mac.v9i2.4271</a></p>
Journal Article (more than 7 authors)	<p>Lastname, M., Lastname, N.,  Lastname, O., Lastname,  P., Lastname, Q., Lastname, R.,  Lastname, M., . . . Lastname, Z. (year).  Title of the article in sentence case.  <i>Journal in Title Case, Volume(Issue)</i>,  Firstpage-Lastpage. doi</p>	<p>Gonzalez, W. L., Hughes, W., Carter, D.,  Campbell, C., Baker, A. B., Flores, T.,  Gray, W. E., . . . Lee, L. H. (2018).  National character does not reflect mean  personality trait levels in 49 cultures.  <i>Science</i>, 3(10), 96–100.</p>
Book	<p>Lastname, A. (year). <i>Title of the book in sentence case</i> (edition, Volume).  Publisher. doi</p> <p>Attention:  The edition, volume, and DOI are not compulsory.</p>	<p>Strunk, W., Becker, E., &amp; White, E. B. (1979).  <i>The guide to everything and then some more stuff</i> (3rd ed.) Macmillan.</p> <p>Lippe, T. L. (Ed.). (2016). <i>Student affairs for academic administrators</i>. Stylus Publishing; ACPA Books.</p> <p>Kearney, D. J., &amp; Simpson, T. L. (2020).  <i>Concise guides on trauma care. Mindfulness-based interventions for trauma and its consequences</i>. American Psychological Association.  <a href="https://doi.org/10.1037/0000154-000">https://doi.org/10.1037/0000154-000</a>.</p>
Book Chapter	<p>Lastname, A. (year). Title of the chapter in sentence case. In B. Lastname, C. Lastname, &amp; D. Lastname (Eds.), <i>Title of the book in sentence case</i> (Volume, pp. firstpage-lastpage). Publisher. doi</p>	<p>Bergquist, J. M. (1992). German Americans. In J. D. Buenker &amp; L. A. Ratner (Eds.), <i>Multiculturalism in the United States: A comparative guide to acculturation and ethnicity</i> (Vol. 3, pp. 53–76). Greenwood.</p> <p>Baker, F. M., &amp; Lightfoot, O. B. (1993). Psychiatric care of ethnic elders. In A. C. Gaw (Ed.), <i>Culture, ethnicity, and mental illness</i> (pp. 517–552). American</p>

		Psychiatric Press.
		Scott, D. (2005). Colonial governmentality. In J. X. Inda (Ed.), <i>Anthropologies of modernity</i> (pp. 21–49). Retrieved from <a href="http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832">http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832</a>
Newspaper Article / Newsletter (in paper)	Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i> , Firstpage-Lastpage.	Schwartz, J. (1993, September 30). Obesity affects economic, social status. <i>The Washington Post</i> , 1–4.
Newspaper Article / Newsletter (online)	Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i> . <a href="http://www.website.com">www.website.com</a>	Carey, B. (2019, March 22). Can we get better at forgetting? <i>The New York Times</i> . <a href="https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html">https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html</a>
Website	Lastname, A. (year). <i>Title of the website article in sentence case</i> . Name of the Website in Title Case. <a href="http://www.website.com">www.website.com</a>	Cain, K. (2012). <i>The negative effects of Facebook on communication</i> . Social Media Today. <a href="http://socialmediatoday.com">http://socialmediatoday.com</a>
Published Thesis or Dissertation	Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Doctoral or Master's thesis or dissertation, Name of the Institution]. Repository. <a href="http://www.website.com">www.website.com</a>	Kelly, C. B. D. (2018). <i>The art of coffee roasting</i> [Doctoral thesis, The University of Waikato]. The University of Waikato Research Commons. <a href="https://hdl.handle.net/10289/11614">https://hdl.handle.net/10289/11614</a> .
Unpublished Thesis or Dissertation	Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Unpublished doctoral or Master's thesis or dissertation]. University.	Imber, A. (2003). <i>Applicant reactions to graduate recruitment and selection</i> [Unpublished doctoral dissertation]. Curtin University.
Conference paper, keynote address, poster presentation, etc. (unpublished)	Lastname, A. (Year, Month Day-Day). <i>Title of paper in sentence case</i> [Type of material]. Name of Conference, City, Country.	Whipple, S. (2018, March 6-9). <i>Control beliefs as a moderator of stress on anxiety</i> [Paper presentation]. Southeastern Psychological Association 64th Annual Meeting, Charleston, SC, United States.
Conference paper in Proceedings (published as a book)	Lastname, A. B. (Year). Title of paper. In A. Lastname (Ed.; if applicable), <i>Proceedings book title in sentence case</i> (pp. firstpage-lastpage). Publisher.	Cismas, S. C. (2010). Educating academic writing skills in engineering. In P. Dondon & O. Martin (Eds.), <i>Latest trends on engineering education</i> (pp. 225-247). WSEAS Press.
Comment on Facebook	Author of the comment, A. (Year). First sentence of the comment [Facebook comment on the Month	Wangail, T. (2017). Since Kashmir mass uprising, all Wimax connections were suspended almost for more than three

Post	Day, Year, post by Author of the Post]. www.website.com	months [Facebook comment on the January 23, 2017, post by N Rigzin]. <a href="https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547">https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547</a>
Brochure	Author. (Year). <i>Title of document</i> [Brochure]. Publisher.	Ministry of the Environment. (2007). <i>Conserving water in Ontario</i> [Brochure]. Ministry of the Environment.

**Notes:**

This report is prepared based on APA style of citation and reference.

APA style requires a hanging indent, which means that the first line of each reference entry is aligned flush with the left margin and each subsequent line has a hanging indent of 1.27 cm or 0.5 inch.

- 14. Appendices:** Any material which increases the main text volume, but is important to justify the results of a thesis should be appended. The material, which is either too detailed or not that central, should be included in the appendix. Examples includes immense tables of data, program listings, detailed maps etc.
- 15. Page layout and paper:** The text and wherever possible, all the material of the thesis, including illustrations should be produced on A4-size using white paper of weight 80g/m<sup>2</sup> and printed in black ink. All margins should be 1.0 inches wide, except the left margin which should be 1.5 inches wide to allow for binding.
- 16. Typing and fonts:** The Times New Roman font should be used for the thesis text, headings and figure captions. A 12 pt font should be used for the main text. A 10 pt font should be used for the footnote. Although a slight larger 14 pt font may be used for headings and sub-headings, respectively. A 16 pt font may be used for title. Headings may be in a bold font. All submitted theses copies should be identical to one another.
- 17. Paragraph formatting:** One-and-a-half line spacing should be used throughout the text with the following exceptions; which should be single-line spacing: (i) the table of contents; (ii) tables; (iii) footnotes and endnotes; (iv) long quotations of more than 40 words; (v) computer program in listings/codes. A 6 pt extra space should be provided after each paragraph and each reference using paragraph formatting features of word processor.
- 18. Numbering:** The chapter headings begin at level 1 and numbered sequentially as 1, 2, 3 etc. The level 2 headings (sub-headings) should be numbered as 1.1, 1.2, 1.3 etc. while level 3 headings should be numbered as 1.1.1, 1.1.2, 1.1.3 etc. If more than one appendix is included, these should be numbered separately as Appendix 1, Appendix 2 etc. Figure should be numbered as Figure 1, Figure 2 etc. without distinguishing between different kinds of figure. Tables within the text should be numbered consecutively in a single sequence Table 1, Table 2.
- 19. Pagination:** The title page, approval pages, dedication, acknowledgements, abstract and contents pages etc. should be numbered with Roman numerals in lower case as i,

iii, iv, etc. without showing number on the first page. The rest of the thesis should be numbered in a single sequence in Arabic numbers as 1, 2, 3, 4, 5 etc. starting again with 1 on the first page of the main text (Introduction). Illustration, charts, tables, diagrams etc., placed within the text of the thesis should be paginated as if they are pages of text. Page number should be in the bottom of the page in the centre, midway between the bottom edge of the paper and the last line of text on the page.

- 20. Submission of non-paper media:** One soft copy through e-mail along with the hard copy of the dissertation should be submitted to the Chairman of the relevant department and Central Library of PSTU. Where appropriate to the academic work being conducted, this additional soft copy may be useful. Electronic media must be unalterable and that soft copy submissions should normally be treated as supplementary to the paper dissertation.

(Specimen showing the layout of the cover page soft-binding for Master Thesis)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER  
NON-SALINE AGRO-ECOSYSTEM**

..... Thesis

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

May / November Year

**N.B.:** Soft-binding cover page should be in sky blue art paper

(Specimen page showing the layout of inner title page for soft-binding of Master Thesis)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER  
NON-SALINE AGRO-ECOSYSTEM**

A Thesis

Submitted to  
Patuakhali Science and Technology University, Patuakhali  
In Partial Fulfillment of the Requirements  
for the Degree of Master of .....  
in

.....  
Roll/ID No.: .....  
Registration No.: .....

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

May / November Year

(Specimen page showing the layout of an approval page for soft-binding of Master Thesis)

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for the Degree of Master of .....  
in  
.....

Approved as to style and contents by

Signature  
(Name)  
Supervisor

Signature  
(Name)  
Co-Supervisor

Signature  
(Name)  
Chairman, Defense Committee  
and  
Chairman, Department of .....

May / November Year

(Specimen showing the layout of the cover page hard-binding for Master Thesis)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER  
NON-SALINE AGRO-ECOSYSTEM**

..... Thesis  
Full name of the student

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

June / December Year

**N.B.:** Hard-binding cover page should be in royal blue rexin and typescripts on the cover  
should be in golden color.

(Specimen page showing the layout of inner title page for hard-binding of Master Thesis)

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in  
.....

By  
Student's Name  
Roll/ID No.: .....  
Registration No.: .....

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

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in  
.....

By  
Student's Name

Approved as to style and contents by

Signature  
(Name)  
Supervisor

Signature  
(Name)  
Co-Supervisor

Signature  
(Name)  
Chairman, Defense Committee  
and  
Chairman, Department of .....

June / December Year

## **DECLARATION**

I declare that, the thesis hereby submitted by me for the Master degree at the Patuakhali Science and Technology University is my own independent work and has not previously been submitted by me at another university/faculty for any degree.

Date: .....

Signature

.....

(Full name of the student)

**N.B.:** The name and signature of the candidate will appear in all hard binding copies of the thesis. Declaration page should not be given in soft binding copies.

## Table of Contents

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	Abstract	v
1.	Introduction	1
2.	Review of Literature	....
3.	Materials and Methods	....
4.	Results and Discussion	....
5.	Conclusions	....
6.	References	....
7.	Appendices (if any)	....

\*This is not allowed to write in the soft binding copies of the dissertation.

Professor Dr. Md. Fazlul Hoque  
Dean  
Postgraduate Studies

## **Instructions for the Preparation of PhD Dissertation (Parts of a PhD dissertation, in the order they should appear)**

The best way of writing PhD dissertation is to prepare an extended outline. Supervisor should carefully review the outline and check whether there are any unnecessary materials that are not directly related to the problem statement. It is expected that the PhD dissertation is done with a defined research question that has been solved through well designed research work and the results have been presented systematically. Writing the thesis requires complete organization of the arguments and results. Choose section titles and wordings to clearly give the idea about the findings of the study. This guideline address the major issues related to the structure and style of PhD dissertation.

**The fundamental element of PhD thesis generally comprises the following:**

- 1. Title Page:** Title page must give the following in the order indicated.
- 2. Approval sheet:** This part should be followed as per proforma shown.
- 3. Table of contents:** This should list in sequence, with page number, all major subdivision of the dissertation such as chapters, the references, appendices etc.
- 4. Declaration:** I declare that, except where otherwise stated, this dissertation is based on entirely my own work and has not been submitted in any form to any other university for any degree.

This declaration must be signed by the candidate with date of submission of hard copy of the dissertation. This dissertation is an independent compilation and attachment to your dissertation. Work without this dissertation will not be accepted. The name and signature of the candidate will appear in all hard binding copies of the dissertation. Declaration page should not be given in soft binding copies. Candidates are strongly advised to check the regulations for specific requirements for the degree of Doctor of Philosophy.

- 5. Acknowledgements:** Any help received from any person or institution, in the provision of facilities, should be formally acknowledged. The full name and position of all persons acknowledged are essential.
- 6. Biographical sketch:** Not more than 1 page; to be included in the final binding.
- 7. Abstract:** Should briefly summarize the objectives, methods, results and conclusion of the dissertation. This should be composed in 1 page (A4) in the font size not less than 10 with single spacing between lines, and having no paragraph.
- 8. Introduction:** It should describe the reasons for and objectives of the research work and should highlighted on the topic studied including in evidence for its importance, brief

description of the work, and conclude with clear objectives of the study. Brief background information is necessary to make the records oriented with some of the materials needed to follow the dissertation.

A PhD student must have the capability of conducting independent research. It requires the development of an original research question, a proposal for the methodology to answer it, and a plan for reaching appropriate conclusions.

- 9. Review of literature:** A separate section for this topic is necessary to cover the amount of published literature, which is related to the topics studied. It is essential to cite those that are most important for the work done. The majority of the references should be current, with the exception of historical, original work. Most sources should be primary ones, representing the relevant work done in the field to date. They should be clearly relevant to the specific area of study. Sources whose theories or opinions conflict with the study should also be included. All information is to be appropriately cited as plagiarism (it is defined as presenting someone else's work as one's own) is illegal. Critically evaluate the articles and make some independent assessment of their importance to the set objectives/ research questions that have been done for the dissertation.
- 10. Materials and Methods:** This chapter should clearly describe the setting and management of the study with clear information on the materials used, treatments, design of experiment, collection of data and analysis of data.
- 11. Results:** This should be presented clearly using tables, figures, photographs etc. in standard format and style (having appropriate captions). Presentation of the same results in different forms of illustrations should be avoided. Correct interpretation of the statistical results is necessary. The findings of the study should be critically judged in relation to the present knowledge. Suggestions for alternative approaches may be given. Repetitions and superfluous statements should be avoided.
- 12. Discussion:** Discussion chapter should be presented separately. Every statement must be supported by a reference to published scientific literature or by original work. It does not repeat the details of critical thinking and analysis found in published sources, it uses the results as fact and refers the reader to the source for further details. A dissertation must be corrected and defensible in logic applied to scientific findings or results. This should provide clear interpretation of results in the context of what has been done.
- 13. Summary:** This section will be carefully read by the examiners and others. The list of contributions of new knowledge needs to be incorporated. The future research direction should be included so that researchers picking up this idea in future.

**14. Conclusions:** The contents of the dissertation should be summarized properly, and appropriate conclusions and recommendations should be made. The part should be brief, to the point and accurately described, and should be based on the set objectives and findings of the study. Specific suggestions can also be made. There will be no table, figure or citation of references in this part.

**15. References:** It should be arranged in alphabetical order, and only the references cited in the text should be listed. All the references listed must be completed, accurate and in a standard format as per manual. Uniformity throughout the list is essential.

#### **A. Citing References in the Text**

Type of citation	Narrative citation in text	Parenthetical citation in text
One author	Walker (2007)	(Walker, 2007)
Two authors	Walker and Allen (2004)	(Walker & Allen, 2004)
Three and more authors	Wasserstein et al. (2005)	(Wasserstein et al., 2005)
Groups	National Institute of Mental Health (NIMH, 2003)	(National Institute of Mental Health [NIMH], 2003)
Reference with single page number/chapter, etc	Hedetoft (2013)	(Hedetoft, 2013)
Reference with page range	Haan (2005, pp. 36-37)	(Haan, 2005, pp. 36-37)
Same author, two works from different years	Todres (2011, 2012)	(Todres, 2011, 2012)
Same author, two works from same year	Derryberry and Reed (2005a, 2005b)	(Derryberry & Reed, 2005a, 2005b)

#### Important Notes:

1. Each reference cited in text must appear in the reference list and vice-versa.
2. When citing two or more works together, arrange the in-text citations alphabetically in the same order in which they appear in the reference list:

Recent research in developmental psychology has explored this issue (Bergstrom et al., 2006; Clément, 2010; Harris & Corriveau, 2011; Harris & Koenig, 2006; Heyman, 2008; Heyman & Legare, in press; Koenig & Harris, 2005).

3. If you want to include several different citations in one set of brackets, they should be in alphabetical order, separated by a semi-colon:  
(Durie, 2003; McShane & Travaglione, 2007; Ministry of Education, 1996).
4. To cite more than one work by the same author(s), list the surname of the author(s) and then each different year of publication, separated by a comma:  
(Ministry of Education, 1996, 1999).

## B. The Reference List

Type of Reference	Format	Examples
Journal Article (1 author)	<p>Lastname, A. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume(Issue)</i>, Firstpage-Lastpage.doi</p> <p>Attention: The issue number is not compulsory.</p> <p>If the journal article has an article number instead of a page range, include the word “Article” and then the article number instead of the page range.</p> <p>Journal articles (but also other types of references, such as books) can have a doi or url at the end, but that is not compulsory.</p>	<p>Paivio, A. (1975). Perceptual comparisons through the mind’s eye. <i>Memory &amp; Cognition</i>, 3(1), 635–647.</p> <p>Jerrentrup, A. (2018). Teaching medicine with the help of “Dr. House.” <i>PLoS ONE</i>, 13(3), Article e0193972.</p> <p>Andreff, W. (2000). The evolving European model of professional sports finance. <i>Journal of Sports Economics</i>, 1, 257–276. <a href="https://doi.org/10.1177/152700250000100304">https://doi.org/10.1177/152700250000100304</a></p>
Journal Article (2-7 authors)	<p>Lastname, A., &amp; Lastname, B. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume(Issue)</i>, Firstpage-Lastpage. doi</p>	<p>Becker, L. J., &amp; Seligman, C. (1981). Welcome to the energy crisis. <i>Journal of Social Issues</i>, 37(2), 1–7.</p> <p>Cheryan, S., &amp; Meltzoff, A. N. (2015). Cultural stereotypes as gatekeepers. <i>Frontiers in Psychology</i>, 6, Article e0214466. <a href="https://doi.org/10.3389/fpsyg.2015.00049">https://doi.org/10.3389/fpsyg.2015.00049</a></p> <p>Frischlich, L., Hahn, L., &amp; Rieger, D. (2021). The promises and pitfalls of inspirational media: What do we know, and where do we go from here? <i>Media and Communication</i>, 9(2), 162–166. <a href="https://doi.org/10.17645/mac.v9i2.4271">https://doi.org/10.17645/mac.v9i2.4271</a></p>
Journal Article (more than 7 authors)	<p>Lastname, M., Lastname, N., Lastname, O., Lastname, P., Lastname, Q., Lastname, R., Lastname, M., . . . Lastname, Z. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume(Issue)</i>, Firstpage-Lastpage. Doi</p>	<p>Gonzalez, W. L., Hughes, W., Carter, D., Campbell, C., Baker, A. B., Flores, T., Gray, W. E., . . . Lee, L. H. (2018). National character does not reflect mean personality trait levels in 49 cultures. <i>Science</i>, 3(10), 96–100.</p>

Book	<p>Lastname, A. (year). <i>Title of the book in sentence case</i> (edition, Volume). Publisher. doi</p> <p>Attention: The edition, volume, and DOI are not compulsory.</p>	<p>Strunk, W., Becker, E., &amp; White, E. B. (1979). <i>The guide to everything and then some more stuff</i> (3rd ed.) Macmillan.</p> <p>Lippe, T. L. (Ed.). (2016). <i>Student affairs for academic administrators</i>. Stylus Publishing; ACPA Books.</p> <p>Kearney, D. J., &amp; Simpson, T. L. (2020). <i>Concise guides on trauma care. Mindfulness-based interventions for trauma and its consequences</i>. American Psychological Association. <a href="https://doi.org/10.1037/0000154-000">https://doi.org/10.1037/0000154-000</a>.</p>
Book Chapter	<p>Lastname, A. (year). Title of the chapter in sentence case. In B. Lastname, C. Lastname, &amp; D. Lastname (Eds.), <i>Title of the book in sentence case</i> (Volume, pp. firstpage-lastpage). Publisher. doi</p>	<p>Bergquist, J. M. (1992). German Americans. In J. D. Buenker &amp; L. A. Ratner (Eds.), <i>Multiculturalism in the United States: A comparative guide to acculturation and ethnicity</i> (Vol. 3, pp. 53–76). Greenwood.</p> <p>Baker, F. M., &amp; Lightfoot, O. B. (1993). Psychiatric care of ethnic elders. In A. C. Gaw (Ed.), <i>Culture, ethnicity, and mental illness</i> (pp. 517–552). American Psychiatric Press.</p> <p>Scott, D. (2005). Colonial governmentality. In J. X. Inda (Ed.), <i>Anthropologies of modernity</i> (pp. 21–49). Retrieved from <a href="http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832">http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832</a></p>
Newspaper Article / Newsletter (in paper)	<p>Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i>, Firstpage-Lastpage.</p>	<p>Schwartz, J. (1993, September 30). Obesity affects economic, social status. <i>The Washington Post</i>, 1–4.</p>
Newspaper Article / Newsletter (online)	<p>Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i>. <a href="http://www.website.com">www.website.com</a></p>	<p>Carey, B. (2019, March 22). Can we get better at forgetting? <i>The New York Times</i>. <a href="https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html">https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html</a></p>
Website	<p>Lastname, A. (year). <i>Title of the website article in sentence case</i>. Name of the Website in Title Case. <a href="http://www.website.com">www.website.com</a></p>	<p>Cain, K. (2012). <i>The negative effects of Facebook on communication</i>. Social Media Today. <a href="http://socialmediatoday.com">http://socialmediatoday.com</a></p>
Published Thesis or	<p>Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Doctoral or Master's</p>	<p>Kelly, C. B. D. (2018). <i>The art of coffee roasting</i> [Doctoral thesis, The University</p>

Dissertation	thesis or dissertation, Name of the Institution]. Repository. www.website.com	of Waikato]. The University of Waikato Research Commons. <a href="https://hdl.handle.net/10289/11614">https://hdl.handle.net/10289/11614</a> .
Unpublished Thesis or Dissertation	Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Unpublished doctoral or Master's thesis or dissertation]. University.	Imber, A. (2003). <i>Applicant reactions to graduate recruitment and selection</i> [Unpublished doctoral dissertation]. Curtin University.
Conference paper, keynote address, poster presentation, etc. (unpublished)	Lastname, A. (Year, Month Day-Day). <i>Title of paper in sentence case</i> [Type of material]. Name of Conference, City, Country.	Whipple, S. (2018, March 6-9). <i>Control beliefs as a moderator of stress on anxiety</i> [Paper presentation]. Southeastern Psychological Association 64th Annual Meeting, Charleston, SC, United States.
Conference paper in Proceedings (published as a book)	Lastname, A. B. (Year). Title of paper. In A. Lastname (Ed.; if applicable), <i>Proceedings book title in sentence case</i> (pp. firstpage-lastpage). Publisher.	Cismas, S. C. (2010). Educating academic writing skills in engineering. In P. Dondon & O. Martin (Eds.), <i>Latest trends on engineering education</i> (pp. 225-247). WSEAS Press.
Comment on Facebook Post	Author of the comment, A. (Year). First sentence of the comment [Facebook comment on the Month Day, Year, post by Author of the Post]. www.website.com	Wangail, T. (2017). Since Kashmir mass uprising, all Wimax connections were suspended almost for more than three months [Facebook comment on the January 23, 2017, post by N Rigzin]. <a href="https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547">https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547</a>
Brochure	Author. (Year). <i>Title of document</i> [Brochure]. Publisher.	Ministry of the Environment. (2007). <i>Conserving water in Ontario</i> [Brochure]. Ministry of the Environment.

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	b) List of publications (with reprint)	:	
8.	Department in which admission is sought	:	
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	b) Title of Master Thesis	:	
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	b) Review of literature and an account related work already done or in progress in other institute/country or elsewhere	:	
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	a) Research objectives	:	
	b) Tentative technical program/methodology	:	
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16.	Assurance of study leave by the employer (in case of in-service candidate)	:	

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5.	Review of literature related to the PhD dissertation work	:	
6.	Methodology to be followed	:	
7.	Work plan	:	
8.	References	:	
9.	Research facilities required	:	
10.	Source(s) of fund	:	
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12.	Signature of the supervisor and other members of the Supervisory Committee with name and designation	:	
13.	Countersign by the relevant Chairman of the Department	:	
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# **PHOSPHORUS SORPTION, DESORPTION, FRACTIONS AND SUPPLYING CAPACITY OF TIDAL FLOODPLAIN SOILS OF BANGLADESH**

A Dissertation

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## **DECLARATION**

I declare that, except where otherwise stated, this dissertation is based on entirely my own work and has not been submitted in any form to any other university for any degree.

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# PHOSPHORUS SORPTION, DESORPTION, FRACTIONS AND SUPPLYING CAPACITY OF TIDAL FLOODPLAIN SOILS OF BANGLADESH

MF Hoque

## ABSTRACT

Sound phosphorus fertilizer management, in relation to minimum environmental impact and maximum efficiency, insists on adequate understanding of phosphorus-soil interactions. The present investigation involves characterization of tidal floodplain soils for maximum P sorption capacity, energy of adsorption, buffering capacity of P and P saturation. It evaluated several P extraction methods and uncovered distribution of inorganic and organic fractions of P in tidal floodplain soil. A pot experiment was conducted for the depletion of P fractions by exhaustive plant uptake and transformation of native and applied P. Maximum P adsorption capacity of the tested coastal soils ranged from  $1250 - 1834 \mu\text{g g}^{-1}$ . Energy of adsorption varied from  $0.223$  to  $1.00 \mu\text{g ml}^{-1}$ , P buffering capacity ranged from  $139$  to  $243$  and P saturation ranged from  $0.27$  to  $1.59 \mu\text{mol g}^{-1}$ . Acid (HCl 0.5M) although extracted the highest amount of both native and applied P, showed the poorest relationship with relative dry matter and P uptake by rice. Olsen extractant showed the best correlation between soil test P and dry matter yield but it explained only about 70% of the variability. The critical level for Olsen P was found  $5 \text{ mg kg}^{-1}$  for the coastal soils of Bangladesh. Tidal floodplain soils, on an average of 12 samples, contained  $887 \text{ mg kg}^{-1}$  of total P of which only 0.01% remained in solution form, 1.84% in  $\text{NaHCO}_3$  extractable, 4.24% in  $\text{NaOH}$  extracted inorganic P fraction, 46.65% in  $\text{NaOH}$  extracted organic P fraction, 28.19% in acid pool and 18.97% in residual pool. The tested soils showed a large variability in the distribution in native P in different pools. The application of P mainly increased  $\text{NaHCO}_3$  extractable P and 0.10 N  $\text{NaOH}$  extractable inorganic P pools. Continuous rice cultivation without P application, in controlled net house condition, decreased the concentration of labile P (solution P and  $\text{NaHCO}_3$  P), moderately labile P ( $\text{NaOH}$  Pi and acid) and stable P (organic and residual P) but with the addition of P increased the labile and moderately labile P. Exhaustive rice cropping in pots was done with no application of P ( $P_0$ ) and with  $50 \text{ mg kg}^{-1}$  P application ( $P_{50}$ ) for four crops. The pot experiment facilitated the estimation of labile and stable P pools in coastal soils based on plant P uptake. Estimated labile P ranged from  $5 \text{ mg kg}^{-1}$  in Barisal clay soil collected from Dumki, Patuakhali to  $55 \text{ mg kg}^{-1}$  in Sara silty clay soils collected from Gournadi, Barisal. Estimated stable P pool varied from  $77 \text{ mg kg}^{-1}$  in Jhalokathi clay collected from Dumki, Patuakhali to  $848 \text{ mg kg}^{-1}$  in Barisal clay collected from Barisal. About 3% of the stable P in coastal soils was transferred to labile pool, but depending upon soils 23 to 62% of the labile P was absorbed by the growing rice plants. The estimated labile P showed about 93% variability in relative dry matter and 82% variability in P uptake in  $P_0$  pots. Estimated stable P pool exhibited about 90% variability in relative dry matter yield and P uptake by rice plant in  $P_0$  conditions. The labile P and stable P estimated through plant based approach explained the variability of relative dry matter yield of rice and P uptake better than the soil test approach. Critical level of labile P and stable P was found  $37.5$  and  $600 \text{ mg pot}^{-1}$ , respectively, for the coastal soils of Bangladesh. The labile P and stable P as indicator for differentiating soils into sufficient and deficient level of P need calibration through field studies.

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1. Title of the dissertation
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a) Whether the references cited in the text have been listed in a standard and acceptable form and style:  
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a) Whether the appendices included are judicious, and in

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e. Permanent address :

2. Dissertation and information on Dissertation examination:

a. Title of the Dissertation :

b. Supervisory Committee :

(i)..... - Supervisor

(ii)..... - Co-supervisor

(iii)..... - Co-supervisor

c. Academic schedules:

Admission semester	Dissertation submission semester	Viva-voce examination semester	Report submission semester by the examination committee

d. Earning (at least 74) credits of course(s), research, seminars, publications and dissertation in different semesters for PhD program :

e. Abstract of the dissertation :

3. Name and recommendations of three dissertation examiners:

i. .... :

ii. .... :

iii. .... :

4. Name of the examination committee:

i. .... Chairman

ii. .... Member

(Supervisor)

iii. .... Member

(Chairman, Relevant Academic Committee)

iv. .... Member

(One of the dissertation examiners)

v. .... Member

(Dean, Postgraduate Studies nominee)

5. Report of the PhD examination committee

Name of the student : .....

Roll/ID No. : .....

Reg. No. : .....

Name of the Department : .....

Title of the Dissertation : .....

---

(Please tick (✓) in the right box):

1) Number of Dissertation Examiners recommended for:

(i) Acceptance for the award of the PhD Degree without any modification(s)

1	2	3	None
---	---	---	------

(ii) Acceptance with corrections/modifications/improvements for the award of the PhD Degree

1	2	3	None
---	---	---	------

2) Modified/corrected/improved by candidate

: 

Yes	No
-----	----

3) Viva-voce

: 

Satisfactory	Unsatisfactory
--------------	----------------

4) Achievement of the research work (Shortly):

.....  
.....

6. Decision of the PhD Examination Committee:

The candidate incorporated all corrections and modifications suggested by dissertation examiner(s) before viva-voce examination. The examination committee unanimously recommends to Postgraduate Studies, Patuakhali Science and Technology University, that (candidate's name) ..... be awarded the degree of Doctor of Philosophy by the Patuakhali Science and Technology University, Patuakhali.

.....  
Chairman of the examination committee

Department of.....

Patuakhali Science and Technology University, Dumki, Patuakhali.

Phone: .....

Professor Dr. Md. Fazlul Hoque  
Dean  
Postgraduate Studies

## **Instructions for Internship Report Preparation of Master Program (Parts of master Internship Report, in the order they should appear)**

The best way of writing master internship report is to prepare an extended outline. Supervisor should carefully review the outline and check whether there are any unnecessary materials that are not directly related to the problem statement. It is expected that the Master Internship Report is done with a defined research question that has been solved through well designed analytical work and the results have been presented systematically. Writing the report requires complete organization of the arguments and results. Choose section titles and wordings to clearly give the idea about the findings of the study. This guideline addresses the major issues related to the structure and style of Master Internship Report.

The fundamental element of Master Internship Report generally comprises the following.

1. **Title:** The wording of the title should be simply a characterization of the theme. This may contain major elements the candidate will address. Preferably titles should be simple and direct, without a lot of qualifying terms of phrases. It is better to solicit the opinion of the internship supervisor. Any abbreviation in the report title should be avoided.
2. **Certificate:** The certificate should have details such as name of the student, title of the report, and duration. The above details should be certified by the concern supervisor under whom the work was carried out.
3. **Acknowledgement:** Student should acknowledge the supervisor, company/organization and other relevant persons who have helped for successful completion of the internship.
4. **Glossary/Abbreviations/Acronyms (mandatory):** The glossary establishes a priori understanding of concepts that will be used in the body of the report.
5. **Table of Contents:** The table of contents must indicate all the titles of the text (divisions and subdivisions) and their page numbers. The table of contents should also include the appendices in an itemized way and the appendices should be identified. The formatting of the table of contents should facilitate the reading of these contents and the relationship between them.
6. **List of tables, figures and graphics:** Tables, figures and graphics should be listed separately by number, followed by the title and respective page.
7. **Executive Summary:** This is the only section of the report that is read by most of the readers. The executive summary extracts the key points of the internship report highlighting its purpose, methods, major findings and brief conclusions. It does not include figures, table or citations. The executive summary contains: (i) Title of the internship report; (ii) The word EXECUTIVE SUMMARY in bold uppercase just before the text; (iii) The text should be single paragraph in between 250-300 words,

in single line spacing.

8. **Introduction:** The introduction explains the objectives of the internship, the parts that make up the report and the contents included in it. Therefore, in an introduction, it is desirable to have a first paragraph in which the reader's curiosity is stimulated, using for this purpose the most appealing and relevant aspects related to the theme that should be explained in the following paragraph.

The introduction should:

- Present the internship project.
- Present the (general and specific) objectives and the interest of the work developed.
- Briefly describe the project/activities planned for the internship.
- Identify the methodology used for the development of the work.
- Describe the structure of the report.

9. **Objectives:** This can be included with the introduction or presented as a separate section. The objectives should be very specific and quantifiable. Objectives should not be confused with the ultimate goal of the work.

10. **General characterization of the organization:** The characterization of the organization should include the name, sector of activity, location, history, mission, objectives, values, strategy, billing, organizational chart, etc., and brief characterization of elements associated with the specificity of the master course (e.g.: characterization of policies, human resources, marketing-mix, logistic processes, information management, etc.).

11. **Theoretical framework:** The existence of a possible theoretical- conceptual framework depends on the specificity of the master course and internship. The main sources of the different curricular units of the master course which the student used to plan and carry out the different activities of the Internship should be presented. Other sources should also be cited, particularly those to which the students had access through study on their own initiative or as a result of training provided by the host organization.

12. **Results and Discussion:** This division corresponds to the essential part of the report, in which the set of events that took place during the activity is described and reported. This description and analysis should be brief and clear, and may require the definition of concepts to better understand their contents. It is desirable to introduce the internship plan and its schedule of activities. In this part, the student demonstrates the results obtained and presents any improvement proposals to the organization. A reflection should also be made on the contribution of the internship to the development of the student's technical and behavioral skills.

13. **Conclusion:** The conclusion highlights the essential aspects of the work, as well as the prospects of future work for the internship in question, it should contain a summary of the activities undertaken by the student during the internship period and the skills mobilized to carry out these activities, as well as its results, namely the contribution of these activities to solving the different problems listed in the scope

and objectives of the approved internship plan. The student can present prospects of work that can be done in the near future to improve or conclude the work done. The conclusion cannot include anything that does not derive from the content of the body of the report (avoid comments on how difficult the internship was or how satisfying it was).

14. **References:** Most examiners scan the list of references looking for the important works in the field, inclusive of their own if applicable. Make sure they are listed and referred to in section of review of literature. All references given must be listed in alphabetical order by author's surname. Works by the same author's should be listed in chronological order.

#### A. Citing References in the Text

Type of citation	Narrative citation in text	Parenthetical citation in text
One author	Walker (2007)	(Walker, 2007)
Two authors	Walker and Allen (2004)	(Walker & Allen, 2004)
Three and more authors	Wasserstein et al. (2005)	(Wasserstein et al., 2005)
Groups	National Institute of Mental Health (NIMH, 2003)	(National Institute of Mental Health [NIMH], 2003)
Reference with single page number/chapter, etc	Hedetoft (2013)	(Hedetoft, 2013)
Reference with page range	Haan (2005, pp. 36-37)	(Haan, 2005, pp. 36-37)
Same author, two works from different years	Todres (2011, 2012)	(Todres, 2011, 2012)
Same author, two works from same year	Derryberry and Reed (2005a, 2005b)	(Derryberry & Reed, 2005a, 2005b)

Important Notes:

1. Each reference cited in text must appear in the reference list and vice-versa.
2. When citing two or more works together, arrange the in-text citations alphabetically in the same order in which they appear in the reference list:

Recent research in developmental psychology has explored this issue (Bergstrom et al., 2006; Clément, 2010; Harris & Corriveau, 2011; Harris & Koenig, 2006; Heyman, 2008; Heyman & Legare, in press; Koenig & Harris, 2005).

3. If you want to include several different citations in one set of brackets, they should be in alphabetical order, separated by a semi-colon:  
(Durie, 2003; McShane & Travaglione, 2007; Ministry of Education, 1996).
4. To cite more than one work by the same author(s), list the surname of the author(s) and then each different year of publication, separated by a comma:  
(Ministry of Education, 1996, 1999).

## B. The Reference List

Type of Reference	Format	Examples
Journal Article (1 author)	<p>Lastname, A. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume</i>(Issue), Firstpage-Lastpage.doi</p> <p>Attention: The issue number is not compulsory.</p> <p>If the journal article has an article number instead of a page range, include the word “Article” and then the article number instead of the page range.</p> <p>Journal articles (but also other types of references, such as books) can have a doi or url at the end, but that is not compulsory.</p>	<p>Paivio, A. (1975). Perceptual comparisons through the mind’s eye. <i>Memory &amp; Cognition</i>, 3(1), 635–647.</p> <p>Jerrentrup, A. (2018). Teaching medicine with the help of “Dr. House.” <i>PLoS ONE</i>, 13(3), Article e0193972.</p> <p>Andreff, W. (2000). The evolving European model of professional sports finance. <i>Journal of Sports Economics</i>, 1, 257–276. <a href="https://doi.org/10.1177/152700250000100304">https://doi.org/10.1177/152700250000100304</a></p>
Journal Article (2-7 authors)	<p>Lastname, A., &amp; Lastname, B. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume</i>(Issue), Firstpage-Lastpage. doi</p>	<p>Becker, L. J., &amp; Seligman, C. (1981). Welcome to the energy crisis. <i>Journal of Social Issues</i>, 37(2), 1–7.</p> <p>Cheryan, S., &amp; Meltzoff, A. N. (2015). Cultural stereotypes as gatekeepers. <i>Frontiers in Psychology</i>, 6, Article e0214466. <a href="https://doi.org/10.3389/fpsyg.2015.00049">https://doi.org/10.3389/fpsyg.2015.00049</a></p> <p>Frischlich, L., Hahn, L., &amp; Rieger, D. (2021). The promises and pitfalls of inspirational media: What do we know, and where do we go from here? <i>Media and Communication</i>, 9(2), 162–166. <a href="https://doi.org/10.17645/mac.v9i2.4271">https://doi.org/10.17645/mac.v9i2.4271</a></p>
Journal Article (more than 7 authors)	<p>Lastname, M., Lastname, N., Lastname, O., Lastname, P., Lastname, Q., Lastname, R., Lastname, M., . . . Lastname, Z. (year). Title of the article in sentence case. <i>Journal in Title Case, Volume</i>(Issue), Firstpage-Lastpage. doi</p>	<p>Gonzalez, W. L., Hughes, W., Carter, D., Campbell, C., Baker, A. B., Flores, T., Gray, W. E., . . . Lee, L. H. (2018). National character does not reflect mean personality trait levels in 49 cultures. <i>Science</i>, 3(10), 96–100.</p>

Book	<p>Lastname, A. (year). <i>Title of the book in sentence case</i> (edition, Volume). Publisher. doi</p> <p>Attention: The edition, volume, and DOI are not compulsory.</p>	<p>Strunk, W., Becker, E., &amp; White, E. B. (1979). <i>The guide to everything and then some more stuff</i> (3rd ed.) Macmillan.</p> <p>Lippe, T. L. (Ed.). (2016). <i>Student affairs for academic administrators</i>. Stylus Publishing; ACPA Books.</p> <p>Kearney, D. J., &amp; Simpson, T. L. (2020). <i>Concise guides on trauma care. Mindfulness-based interventions for trauma and its consequences</i>. American Psychological Association. <a href="https://doi.org/10.1037/0000154-000">https://doi.org/10.1037/0000154-000</a>.</p>
Book Chapter	<p>Lastname, A. (year). Title of the chapter in sentence case. In B. Lastname, C. Lastname, &amp; D. Lastname (Eds.), <i>Title of the book in sentence case</i> (Volume, pp. firstpage-lastpage). Publisher. doi</p>	<p>Bergquist, J. M. (1992). German Americans. In J. D. Buenker &amp; L. A. Ratner (Eds.), <i>Multiculturalism in the United States: A comparative guide to acculturation and ethnicity</i> (Vol. 3, pp. 53–76). Greenwood.</p> <p>Baker, F. M., &amp; Lightfoot, O. B. (1993). Psychiatric care of ethnic elders. In A. C. Gaw (Ed.), <i>Culture, ethnicity, and mental illness</i> (pp. 517–552). American Psychiatric Press.</p> <p>Scott, D. (2005). Colonial governmentality. In J. X. Inda (Ed.), <i>Anthropologies of modernity</i> (pp. 21–49). Retrieved from <a href="http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832">http://www3.interscience.wiley.com/cgi-bin/bookhome/117909832</a></p>
Newspaper Article / Newsletter (in paper)	<p>Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i>, Firstpage-Lastpage.</p>	<p>Schwartz, J. (1993, September 30). Obesity affects economic, social status. <i>The Washington Post</i>, 1–4.</p>
Newspaper Article / Newsletter (online)	<p>Lastname, A. (year, month day). Title of the article in sentence case. <i>Title of the Newspaper/Newsletter in Title Case</i>. <a href="http://www.website.com">www.website.com</a></p>	<p>Carey, B. (2019, March 22). Can we get better at forgetting? <i>The New York Times</i>. <a href="https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html">https://www.nytimes.com/2019/03/22/health/memory-forgetting-psychology.html</a></p>
Website	<p>Lastname, A. (year). <i>Title of the website article in sentence case</i>. Name of the Website in Title Case. <a href="http://www.website.com">www.website.com</a></p>	<p>Cain, K. (2012). <i>The negative effects of Facebook on communication</i>. Social Media Today. <a href="http://socialmediatoday.com">http://socialmediatoday.com</a></p>
Published Thesis or	<p>Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Doctoral or Master's</p>	<p>Kelly, C. B. D. (2018). <i>The art of coffee roasting</i> [Doctoral thesis, The University</p>

Dissertation	thesis or dissertation, Name of the Institution]. Repository. www.website.com	of Waikato]. The University of Waikato Research Commons. <a href="https://hdl.handle.net/10289/11614">https://hdl.handle.net/10289/11614</a> .
Unpublished Thesis or Dissertation	Lastname, A. A. (year). <i>Title of thesis in sentence case</i> [Unpublished doctoral or Master's thesis or dissertation]. University.	Imber, A. (2003). <i>Applicant reactions to graduate recruitment and selection</i> [Unpublished doctoral dissertation]. Curtin University.
Conference paper, keynote address, poster presentation, etc. (unpublished)	Lastname, A. (Year, Month Day-Day). <i>Title of paper in sentence case</i> [Type of material]. Name of Conference, City, Country.	Whipple, S. (2018, March 6-9). <i>Control beliefs as a moderator of stress on anxiety</i> [Paper presentation]. Southeastern Psychological Association 64th Annual Meeting, Charleston, SC, United States.
Conference paper in Proceedings (published as a book)	Lastname, A. B. (Year). Title of paper. In A. Lastname (Ed.; if applicable), <i>Proceedings book title in sentence case</i> (pp. firstpage-lastpage). Publisher.	Cismas, S. C. (2010). Educating academic writing skills in engineering. In P. Dondon & O. Martin (Eds.), <i>Latest trends on engineering education</i> (pp. 225-247). WSEAS Press.
Comment on Facebook Post	Author of the comment, A. (Year). First sentence of the comment [Facebook comment on the Month Day, Year, post by Author of the Post]. www.website.com	Wangail, T. (2017). Since Kashmir mass uprising, all Wimax connections were suspended almost for more than three months [Facebook comment on the January 23, 2017, post by N Rigzin]. <a href="https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547">https://www.facebook.com/groups/904515826309195/permalink/1291073837653390/?comment_id=1293505600743547</a>
Brochure	Author. (Year). <i>Title of document</i> [Brochure]. Publisher.	Ministry of the Environment. (2007). <i>Conserving water in Ontario</i> [Brochure]. Ministry of the Environment.

**Notes:**

This report is prepared based on APA style of citation and reference.

APA style requires a hanging indent, which means that the first line of each reference entry is aligned flush with the left margin and each subsequent line has a hanging indent of 1.27 cm or 0.5 inch.

15. **Appendices:** Any material which increases the main text volume, but is important to justify the results of an internship report should be appended. The material, which is either too detailed or not that central, should be included in the appendix. Examples includes immense tables of data, program listings, detailed maps etc.
16. **Page layout paper:** The text and wherever possible, all the material of the internship report, including illustrations should be produced on A<sup>4</sup>-size using white paper weight

80g/m<sup>2</sup> and printed in black ink. All margins should be 1.0 inches wide, except the left margin which should be 1.5 inches wide to allow for binding.

17. **Typing and fonts:** The Times New Roman font should be used for the internship report text, headings and figure captions. A 12pt font should be used for the main text. A 10pt font should be used for the footnote. Although a slight larger 14pt font may be used headlines and sub-headings respectively. A 16 pt font may be used for title. Headings may be in a bold font. All submitted report copies should be identical to one another.
18. **Paragraph formatting:** One-and-a-half line spacing should be used throughout the text with the following exceptions; which should be single-line spacing: (i) the table of contents; (ii) tables; (iii) footnotes and endnotes; (iv) long quotations of more than 40 words; (v) computer program in listings/codes. A 6pt extra space should be provided after each paragraph and each reference using paragraph formatting features of word processor.
19. **Numbering:** The chapter headings begin at level 1 and numbered sequentially as 1, 2, 3 etc. The level 2 headings (sub-headings) should be numbered as 1.1, 1.2, 1.3 etc. while level 3 headings should be numbered as 1.1.1, 1.1.2, 1.1.3 etc. If more than one appendix is included, these should be numbered separately as Appendix I, Appendix 2 etc. Figure should be numbered as Figure I, Figure 2 etc. without distinguishing between different kinds of figures. Tables within the text should be numbered consecutively in a single sequence Table I, Table 2.
20. **Pagination:** The title page, approval pages, dedication, acknowledgements, executive summary and contents pages etc. should be numbered with Roman numerals in lower case as i, iii, iv, etc. without showing number on the first page. The rest of the internship report should be numbered in a single sequence in Arabic numbers as 1, 2, 3, 4, 5 etc. starting again with 1 on the first page of the main text (Introduction), illustration, charts, tables, diagrams etc. placed within the text of the internship report should be paginated as if they are pages of text. Page number should be in the bottom of the page in the centre, midway between the bottom edge of the paper and the last line of text on the page.
21. **Submission of non-paper media:** One copy of Master internship report in PDF format as soft copy should be submitted to Chairman, respective department and Library of PSTU along with the hard copy of the report. Electronic media must be unalterable and that non-paper submissions should normally be treated as supplementary to the Internship report.

(Specimen showing the layout of the cover page soft-binding for Internship report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

..... Internship Report

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

March / September Year

**N.B.:** Soft-binding cover page should be in sky blue art paper

(Specimen page showing the layout of inner title page for soft-binding of Internship report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

A Report

Submitted to  
Patuakhali Science and Technology University, Patuakhali  
In Partial Fulfillment of the Requirements  
for the Degree of Master of .....  
in  
.....  
Roll/ID No.: .....  
Registration No.: .....

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

March / September Year

(Specimen page showing the layout of an approval page for soft-binding of Internship Report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

A Report

Submitted to  
Patuakhali Science and Technology University, Patuakhali  
In Partial Fulfillment of the Requirements  
for the Degree of Master of .....  
in  
.....

Approved as to style and contents by

Signature  
(Name)  
Supervisor

Signature  
(Name)  
Co-Supervisor

Signature  
(Name)  
Chairman, Defense Committee  
and  
Chairman, Department of .....

March / September Year

(Specimen showing the layout of the cover page hard-binding for Internship Report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

..... Internship Report  
Full name of the student

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

June / December Year

**N.B.:** Hard-binding cover page should be in royal blue rexin and typescripts on the cover should be in golden color.

(Specimen page showing the layout of inner title page for hard-binding of Internship Report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

A Report

Submitted to  
Patuakhali Science and Technology University, Patuakhali  
In Partial Fulfillment of the Requirements  
for the Degree of Master of .....  
in

.....

By  
Student's Name  
Roll/ID No.: .....  
Registration No.: .....

Department of .....  
Patuakhali Science and Technology University  
Patuakhali

June / December Year

(Specimen page showing the layout of an approval page for hard-binding of Internship Report)

**CRITICAL PERIOD OF WEED COMPETITION IN  
TRANSPLANT AUS RICE cv. BRRI dhan27 UNDER NON-  
SALINE AGRO-ECOSYSTEM**

A Report

Submitted to  
Patuakhali Science and Technology University, Patuakhali  
In Partial Fulfillment of the Requirements  
for the Degree of Master of .....  
in  
.....

By  
Student's Name

Approved as to style and contents by

Signature  
(Name)  
Supervisor

Signature  
(Name)  
Co-Supervisor

Signature  
(Name)  
Chairman, Defense Committee  
and  
Chairman, Department of .....

June / December Year

## **DECLARATION**

I declare that, the report hereby submitted by me for the Master degree at the Patuakhali Science and Technology University is my own independent work and has not previously been submitted by me at another university/faculty for any degree.

Date: .....

Signature

.....  
(Full name of the student)

**N.B.:** The name and signature of the candidate will appear in all hard binding copies of the report. Declaration page should not be given in soft binding copies.

## Table of Contents

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1.	Introduction	1
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5.	Conclusions	....
6.	References	....
7.	Appendices (if any)	....

\*This is not allowed to write in the soft binding copies of the report.

SGD  
Professor Dr. Md. Fazlul Hoque  
Dean  
Postgraduate Studies