

Guidelines for postgraduate Students

Course Work, Synopsis and Thesis (Formatting Manual)

**Directorate of Graduate Studies
University of Agriculture, Faisalabad
Pakistan**

Table of Contents

Sr. No.	Title	Page No.
1	Purpose of the Thesis	3
2	Thesis format guidelines and organization	4
3	Formatting guidelines	4
	Language	4
	Paper size	4
4	Paper type	4
	Page spacing	4
	Line spacing	4
	Margins	4
	Font size	4
	Font type	4
	Page numbering	4
	Text presentation	5
	Units of measurement	5
5	Hard bound copies (Colour)	5
	Print	6
6	Organization of the thesis	6
	1 Preliminary part	6
	2 Main body	6
	3 End matter	7
7	Title page of thesis	8-12
	Contents of the table	13
	Research paper style thesis format	14
8	List of tables	15
9	List of figures	15
10	List of appendices	15
11	How to write Abstract	16
12	Chapter formatting	17
13	Chapter 1 INTRODUCTION	18
14	Chapter 2 REVIEW OF LITERATURE	20
15	Chapter 3 MATERIALS AND METHODS	21
16	Chapter 4 RESULTS AND DISCUSSION OR RESULTS DISCUSSION	22
17	Chapter 3 Research paper style thesis format Title of the research paper/experiment 3.1 Abstract 3.2 Introduction 3.3 Materials and Methods/Methodology 3.4 Results and Discussion 3.4.1 Conclusions	22
18	Chapter 5/6 Summary	23
19	References/literature cited	24-25
20	Synopsis evaluation proforma	26
21	Guideline for Synopsis (GS-5)	27
22	Guideline Performa for course work program (GS/12)	34

Purpose of the Thesis

Research is an essential part of postgraduate research degree programs. While all postgraduate students should become knowledgeable about research in their chosen field of study, research students engage in the process of conducting, analyzing, interpreting, and reporting their own personal research.

The thesis is the compilation and professional showcase of the postgraduate research. Although postgraduate students eventually may submit their research to different journals or other publication outlets, postgraduate thesis students must use the format, already approved by the Graduate Studies and Research Board, University of Agriculture, Faisalabad.

A thesis is the result of research, scholarly, or creative activity that gives evidence of independent, critical, and creative investigation. The thesis demonstrates the ability to define and develop a problem; to understand and synthesize relevant literature; to use appropriate data collection methodology; to analyze and interpret data; and to draw reasonable conclusions based on the investigation that integrated the new knowledge into the chosen field of study. This is different from courses, projects, research papers, or other types of assignments which are not reviewed by Office of the Graduate Studies and generally not preserved in the Main library. While still maintaining flexibility the thesis does bear distinct university standards and requirements as set forth in this guideline.

The fulfillment of a thesis requirement (***A thesis submitted in partial fulfilment of the requirement for the degree of ...***) is a distinct advantage to postgraduate students who plan to do higher studies or to work in certain fields of employment.

All theses submitted as a part of the MS/MPhil/MSc(Hons)/MBA and PhD programs at postgraduate level must be formatted as follows:

THESIS FORMAT GUIDELINES AND ORGANIZATION

Formatting guidelines

- Language:** As the medium of instruction at University of Agriculture, Faisalabad is English, therefore, thesis should be written in English.
- Paper size:** Final copy of the Thesis must be printed on International Standard A4 size paper (8.27" x 11.69")
- Paper type:** Paper should be white, easy to read and reproduce (at least 75 g).
- Page spacing:** Should be printed on one side of paper (not back to back)
- Line Spacing:** The text and tables should be in one-and-a-half (1.5) line spacing. Line spacing must be 1.5 (one-and-a-half) throughout the thesis, except for long quotations, footnotes, table captions and figure legends, and individual references in the "Literature Cited" section, which must be single-spaced (with 1.5 spacing between references).
- Margins:** At least 1.25 inch on the binding edge, 1.0 inch on the opposite edge and 1.0 inch each at the top and bottom.
The left margin of the thesis must be 3.175cm (1.25 inches) to permit binding. All other margins must be 2.54cm (1 inch). All of the text throughout the thesis must be left-justified and formatted for only one column, with the exception of section titles (e.g. 'Abstract', 'Acknowledgement') which are centered
- Font size;** All thesis text must be in Times New Roman or Palatino 12 point font
- For main text:** **Time News Roman** 12 (Font size of 10 may be used for footnote in figures and tables)
- For Heading:** **Time News Roman**
Level 1: **16 bold**,
level 2: **14 bold**,
level 3: **12 bold**
- Font type:** Times New Roman (Font size of 10 may be used for footnote)
- Page Numbering:**
- i. Page numbers not required on Title page, Declaration, Acknowledgment and Dedication page.
 - ii. Preliminary pages (Table of Contents, List of Tables, List of Figures etc) should be numbered in lower case Roman numerals (i, ii, iii, etc.). The first numbered page (i) must be the Table of Contents.
 - iii. Main body of the thesis must be numbered consecutively in the bottom center of the page, no less than 12 mm from the edge of the page. This include pages containing illustrations, tables, bibliography, and appendixes
- Text presentation:** The thesis must be completed in good style, with no errors of grammar, spelling, or content.

EACH CHAPTER MUST START ON A NEW PAGE.

Most of the text should be in paragraph form with a minimal use of bullets, lists, or extensive quotations. The first line of each paragraph must be indented, or there must be a larger space between paragraphs than between lines if no indent is used.

Clearly present the results of your analysis. When reporting statistical results, the use of Greek symbols must be used, not text (e.g. ' $\chi^2 = 4.3$ ' not 'Chi-squared=4.3').

Units of measurement should follow the international system of units or discipline specific standards.

The use of footnotes must be reasonable throughout your thesis. If absolutely required, they must be numbered consecutively using Arabic numerals throughout the thesis. They must be placed at the bottom of the appropriate Table/illustration/page (Font size of TNR 10 pt should be used for footnote in figures and tables). The format used for footnotes must remain consistent.

Submission of finally approved copies (after the Viva Voce):

COLOUR OF HARD BOUND COPIES

MS/MPhil/MSc (Hons)/MBA Thesis:

Two copies are required to be submitted to the Main Library and get the submission slip for the submission to the office of the Controller of Examinations for notification. All the theses must have **Blue** hard binding with silver lettering on the front and on the spine.

PhD Thesis:

Two copies are required to be submitted to the office of the Controller of Examinations along with a CD (Soft copy pdf) for HEC. All the theses must have **Maroon** hard binding with golden lettering on the front and on the spine.

Page limit of Thesis: Under the page minimum page limit 75 page for **MS/MPhil/MSc (Hons)/ MBA and 150 pages for PhD**, approved by the statutory bodies.

Print:

- i. This must also be of the highest quality, with all font and images being clear, sharp, and consistent in intensity. All text must be black. Only single-sided printing is permitted.
- ii. Do not use correcting liquid. Reprint the page(s) if any mistakes are found prior to submission. Any theses with smudged, blurred, faint, or broken lettering or images will not be accepted.

- iii. All colour images must be clearly plotted with a good quality colour printer. No pasting of photographs or other images into the thesis is permitted.

ORGANIZATION OF THE THESIS

- 1 Preliminary Part**
- 2 Main body**
- 3 End Matter**

1. Preliminary Part (Title pages)

Title page
Declaration
Acknowledgement
Dedication Page
Contents
List of Tables
List of Figures/ Illustrations
List of Abbreviation
Abstract

2. Main Body (Chapters Nos and their Names, Table 1& 2)

Chapter 1	Introduction
Chapter 2	Review of Literature
Chapter 3	Materials and Methods/ Methodology
Chapter 4	Results and Discussion
Chapter 5	Summary References/Literature Cited

OR

Chapter 1	Introduction
Chapter 2	Review of Literature
Chapter 3	Materials and Methods/ Methodology
Chapter 4	Results
Chapter 5	Discussion
Chapter 6	Summary References/Literature Cited

OR

(Research Paper Style Table 3)

For **MS/MPhil/MSc (Hons)/ MBA** should be minimum 2 Research papers
For PhD should be minimum 4 Research papers

Chapter 1	Introduction
Chapter 2	Review of Literature
Chapter 3	Title of the research Paper/Experiment Abstract 3.1. Introduction 3.2. Materials and Methods/Methodology 3.3. Results and Discussion 3.3.1. Conclusions
Chapter 4	Title of the research Paper/Experiment Abstract 4.1. Introduction 4.2. Materials and Methods/Methodology 4.3. Results and Discussion

	4.3.1. Conclusions
Chapter 5	Title of the research Paper/Experiment
	Abstract
	5.1. Introduction
	5.2. Materials and Methods/Methodology
	5.3. Results and Discussion
	5.3.1. Conclusions
Chapter 6	Title of the research Paper/Experiment
	Abstract
	6.1. Introduction
	6.2. Materials and Methods/Methodology
	6.3. Results and Discussion
	6.3.1. Conclusions
Chapter 7	Summary

The main body of the thesis may be arranged in research paper format (as given in the Table 3)

3. End Matter

**References/Literature Cited (As per Pakistan
Journal of Agricultural Sciences)
Appendixes**

**TITLE OF THE THESIS (IN BLOCK CAPITAL LETTERS,
FONT SIZE 16 (Bold), FONT TYPE TIMES NEW ROMAN
(TNR) AND CENTRALIZED)**

followed by University monogram (1.7×1.7 inch)
(no monogram on 2nd title page)



full name of the candidate, registration number (First letter
capital, Font size 14, TNR, bold and centralized)

Name of the Student
Regd. No. xxxx-ag-xxxx

Degree for which the thesis has been submitted,
(First letter capital, font size 16, TNR, bold and centralized).

Master of Business Management
Master of Science (Hons) Master
of Science (MS) Master of
Philosophy
Doctor of Philosophy

MBA/M.Sc. (Hons)/MS/MPhil/PhD

XXXXXXXXXXXXXXXXXXXX

Name of the Department/Institute, Faculty, University name
(First letter capital, font size 16, TNR, bold and centralized).

Department/Institute of Abcd
Faculty of Abcd
University of Agriculture, Faisalabad,
Pakistan
YEAR

**TITLE OF THE THESIS (IN BLOCK CAPITAL LETTERS,
FONT SIZE 16 (Bold), FONT TYPE TIMES NEW ROMAN
(TNR) AND CENTRALIZED)**

by

full name of the candidate, registration number (First letter
capital, Font size 14, TNR, bold and centralized)

Name of the Student
Regd. No. xxxx-ag-xxxx

(Statement in First letter capital, Font size 12, TNR bold and centralized)

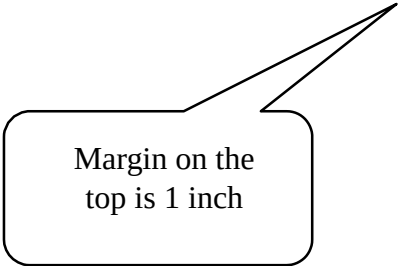
A thesis submitted in partial fulfilment of the requirement for the degree of

Degree for which the thesis has been submitted,
(First letter capital, font size 16, TNR, bold and centralized).

MBA/M.Sc. (Hons)/MS/MPhil/PhD
XXXXXXXXXXXXXXXXXXXX

Name of the Department/Institute, Faculty, University name
(First letter capital, font size 16, TNR, bold and centralized).

Department/Institute of Abcd
Faculty of Abcd
University of Agriculture, Faisalabad,
Pakistan
YEAR



Margin on the
top is 1 inch

**(IN BLOCK CAPITAL LETTERS, FONT SIZE 12 (Bold), FONT TYPE TIMES
NEW ROMAN (TNR) AND CENTRALIZED)**

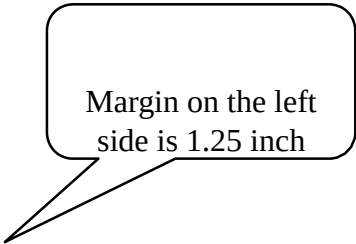
DECLARATION

(Text in sentence case, Font size 12, TNR bold and Justified)

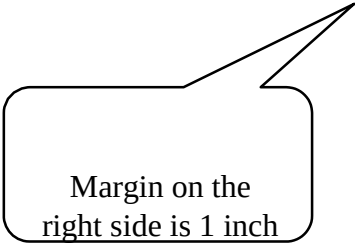
I hereby declare that the contents of the thesis, “title of thesis” are product of my own research and no part has been copied from any published source (except the references, standard mathematical or genetic models/ equations/ formulate/protocols etc.). I further declare that this work has not been submitted for award of any other diploma/degree. The University may take action if the information provided is found incorrect at any stage.

(Name of the student, Font size 12, TNR bold and align right for signature)

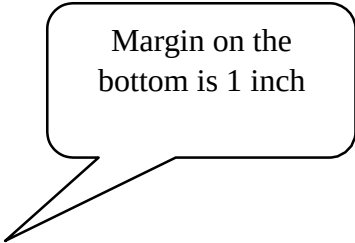
Name of the student
Registration No.



Margin on the left
side is 1.25 inch



Margin on the
right side is 1 inch



Margin on the
bottom is 1 inch

(Font size 12, TNR bold, single line space and align right)

**The Controller of Examinations,
University of Agriculture,
Faisalabad.**

(Font size 12, TNR bold, 1.5-line space and align right)

We, the Supervisory Committee, certify that the contents and form of thesis submitted by **(full name of the candidate, registration number** (First letter capital, Font size 12, TNR, bold), have been found satisfactory and recommend that it be processed for evaluation by the External Examiner(s) for the award of degree.

Supervisory committee:

1. Chairman _____

full name of the Supervisor First letter capital, Font size 12, TNR, (Name
must be below the line where Supervisor/Member has to signed)

2. Member _____

full name of the committee member First letter capital, Font size 12, TNR

3. Member _____

full name of the committee member First letter capital, Font size 12, TNR

CERTIFICATE FOR APPROVAL (only for PhD Scholar)

This is to certify that the research work presented in this thesis, entitled _____

_____ was conducted by _____ under the supervision of _____

No part of this thesis has been submitted anywhere else for any other degree. This thesis is submitted to the _____

_____ in partial fulfilment of the requirements for the degree of Doctor of Philosophy in field of _____

Department/Institute of _____ at University of Agriculture, Faisalabad, Pakistan

Student Name: _____ **Signature** _____

Examination Committee

a) External Examiner 1:

Name _____ **Signature** _____
(Designation & Office Address)

b) External Examiner 2:

Name _____ **Signature** _____
(Designation & Office Address)

c) External Examiner 3:

Name _____ **Signature** _____
(Designation & Office Address)

Supervisor

Name: _____ **Signature** _____

Name of Dean/HOD: _____ **Signature** _____

**CONTENTS OF THE TABLE (IN BLOCK CAPITAL LETTERS,
FONT SIZE 14 (BOLD), FONT TYPE TIMES NEW ROMAN (TNR)
AND CENTRALIZED)**

Table 1 & 2

TABLE OF CONTENTS

Name of the chapter name (First letter capital, font size 14, TNR, bold and left align) in
1.5-line spacing.

Chapter	Title	Page
1	Introduction	
2	Review of Literature	
3	Materials and Methods/ Methodology	
4	Results and Discussion	
5	Summary	
	References/Literature Cited	
	Appendices	

OR

Chapter.	Title	Page
1	Introduction	
2	Review of Literature	
3	Materials and Methods/ Methodology	
4	Results	
5	Discussion	
6	Summary	
	References/Literature Cited	
	Appendices	

OR

Table 3 Research paper style thesis format

TABLE OF CONTENTS

Name of the chapter name (First letter capital, font size 14, TNR, bold and left align) in single line spacing. The subtitle of the chapter's name (First letter capital, font size 12, TNR

Chapter	Title	Pages
1	Introduction	
2	Review of Literature	
3	Title of the research Paper/Experiment	
	Abstract	
	3.1. Introduction	
	3.2. Materials and Methods/Methodology	
	3.3. Results and Discussion	
	3.3.1. Conclusions	
4	Title of the research Paper/Experiment	
	Abstract	
	4.1. Introduction	
	4.2. Materials and Methods/Methodology	
	4.3. Results and Discussion	
	4.3.1. Conclusions	
5	Title of the research Paper/Experiment	
	Abstract	
	5.1. Introduction	
	5.2. Materials and Methods/Methodology	
	5.3. Results and Discussion	
	5.3.1. Conclusions	
6	Title of the research Paper/Experiment	
	Abstract	
	6.1. Introduction	
	6.2. Materials and Methods/Methodology	
	6.3. Results and Discussion	
	6.3.1. Conclusions	
7	Summary	
	References/Literature Cited	
	Appendices	

Table 4**LIST OF TABLES**

Table	Title	Page
2.1		6
2.2		12
2.3		16
2.4		19
3.1		21
3.2		26
3.3		28
3.4		29
3.5		31
4.1		33
4.2		35
4.3		36
4.4		38

(Table 5, next page)**LIST OF FIGURES**

Figure	T	Page
1.1		3
3.1		100
3.2		100
3.3		100
3.4		101
3.5		101
3.6		102
3.7		102
3.8		102
3.9		103
3.10		103
3.11		104
3.12		104

(Table 6 Next page)**LIST OF APPENDICES**

Appendix.	Tit	Page
1.1		
1.2		
2.1		
2.2		
3.1		
3.2		
4.1		
4.2		
4.3		

(Abstract uppercase TNR-16 Bold and centralized)

ABSTRACT

What is an Abstract?

An abstract is a condensed overview of the thesis that usually includes the purpose of the research study, the basic design of the study, the major findings, and brief results following the conclusions. Abstracts are usually used to give an overview to the reader, and are generally 300 words or less. The references (e.g. name of author and date) should not be cited in the abstract

1. state clearly the objectives of the study;
2. concisely describe the **methodology or method** employed in gathering the data, processing, and analysis;
3. summarize the results, and
4. state the principal conclusions of the research.
5. number of words, Normally, abstracts should not exceed 300 words but this number could vary depending on the prescribed number of words (For PhD 500 words)
6. Tense of the abstract; The abstract should be written in the past tense because the investigation has transpired. However, statement of facts in, say, the results and discussion and the conclusion, must be in the present tense.

Finally, the references (e.g. name of author and date) should not be cited in the abstract

Chapter Formatting

- ✓ Each chapter must start on a new page
- ✓ The first page of Chapter 1 is page 1; number pages continuously after that
- ✓ The page number must be centered at the bottom (footer)
- ✓ Use the same font style and size for page numbers as used in the text
- ✓ The chapter title should be right aligned, single-spaced, bold, and in all caps
- ✓ The title of the chapter must match the title listed in the Table of Contents
- ✓ Add an extra return following the chapter title
- ✓ 1.5-line spacing and justify the text of the body of the chapter
- ✓ Examples are given on the next page

CHAPTER 1

(Next line with 1.5 line spacing Introduction in TNR 16 Bold upper case right alien)

INTRODUCTION

- Indicate the field of the work, why this field is important, and what has already been done (with proper citations).
- Indicate a gap, raise a research question, or challenge prior work in this area.
- Outline the objective and announce the present research, clearly indicating the hypothesis.
- Avoid: repeating the abstract; providing unnecessary background information; exaggerating the importance of the work; claiming novelty without a proper literature search.

Example of introduction is as under:

The Canadian dairy industry has approximately 968,700 dairy cows on 10,371 farms. Among these animals, around 64.2% are enrolled in milk-recording programs, of which 39.8% are on supervised systems and 24.4% are on unsupervised systems. The Canadian dairy cattle population consists of 7 main dairy breeds, with 93% of cows registered as Holstein ([Canadian Dairy Information Center, 2019](#)). Demand for dairy products is likely to increase over the coming decades as global population and wealth increases. Although the genetic improvement of livestock has been very successful in increasing productivity, there is still pressure to improve the sustainability of the dairy industry and the traits contributing to it.

In Canada, genetic selection in Holstein cattle has been done through the Lifetime Performance Index, formerly known as Lifetime Profit Index (**LPI**), since it was introduced in 1991 and, more recently, through an alternative index called Pro\$. In the last 20 yr, 3 changes were made to LPI's main components; that is, production: durability: health and fertility, shifting their respective emphasis from 57:38:5 (2001) to 54:36:10 (2005), 51:34:15 (2008), and 40:40:20 (2016). The estimation of genetic parameters for economically important traits is a crucial component of animal breeding programs. [Miglior et al., \(2017\)](#) reviewed the development of phenotypes used in the Canadian dairy cattle selection program over time. Genetic parameters related to the Canadian Holstein population have been estimated for production (e.g., [Miglior et al., 2007](#); [Loker et al., 2012](#)), conformation (e.g., [Van Dorp et al., \(2004\)](#), fertility (e.g., [Jamrozik et al., 2005](#); [Sewalem et al., 2010](#), [Alves et al., 2020](#)), and relatively more novel traits, such as metabolic diseases (e.g., [Guarini et al., 2019](#)), hoof health (e.g., [Malchiodi et al., 2017](#)) and milk properties (e.g., [Nayeri et al., 2020](#), [Martin et al., 2019](#))

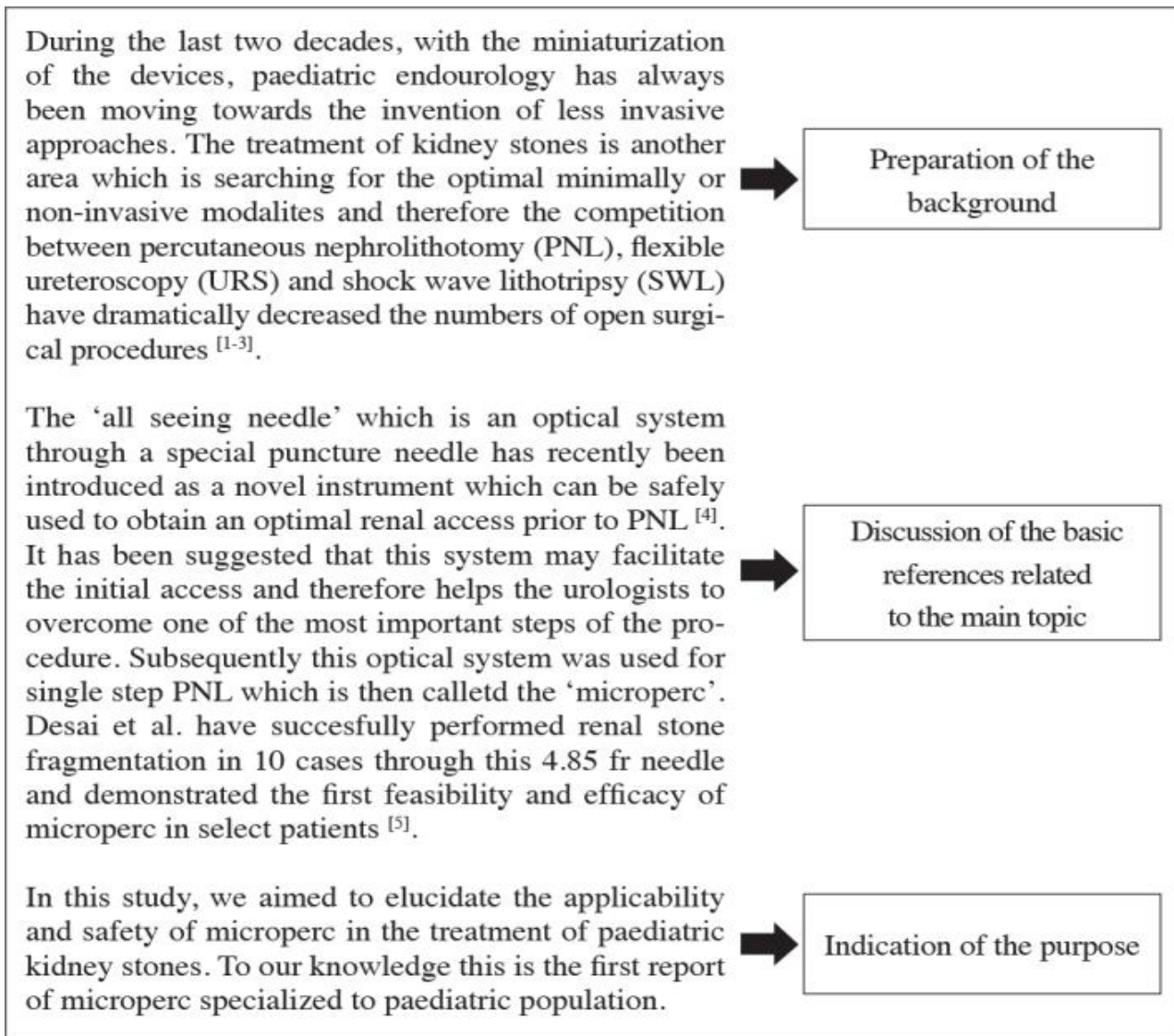
looked at the genetic correlation among a subset of 28 traits on Canadian Holstein cows from all trait groups, except hoof health. In addition to the importance of re-estimating these parameters using current data, a study involving all current routinely recorded traits in Canada has not yet been done. The knowledge of the (co)variance between conventional and relatively more novel traits is critical for

Preparation to the background

Discussion of the basic reference related to the main topic

updating selection indexes and predicting correlated responses when new traits are integrated in the breeding program. The objective of this study was therefore to estimate the genetic parameters for all 67 current routinely evaluated traits in primiparous Canadian Holstein cows.	Purpose/objective of the research
--	---

(Source; *Journal of Dairy Science*)



1. Abbreviations should be given following their explanations in the ‘Introduction’ section (their explanations in the summary does not count)
2. Simple present tense should be used.
3. References should be selected from updated publication with a higher impact factor, and prestigious source books (Last 10 years).
4. Avoid mysterious, and confounding expressions, construct clear sentences aiming at problematic issues, and their solutions.
5. The sentences should be striking, appealing, and plausible.
6. Firstly general, then subject-specific information should be given. Finally our aim should be clearly explained.

Chapter 2 in bold upper case TNR 16 and left alien)

CHAPTER 2

(Next line with 1.5 line spacing Review of literature in TNR 16 Bold upper case right alien)

REVIEW OF LITERATURE

(Body of the Text TNR 12, 1.5-line spacing and justified)

- i. Relevant to the proposed study and properly updated
- ii. Given in the reference list (not missing in bibliography/Literature cited)
- iii. Review may be under different parameters subheading or in chronological order (one order should be observed in whole document)
- iv. Written in some meaningful sequence (story writing) or arranged in chronological order Uniform style (In the text, a reference should be quoted by the author's name and date in parentheses, in date order, e.g. (Ashraf, 1999; Bashir et al., 2000) as Pakistan Journal of Agricultural Sciences (PAJS)
- v. Where there are three or more authors, the first name followed by et al. should be used. A list of references should be given at the end of the text listing,
- vi. In text: Scott and Jaggard (1993); Ashraf (1994); Ashraf (1994a,b); (Edmondson, 1998); (Scott and Jaggard, 1993; Ashraf, 1994; Edmondson, 1998); Ferris et al. (1990) (no personal communication).
- vii. Preferably the review of literature updated with recent research e.g. last 10 to 15 years

Chapter 3 in bold upper case TNR 16 and left alien)

CHAPTER 3

(Next line with 1.5 line spacing Materials and Methods in TNR 16 Bold upper case right alien)

MATERIALS AND METHODS

For Sciences (Plant/Animal/Engineering/Basic) (Materials and Methods)

For Social Sciences (Methodology)

Materials and Methods/Methodology

(Clearly stated)

- i. Location of the Experiment/Area from data collected is mentioned
- ii. Treatment details/husbandry practices are given
- iii. Avoid the unnecessary flow diagrams
- iv. Data collected along with units/Survey data according to survey standards.
- v. Statistical methods/ Lab Techniques (Molecular Biology) or any other are given?
- vi. Experimental design/Technique are mentioned
- vii. Treatment comparison test mentioned
- viii. Statistical/analytical reference mentioned

Chapter 4 in bold upper case TNR 16 and left alien)

CHAPTER 4

(Next line with 1.5 line spacing Results and Discussion in TNR 16 Bold upper case right alien)

RESULTS AND DISCUSSION

This chapter is flexible for postgraduate scholar, they may divide this chapter in two parts:

CHAPTER 4

(Next line with 1.5 line spacing Results in TNR 16 Bold upper case right alien)

RESULTS

CHAPTER 5

(Next line with 1.5 line spacing Discussion in TNR 16 Bold upper case right alien)

DISCUSSION

Further, GSRB also approved that this chapter may be written in research paper style and each paper/Experiment considered as chapter. This format is mainly referred to PhD degree programs with the suggestion that research can contribute minimum four (4) research papers. However, each chapter should be an independent research paper having the following segments (describe in Table 3), in this format there will be no separate Chapter for Materials and Methods and will continue after the Review of Literature.

CHAPTER 3

(Next line with 1.5 line spacing Title of the paper in TNR 16 Bold upper case right alien)

TITLE OF THE RESEARCH PAPER/EXPERIMENT

- 3.1 Abstract
- 3.2 Introduction
- 3.3 Materials and Methods/Methodology
- 3.4 Results and Discussion
 - 3.4.1 Conclusions

Chapter 5 in bold upper case TNR 16 and left alien)

CHAPTER 5/6/?

(Next line with 1.5-line spacing Summary in TNR 16 Bold upper case right alien)

SUMMARY

What is a Summary?

Like an abstract, a summary is just a condensed write-up of thesis/dissertation. However, summaries are more open ended than a thesis/dissertation and can contain much more varied information. They can be included in virtually any type of thesis/dissertation, and do not have a specific word count limit. Always check with your instructor for those types of guidelines before handing in your summary and paper. The references (e.g. name of author and date) should not be cited in the summary

Chapter no. is not given to the references/Literature cited
(References/Literature Cited in TNR 16 Bold upper case right alien)

References/Literature Cited

- i. Reference in list mentioned in the text
- ii. Names (Spell) and Year of publication same in text
- iii. List is arranged alphabetically, TNR 12 and single line space
- iv. In the list reference are not duplicated
- v. The abbreviation for Journals are according to the PJAS
- vi. Reference are written in format of Pakistan Journal of Agriculture Science (PJAS)
- vii. Each reference separated before and after by setting 6pt in indent spacing.

Student should check that all references in the text appear at the end of the synopsis and vice versa, and that the names and dates correspond in the two places. The accuracy of presentation of each reference in the list should be carefully checked.

(Examples)

Article in journal, magazine and serial publication

Altaf, S., M.M. Khan, M.J. Jaskani, I.A. Khan, M. Usman, B. Sadia, F.S. Awan, A. Ali and I.A. Khan. 2014. Morphogenetic characterization of seeded and seedless varieties of Kinnow mandarin (*Citrus reticulata* Blanco). *Australian Journal of Crop Science*, 8:1542-1549.

Aslam, M., M. Ismat, R.H. Qureshi, S. Nawaz and I.A. Mehmood. 1994. Paddy yield affected by planting techniques in a salt-affected soil. *Pakistan Journal of Agricultural Sciences*. 31:401-405.

Khan, M.S. 1997. Response to selection for milk yield and lactation length in buffaloes *Asian-Australasian Journal of Animal Sciences*. 10:567-570.

Thevamonharan, K., W. Vandepitte, G. Mohiuddin and K. Javed. 2002. Animal model heritability estimates for various production and reproduction traits of Nili-Ravi buffaloes. *Pakistan Journal of Agricultural Sciences*. 39:50-55.

Books (including bulletins, reports, multi-volume works, series):

Steel, R.G.D. and J.H. Torrie. 1980. *Principles and Procedures of Statistics: A biometrical approach*, 2nd Ed. McGraw Hill Book Co., New York.

Chapter in a book:

Jaskani, M.J., M. Omura and I.A. Khan. 2007. Cytogenetics. In: I.A. Khan (ed.), *Citrus Genetics, Breeding and Biotechnology*. CAB International, UK. pp.151-166.

Wiseman, J. 1990. Variability in the nutritive value of fats and non-ruminants. In: J. Wiseman and J.A. Cole (eds.), *Feedstuffs Evaluation*. Butterworths, London. pp.232-234.

Conference, symposium or workshop proceedings:

- Jaskani, M.J. and I.A. Khan. 2000. Characterization of interploid hybrids of Kinnow mandarin. *Proc. Int. Soc. Citriculture* 1:165-166.
- Khan, I.A., M.J. Jaskani, M.M. Khan and B. Fatima. 2002. Breeding for triploid seedless citrus fruits-A biotechnology approach. In: Y.A. Al-Shayji, J.S. Sidhu, M. Saleem and K. Guerinik (eds.), *Biotechnology Applications for the Arid Regions*. Kuwait Institute for Scientific Research, Kuwait. pp.229-234.
- Khatkar, M.S., Sethi. R-K. and V.N. Tripathi. 1996. Repeatability of economic traits in Murrah buffaloes. In: *Proc. 2nd ABA Congress, Manila, Philippines*. pp: 346-348.
- Muhammad, S. and A. Ghafoor. 1986. Reclamation of two saline-sodic soil series through subsoiling and gypsum application using marginal water for leaching. In: R. Ahmad and A.S. Pietro (eds.), *Prospects for Biosaline Research*. *Proc. US-Pak Biosaline Res. Workshop*; Sept. 22-26, 1985. University of Karachi, Karachi, Pakistan. pp.221-223.

Dissertation or thesis:

- Mehmood, A. 2013. Physical, biochemical and molecular profiling of guava (*Psidium guajava* L.) germplasm. Ph.D. dissertation Institute of Horticultural Sciences, University of Agriculture, Faisalabad, Pakistan.
- Kirkegaard, J.A. 1990. Effect of compaction on the growth of pigeon pea on clay soils. Ph.D. diss., Dept. Soil Sci., Univ. Queensland, St Lucia, Australia.
- Thevamanoharan, K. 2002. Genetic analysis of performance traits of swamp and riverine buffalo. Ph.D. Thesis, Katholieke University of Leuven, Belgium.

Software and websites:

- National Agricultural Statistics Service. 1997. Crops county data. Available online with updates at <https://usda.mannlib.comell.edu/data-sets/crops/9X100>. Accessed on 06-03-2020
- SAS/STAT® . 1996. User's Guide. Version 6. SAS Inst., Inc., Cary, NC. USA.

Organization/ Govt. department documents:

- GOP. 2019. Pakistan Economic Survey 2019-20. Finance and Economic Affairs Division, Ministry of Finance, Govt. of Pakistan, Islamabad, Pakistan.
- GOP. 2017. Agricultural Statistics Year Book 2017-18. Ministry of National Food Security and Research, Govt. of Pakistan, Islamabad, Pakistan.

UNIVERSITY OF AGRICULTURE FAISALABAD
DIRECTORATE OF GRADUATE STUDIES
SYNOPSIS PROFORMA FOR MBA/MSc(Hons.)/MPhil/MS/PhD

Following guidelines/checklist should be completed, signed by the student verified by his/her supervisor and attached with the synopsis for the submission to the office of the Directorate of Graduate Studies for approval. Further check the box with against each observation.

Name of the student _____ Regd. # _____ -ag- _____

Degree MBA/MSc(Hons.)/MPhil/MS/PhD Discipline _____

Title of the Synopsis: _____

- | | | |
|----|--|--------------------------|
| 1 | Title of the synopsis given on page one is the same as given on page second | ☐ |
| 2 | The synopsis submitted /written according to prescribed Performa GS/5 | ☐ |
| 3 | Abstract (clearly states and includes) | |
| | i. The objective of the study, | ☐ |
| | ii. brief methodology and | ☐ |
| | iii. statistical approach/techniques | ☐ |
| 4 | Need for the Project/Introduction (Clearly established and includes) | |
| | i. The problem/process for which the study is planned | ☐ |
| | ii. Is the need for the research be established? | ☐ |
| | iii. hypothesis clearly stated (if required) | ☐ |
| | iv. Are the objectives of the research (not in the form of general objective, aims and objective, major objective)? | ☐ |
| 5 | Review of literature | |
| | i. Relevant to the proposed study and properly updated | ☐ |
| | ii. Given in the reference list (not missing in bibliography/Literature cited) | ☐ |
| | iii. Written in some meaningful sequence (story writing) or arranged in chronological order | ☐ |
| | iv. Uniform style (In the text, a reference should be quoted by the author's name and date in parentheses, in date order, e.g. (Ashraf, 1999; Edmondson, 2000) as PAJS | ☐ |
| 6 | Materials and Methods/Methodology (clearly stated) | |
| | i. Location of the Experiment/Area from data collected is mentioned | ☐ |
| | ii. Treatment details are given/husbandry practices are given | ☐ |
| | iii. Data collected along with units/Survey data according to survey standards | ☐ |
| | iv. Statistical methods/ Lab Techniques (Molecular Biology) or any other are given? | ☐ |
| | v. Experimental design/Technique are mentioned | ☐ |
| | vi. Treatment comparison test mentioned | ☐ |
| | vii. Statistical/analytical reference mentioned | ☐ |
| 7 | References/Literature Cited | |
| | i. Reference in list mentioned in the text | ☐ |
| | ii. Names (Spell) and Year of publication same in text | ☐ |
| | iii. List is arranged alphabetically | ☐ |
| | iv. In the list reference are not duplicated | ☐ |
| | v. The abbreviation for Journals are according to the PJAS | ☐ |
| | vi. Reference are written in format of Pakistan Journal of Agriculture Science (PJAS) | ☐ |
| 8 | Miscellaneous | |
| | i. Title of the defended synopsis (For PhD students) is same | ☐ |
| | ii. Title of the synopsis is same as given in the synopsis defense letter (For PhD students) | ☐ |
| | iii. The supervisory committee given in the synopsis is same as given in the App. course work | ☐ |
| 9 | Signatures The synopsis signed by all the members Dean, Director, Chairman, Supervisor Member of Supervisory Committee Scrutiny Committee and Student | ☐ |
| 10 | QEC Report Status of my synopsis Similarity index is pass | ☐ |

I have written/prepared the synopsis according to the above guideline/check list.

Student (Signature) _____

The claim of the student has checked and verified, that is correct.

Supervisor: (Signature) _____

Remarks of Director Graduate Studies officials _____

Decision of the Director Graduate Studies _____

Director
Graduate Studies,
University of Agriculture, Faisalabad

**NAME OF THE UNIVERSITY (IN BLOCK CAPITAL LETTERS,
FONT SIZE 16 (Bold), FONT TYPE TIMES NEW ROMAN (TNR),
SINGLE LINE SPACING AND CENTRALIZED)**

UNIVERSITY OF AGRICULTURE, FAISALABAD

**Name of the Department/Institute and Faculty
(First letter capital, font size 16, TNR, bold and centralized).**

Department/Institute of ABCD

Faculty of ABCD

(SYNOPSIS FOR MBA/M Sc (Hons) /M Phil/PhD)

**TITLE OF THE SYNOPSIS (IN BLOCK CAPITAL LETTERS, FONT
SIZE 14 (Bold), FONT TYPE TIMES NEW ROMAN (TNR), SINGLE
LINE SPACING AND JUSTIFIED)**

full name of the candidate, registration number
(First letter capital, Font size 12, TNR, and centralized)

Name of the Student _____

Registration No. _____

(Abstract in First letter capital, Font size 14, TNR bold and centralized)

Abstract

(clearly states and includes)

- i. the objective of the study,
- ii. brief Materials and Methods/methodology/procedure/techniques
- iii. statistical approach/techniques
- iv. Abstract of the synopsis should be between 250 to 300 words

**NAME OF THE UNIVERSITY (IN BLOCK CAPITAL LETTERS,
FONT SIZE 16 (Bold), FONT TYPE TIMES NEW ROMAN (TNR),
SINGLE LINE SPACING AND CENTRALIZED)**

UNIVERSITY OF AGRICULTURE, FAISALABAD

**Name of the Department/Institute and Faculty
(First letter capital, font size 16, TNR, bold and centralized).**

Department/Institute of ABCD

Faculty of ABCD

(SYNOPSIS FOR MBA/M Sc (Hons) /M Phil/PhD)

**I. TITLE OF THE SYNOPSIS (IN BLOCK CAPITAL LETTERS,
FONT SIZE 14 (Bold), FONT TYPE TIMES NEW ROMAN (TNR),
SINGLE LINE SPACING AND JUSTIFIED)**

(Space between title and II before 12pt)

(TNR 12 Normal with 1.5-line spacing)

- II**
- a) Date of Admission _____
 - b) Date of Initiation (Research) _____
 - c) Probable Duration (Research) _____

III PERSONNEL (TNR 12 Bold)

- a) Name of the student _____
- b) Registration Number _____ xxxx-ag-xxxx

IV SUPERVISORY COMMITTEE (TNR 12 Bold)

- i. Supervisor _____
full name of the Supervisor First letter capital & E-Mail, Font size 12, TNR,
- ii. Co-Supervisor _____
If any (full name of the Co-Supervisor First letter capital & E-Mail Font size 12, TNR)
- iii. Member _____
full name of the committee member First letter capital & E-Mail Font size 12, TNR
- iv. Member _____
full name of the committee member First letter capital & E-Mail Font size 12, TNR

V. Need for the Project/Introduction

(Need for the Project/Introduction in First letter capital, Font size 14, TNR bold and centralized)

(Body of the Text TNR 12, 1.5-line spacing and justified)

Need for the Project/Introduction (Clearly established and includes)

- i. The problem/process for which the study is planned
- ii. Is the need for the research be established?
- iii. hypothesis clearly stated (if required)
- iv. Are the objectives of the research (not in the form of general objective, aims and objective, major objective)?

VI. Review of Literature

(Body of the Text TNR 12, 1.5-line spacing and justified)

- i. Relevant to the proposed study and properly updated
- ii. Given in the reference list (not missing in bibliography/Literature cited)
- iii. Review may be under different parameters subheading or in chronological order (only one should be observed in whole document)
- iv. Written in some meaningful sequence (story writing) or arranged in chronological order Uniform style (In the text, a reference should be quoted by the author's name and date in parentheses, in date order, e.g. (Ashraf, 1999; Bashir et al., 2000) as Pakistan Journal of Agricultural Sciences (PAJS)
- v. Where there are three or more authors, the first name followed by et al. should be used. A list of references should be given at the end of the text listing,
- vi. In text: Scott and Jaggard (1993); Ashraf (1994); Ashraf (1994a,b); (Edmondson, 1998); (Scott and Jaggard, 1993; Ashraf, 1994; Edmondson, 1998); Ferris et al. (1990) (no personal communication).
- vii. Preferably the review of literature updated with recent research e.g. last 10 to 15 years

VII. Materials and Methods/Methodology

(clearly stated)

- i. Location of the Experiment/Area from data collected is mentioned
- ii. Treatment details are given/husbandry practices are given
- iii. Data collected along with units/Survey data according to survey standards
- iv. Statistical methods/ Lab Techniques (Molecular Biology) or any other are given?
- v. Experimental design/Technique are mentioned
- vi. Treatment comparison test mentioned
- vii. Statistical/analytical reference mentioned

VIII. References/Literature Cited

- i. Reference in list mentioned in the text

- ii. Names (Spell) and Year of publication same in text
- iii. List is arranged alphabetically, TNR 12 and single line space
- iv. In the list reference are not duplicated
- v. The abbreviation for Journals are according to the PJAS
- vi. Reference are written in format of Pakistan Journal of Agriculture Science (PJAS)
- vii. Each reference separated before and after by setting 6pt in indent spacing.

Student should check that all references in the text appear at the end of the synopsis and vice versa, and that the names and dates correspond in the two places. The accuracy of presentation of each reference in the list should be carefully checked.

(Examples)

Article in journal, magazine and serial publication

- Altaf, S., M.M. Khan, M.J. Jaskani, I.A. Khan, M. Usman, B. Sadia, F.S. Awan, A. Ali and I.A. Khan. 2014. Morphogenetic characterization of seeded and seedless varieties of Kinnow mandarin (*Citrus reticulata* Blanco). *Aust. J. Crop Sci.* 8:1542-1549.
- Aslam, M., M. Ismat, R.H. Qureshi, S. Nawaz and I.A. Mehmood. 1994. Paddy yield affected by planting techniques in a salt-affected soil. *Pak. J. Agri. Sci.* 31:401-405.
- Khan, M.S. 1997. Response to selection for milk yield and lactation length in buffaloes. *Asian-Aust. J. Anim. Sci.* 10:567-570.
- Thevamonharan, K., W. Vandepitte, G. Mohiuddin and K. Javed. 2002. Animal model heritability estimates for various production and reproduction traits of Nili-Ravi buffaloes. *Pak. J. Agri. Sci.* 39:50-55.

Books (including bulletins, reports, multi-volume works, series):

- Steel, R.G.D. and J.H. Torrie. 1980. *Principles and Procedures of Statistics: A biometrical approach*, 2nd Ed. McGraw Hill Book Co., New York.

Chapter in a book:

- Jaskani, M.J., M. Omura and I.A. Khan. 2007. Cytogenetics. In: I.A. Khan (ed.), *Citrus Genetics, Breeding and Biotechnology*. CAB International, UK. pp.151-166.
- Wiseman, J. 1990. Variability in the nutritive value of fats and non-ruminants. In: J. Wiseman and J.A. Cole (eds.), *Feedstuffs Evaluation*. Butterworths, London. pp.232-234.

Conference, symposium or workshop proceedings:

- Jaskani, M.J. and I.A. Khan. 2000. Characterization of interploid hybrids of Kinnow mandarin. *Proc. Int. Soc. Citriculture* 1:165-166.
- Khan, I.A., M.J. Jaskani, M.M. Khan and B. Fatima. 2002. Breeding for triploid seedless citrus fruits-A biotechnology approach. In: Y.A. Al-Shayji, J.S. Sidhu, M. Saleem and K. Guerinik (eds.), *Biotechnology Applications for the Arid Regions*. Kuwait Institute for Scientific Research, Kuwait. pp.229-234.

Khatkar, M.S., Sethi. R-K. and V.N. Tripathi. 1996. Repeatability of economic trails in Murrah buffaloes. In: Proc. 2nd ABA Congress, Manila, Philippines. pp: 346-348.

Muhammad, S. and A. Ghafoor. 1986. Reclamation of two saline-sodic soil series through subsoiling and gypsum application using marginal water for leaching. In: R. Ahmad and A.S. Pietro (eds.), Prospects for Biosaline Research. Proc. US-Pak Biosaline Res. Workshop; Sept. 22-26, 1985. University of Karachi, Karachi, Pakistan. pp.221-223.

Dissertation or thesis:

Mehmood, A. 2013. Physical, biochemical and molecular profiling of guava (*Psidium guajava* L.) germplasm. Ph.D. diss., Inst. Hort. Sci., Univ. Agric., Faisalabad, Pakistan.

Kirkegaard, J.A. 1990. Effect of compaction on the growth of pigeon pea on clay soils. Ph.D. diss., Dept. Soil Sci., Univ. Queensland, St Lucia, Australia.

Thevamanoharan, K. 2002. Genetic analysis of performance traits of swamp and riverine buffalo. Ph.D. Thesis, Katholieke Univ. Leuven.

Software and websites:

National Agricultural Statistics Service. 1997. Crops county data. Available online with updates at <https://usda.mannlib.comell.edu/data-sets/crops/9X100>. Accessed on 06-03-2020

SAS/STAT® . 1996. User's Guide. Version 6. SAS Inst., Inc., Cary, NC. USA.

Organization/ Govt. department documents:

GOP. 2019. Pakistan Economic Survey 2019-20. Finance and Economic Affairs Division, Ministry of Finance, Govt. of Pakistan, Islamabad, Pakistan.

GOP. 2017. Agricultural Statistics Year Book 2017-18. Ministry of National Food Security and Research, Govt. of Pakistan, Islamabad, Pakistan.

SIGNATURES

(IN BLOCK CAPITAL LETTERS, FONT SIZE 14 (BOLD), FONT TYPE TIMES NEW ROMAN (TNR) AND CENTRALIZED)

Student: (Name of the student) _____

Supervisor: (Name of the Supervisor) _____

Supervisory Committee

i. Name of the Supervisor Supervisor _____

ii. Name of the Member Member _____

iii. Name of the Member Member _____

Forwarded

(Signature)
Chairman / Director,
Department/Institute of xyz
University of Agriculture,
Faisalabad

Faculty Scrutiny Committee:

a) Name of the Convenor Faculty Scrutiny Committee _____

b) Name of the member Faculty Scrutiny Committee _____

c) Name of the member Faculty Scrutiny Committee _____

d) Name of the member Faculty Scrutiny Committee _____

Reviewed and Witnessed:

Dean
Faculty of xyz
University of Agriculture,
Faisalabad

Director Graduate Studies
University of Agriculture,
Faisalabad

Instructions

1. All Ph.D. Students have to submit their synopsis for their dissertation preferably up to 4th semester
2. Abstract of the synopsis should be between 250 to 300 words
3. Faculty scrutiny committee Member(s) should be other than supervisory committee

Role of the Faculty scrutiny committee and Faculty Member(s) has / have to check:

- a) Technical aspects of the research
- b) Scope of the research whether it relates to the field or not
- c) Addressing the current issues of the practical nature
- d) The research facilities are available at the campus
- e) Review of literature is related to the title
- f) Number of citation should not be less than fifteen
- g) Synopsis is according to the above guidelines

UNIVERSITY OF AGRICULTURE FAISALABAD

(Name of the University TNR 16 Bold)

Faculty of XXXXXXXXX/UAF Sub Campus XXXXX

(Name of the Faculty TNR 14 Bold)

Department/Institute

(Name of the Department/Institute TNR 12 Bold)

Course Work for MS/MPhil/MSc(Hons)/PhD degree

(TNR 12 Bold and spacing after 10ppt)

Personnel (TNR 12 Bold and spacing after 10ppt)

Name of the Student: TNR 12	Muhammad Aleem TNR 12
Registration No.:	2012-ag-786
Date of Admission:	01-09-2016
Name of Supervisor:	Mr./Ms/Dr official Name as appointed

Supervisory Committee (TNR 12 Bold and spacing after 10ppt)

Supervisor: TNR 12	Signature Mr./Ms/Dr official Name as appointed/
Member	Signature Mr./Ms/Dr official Name as appointed
Member	Signature Mr./Ms/Dr official Name as appointed

Course Work

Course No	Title of the Course	Credit Hours
-----------	---------------------	--------------

a) Major Courses

b) Minor Courses

c) Compulsory Minor courses

d) Audit Courses

e) Deficiency (Pre-requisite/General) Courses

Should not be more than one academic year i.e.

Winter Semester +Spring Semester +Summer session

Grand Total (a+b+c) =

Chairman/Director/HOD/Incharge

Department/Institute

University of Agriculture, Faisalabad

Dean/Principal

Faculty of ___/UAF Sub Campus_____

University of Agriculture, Faisalabad

Director

Graduate Studies

University of Agriculture, Faisalabad