The University of Faisalabad

POSTGRADUATE OFFICE

Semi-Final Thesis Scrutiny Form for MBA/MS/MPhil/PhD

The following guidelines/checklist should be completed, signed by the student, verified by supervisor and attached with the semi-final thesis for scrutiny by the Postgraduate Office.

Name of student: _____ Regd. No. _____ Degree/discipline: _____

Title of thesis: _____

_____

S. No.	Task / Requirement	Remarks		
1.	Synopsis Approved (proof attached)	Yes		No
2.	Title according to the approved Synopsis	Yes		No
3.	**Components of Semi-Final Thesis completed (✓ the appropriate option)**			
4.	Table of Contents	Partially	Mostly	Fully
5.	List of Figures and list of Tables	Partially	Mostly	Fully
6.	Abstract draft	Partially	Mostly	Fully
7.	Introduction chapter	Partially	Mostly	Fully
8.	Review of Literature	Partially	Mostly	Fully
9.	Materials and Methods	Partially	Mostly	Fully
10.	Data collection completed	Partially	Mostly	Fully
11.	Data analysis completed	Partially	Mostly	Fully
12.	Results & Discussion draft	Partially	Mostly	Fully
13.	Summary draft	Partially	Mostly	Fully
14.	Tables/Figures prepared and labeled	Partially	Mostly	Fully
15.	Words count limit	Partially	Mostly	Fully
16.	Supervisor review (latest version)	Partially	Mostly	Fully
17.	Formatting as per university guidelines	Partially	Mostly	Fully
18.	References cross matched & set	Partially	Mostly	Fully
19.	References given as per format applicable	Yes		No
20.	No. of references digested in Introduction			
21.	No. of references digested in Review of Literature			
22.	No. of references digested in Materials and Methods			
23.	No. of references digested in Discussion			
24.	No. of references cited/listed from the last two years			
25.	Total No. of references digested in whole thesis			

I have written/prepared thesis according to the above guidelines/checklist. **Signature of Student**: _____

The claim of student has been checked, verified and found correct: **Signature of Supervisor**: _____

Remarks of the Postgraduate Office: Minor Revision Major Revision

Postgraduate Office: Signature/Stamp: _____ Dated: _____

The University of Faisalabad

POSTGRADUATE OFFICE

FINAL THESIS CHECKLIST FOR MBA/MS/MPHIL/PHD

The following guidelines/checklists should be completed, signed by the student, verified by supervisor and attached with the semi-final and final thesis (as the case maybe) for submission to Postgraduate Office for approval. Please check the relevant boxes under Yes or No columns

Name of student:_____ Regd. No. _____Degree/discipline: _____

Title of thesis: _____

_____

S. No.	Document Attached	Yes	No
1.	**Copy of Approved MPhil/PhD Synopsis** (signed by Postgraduate Office)	☐	☐
2.	**Comprehensive Exam Pass Notification** (copy issued by controller office; only for PhD)	☐	☐
3.	**Plagiarism Report within prescribed limits** (issued from QEC)	☐	☐
4.	**Supervisor's Approval Letter** (written confirmation for final thesis)	☐	☐
5.	**Final Thesis Hard Copies** (2 for MPhil & 4 for PhD)	☐	☐
6.	**Co-Supervisor Approval** (if applicable)	☐	☐
7.	**Enrollment Extension Letter** (if PhD > 8 years and MPhil > 4 years)	☐	☐
8.	**Change of Supervisor Letter** (if applicable)	☐	☐
9.	**Change of Synopsis Title** (if applicable)	☐	☐
10.	**IRSIP Letter from Supervisor** (Awarded or Not Awarded only for PhD)	☐	☐
11.	**IRSIP Award letter** (Original or attested copy issued by HEC only for PhD)	☐	☐
12.	**IRSIP Completion Certificate** (From host university only for PhD)	☐	☐
13.	**IRSIP Final Report Submitted to HEC** (only for PhD students who availed IRSIP)	☐	☐
14.	**Host Supervisor's Evaluation Letter** (only for PhD)	☐	☐
15.	**Evidence of Return to Pakistan after IRSIP** (Entry/Exit Stamps on Passport; only for PhD)	☐	☐
16.	**Thesis word count is within the prescribed range**	☐	☐
17.	**(a) Word count** (excluding references & excluding Roman pages)		
	(b) Word count (including references & excluding Roman pages)		

I have written/prepared thesis according to the above guidelines/checklist. **Signature of student**: _____

The claim of student has been checked, verified and found correct. **Signature of Supervisor**: _____

Remarks of the Postgraduate Office: Accepted | Minor Revision | Major Revision | Rejected

Director Academics: **Signature/Stamp:** _____ **Dated:** _____

Annexure-1

On the Binding

Muhammad Usman

MS Physiology

2024

Wheat (*Triticum aestivum* L.) Flour is the Source of Staple Food for Humans in this World

By

Muhammad Usman
2022-MSPHY-004

Department of Physiology
Faculty of Medicine & Allied Health Sciences
The University of Faisalabad

Annexure 2

Wheat (*Triticum aestivum* L.) Flour is the Source of Staple Food for Humans in this World (18pt centered, title case, bold)

space
space
space
space

16pt, centered

The University of Faisalabad

(1"×2" centered)

space
space
space

By (16pt, centered, bold)

space
space

Muhammad Usman (20pt centered, title case, bold)
2022-MSPHY-004 (18pt centered, title case, bold)

Thesis Submitted in Partial Fulfilment of the
Requirements for the Degree of (14pt centered, title case, bold)

space

Master of Philosophy (20pt centered, title case, bold)

in(16pt, bold)

Physiology (20pt centered, title case, bold)

space
space
space

Department of Physiology (18pt centered, title case, bold)
Faculty of Medicine & Allied Health Sciences (18pt centered, title case, bold)
The University of Faisalabad (22pt centered, title case, bold)

space

2026 (18pt centered)

Annexure 3

Authors Declaration **(16pt centered, title case, bold)**

Space (12pt)

I _____ hereby state that my M.Phil./Ph.D. thesis titled "_____ _____" is my own work and has not been submitted previously by me for taking any degree from University of Faisalabad or anywhere else in the country/world. At any time if my statement is found to be incorrect even after my graduation, the university has the right to withdraw my PhD degree. (12pt justified, sentence case)

Student Signature

Name: _____

Regd. No. _____

Date: _____

(12pt justified, title case, normal font)

Annexure 4

Plagiarism Undertaking (16pt centered, title case, bold)

Space (12pt)

I solemnly declare that research work presented in the thesis titled "_____

_____

_____" is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledged, and that complete thesis has been written by me.

I understand the zero-tolerance policy of the HEC and University of Faisalabad towards plagiarism. Therefore, I as an author of the above titled thesis, declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of degree, the University reserves the right to withdraw/revoke my degree, and that the HEC and the University have the right to publish my name on the HEC/University Websites, where the names of the students are placed who submitted plagiarized theses. (12pt justified, sentence case, normal font)

Student Signature

Name: _____

Regd. No. _____

Date: _____

Annexure-5

Certificate of Approval (16pt centered, title case, bold)

Space (12pt)

This is to certify that the research work presented in this thesis, entitled "_____ _____ _____" was conducted by _____ under the supervision of _____. This thesis is submitted to the Department of _____ in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the field of _____, Department of _____, University _____. (12pt justified, sentence case, normal font)

Student Name: _____ Signature:_____

Examination Committee: (14pt justified, justified, upper case, bold)

c) _____ (Supervisor name) Signature:_____

d) _____ Co-Supervisor name) Signature:_____

d) _____ (Member name) Signature:_____

e) _____ (Member name) Signature:_____

Head of Department/Chairman Signature:_____

Dean, Faculty of _____ Signature:_____

(12pt justified, title case, bold)

Annexure-6

Certificate of Ethical Approval (16pt centered, title case, bold)

Space (12pt)

(To be executed when the research is on animals or humans)

The certificate will be issued by the University Research Ethics Committee

(12pt justified, sentence case, bold)

Dedication (16pt centered, title case, bold)

Space (12pt)

Acknowledgment (16pt centered, title case, bold)

Space (12pt)

Table of Contents (16pt centered, title case, bold)

Space (12pt)

List of Figures (16pt centered, title case, bold)

Space (12pt)

List of Tables (16pt centered, title case, bold)

Space (12pt)

List of Abbreviations (16pt centered, title case, bold)

Space (12pt)

Full name (14pt centered, title case)	Abbreviations
Nanoparticles	NPs
Silver Nanoparticles	AgNPs
Ultraviolet A	UVA

Abstract (16pt centered, title case, bold)

Space (12pt)

0.5”tab The present-day study focuses on the development and characterization of polymeric nanoparticles encapsulating *Citrus lemon* extract, aimed at enhancing its stability, bioavailability, and therapeutic potential. *Citrus lemon* extract, opulent in biologically active substances for example flavonoids, vitamin C & phenolic, possesses significant antioxidant, anti-infective and anti-inflammatory action. However, its clinical application is limited by poor solubility and degradation under environmental conditions. To overcome these challenges, biocompatible and biodegradable polymers, such as chitosan was employed to formulate nanoparticles using the Nano precipitation technique. The resulting nanoparticles were categorized for size of particles, zeta potential, polydispersity index (PDI), encapsulation efficiency, and morphology using procedures such as scanning electron microscopy (SEM) and Fourier-transform infrared spectroscopy (FTIR). The nanoparticles exhibited a uniform size distribution (100–200 nm), electro positivity and high loading efficiency indicating successful incorporation of the *Citrus lemon* extract. The antioxidant and antimicrobial assays confirmed the retained bioactivity of the encapsulated extract. These findings suggest that polymeric nanoparticles are a promising delivery system for *Citrus lemon* extract, with potential applications in pharmaceuticals, cosmetics and nutraceuticals formulations. (12pt justified, sentence case, without keywords, past tense, 200-250 words).

Chapter 1 (16pt, left aligned, title case, bold)

(16pt right aligned, title case, bold) **Introduction space**

0.5”tab The previous years have seen an augmented progression in the arena of nanotechnology, and several items incorporating nanoparticles are being used in a diversity of applications, comprising food science, face paint, and medicines. Atoms with a single aspect between 1 -100 nano meters are called nanoparticles (NPs). Dependent on their magnitude and exterior functions NPs show a multiplicity of features. Because of their tiny size and huge surface area NPs are widely used in a range of fields, containing electronics, maquillages and both investigative and calming remedial solicitations (Missaoui et al., 2018, Bartholomew and Sinclair, 2022).

0.5”tabThe dimensions to representation nanomaterial retaining methods with microscopic perseverance competencies for example scanning electron microscopy has subsidized to the augmented escalation and emergent attentiveness in nanotechnology (Jin et al., 2010). Studies concentrating on the hazards connected with NPs and nanotechnology. However, despite our growing exposure to NPs, research on NP application is taking precedence over knowledge about nanoparticles safety (Missaoui et al., 2018).

(12pt justified, normal font, sentence case, without subheadings, each paragraph should be tab-indented, sources must be properly cited, present tense, started with page 1, multiple in-text citations must presented chronologically throughout the draft e.g., (Wang et al., 2019; Zhang et al., 2025).

Chapter 2 (16pt left aligned, title case, bold)

(16pt right aligned, title case, bold) **Review of Literature**

Space (12pt

0.5”tab Herbal remedies were typically utilized in both developed and developing nations since they were considered natural and had no deleterious effects. each paragraph should be tab-indented, past tense, sources must be properly cited)

2.1 History (14pt justified, title case, bold)

0.5”tab Herbal remedies were typically utilized in both developed and developing nations since they were considered natural and had no deleterious effects. (12pt justified, sentence case, normal font)

2.1.1 Geographical Distribution (12pt justified, sentence case, bold)

0.5”tab Although it originated in North India, it is now grown in the America, Argentine Republic, Persia, Brasil, Italia, Espana, Mexico, Turkey and China. Around the world, *Citrus lemons* are utilized for both culinary and non-culinary uses. *Citrus lemons* are largely utilized for their juice which is extracted from the pulp (Figueira et al., 2020). (12pt justified, sentence case, normal font)

0.5”tab Although it originated in North India, it is now grown in the America, Argentine Republic, Persia, Brasil, Italia, Espana, Mexico, Turkey and China. Around the world, *Citrus lemons* are utilized for both culinary and non-culinary uses. *Citrus lemons* are largely utilized for their juice which is extracted from the pulp (Figueira et al., 2020). (12pt justified, sentence case, normal font)

2.1.1.1 Geographical distribution (12pt justified, sentence case, bold): Although it originated in North India, it is now grown in the America, Argentine Republic, Persia, Brasil, Italia, Espana, Mexico, Turkey and China. Around the world, *Citrus lemons* are utilized for both culinary and non-culinary uses. *Citrus lemons* are largely utilized for their juice which is extracted from the pulp (Figueira et al., 2020). (12pt justified, sentence case)

Chapter 3

(16pt right aligned, title case, bold) **Materials and Methods**

Space (12pt)

3.1 Materials (14pt, Title Case)

3.1.1 Soil and chemical analysis (12pt, sentence case)

3.2. DPPH Method for Antioxidant Activity

3.2.1 Growth and Morphology (12pt, sentence case)

3.2.1.1 Root and shoot (12pt, sentence case)

For format details see chapter 2, each paragraph should be tab-indented, past tense, each method must be properly cited)

Chapter 4

(16pt right aligned, title case, bold) **Results and Discussion**

Space (12pt)

For format details see chapter 2, each paragraph should be tab-indented, past tense

Chapter 5

(16pt right aligned, title case, bold) **Summary**

Space (12pt)

For format details see chapter 2, each paragraph should be tab-indented**,**

Literature Cited

(16pt centered, title case, bold, tab-indented)

space (12pt)

Gasek NS, Kuchel GA and Kirkland JL (2021) Strategies for targeting senescent cells in human disease. *Nature Aging* 1: 870–879. (use en dash (–) hyphen)

Gavahian M and Yang YH (2022) Power ultrasound for valorization of *Citrus limon* (cv. Eureka) waste: Effects of maturity stage and drying method on bioactive compounds, antioxidant, and anti-diabetic activity. *Innovative Food Science & Emerging Technologies* 79: 103052. Scientific names italicized

For journal reference (12pt, justified):

Author name: without dots; et al. if authors exceed three,

Year: in parenthesis

Paper title: normal case

Journal name: full, title case and italicized

Book Reference

Crouch C, Le Gales P and Trigilia C (2015) *Local Production Systems in Europe: Rise or Demise*, 2nd edn. Oxford: Oxford University Press.

Book Chapter Reference

If single author

Author A (year) Chapter title: Subtitle. In: Editor A (ed.) *Book Title*. City of Publisher: Publisher, 00–00.

If two authors

Author A and Author B (year) Chapter title: Subtitle. In: Editor A, Editor B and Editor C (eds) *Book Title*. Place: Publisher, 00–00.

If three authors

Author A, Author B and Author C (year) Chapter title: subtitle. In: Editor A and Editor B (eds) *Book Title*. City of Publisher: Publisher, 00–00.

If four or more authors

Author A, Author B, Author C et al. (year) Chapter title: Subtitle. In: Editor A, Editor B, Editor C et al. (eds) *Book Title*. City of Publisher: Publisher, 00–00.

For journal reference writing (12pt, justified, normal font):

Author name: without dots; et al. if authors exceed three

Year: in parenthesis

Book title: title case, italicized. City of publisher: Publisher name.

In case of US publisher:

Author A, Author B, Author C et al. (year) Chapter title: Subtitle. In: Editor A, Editor B, Editor C et al. (eds) *Book Title*. City of Publisher, Two Capital Letters abbreviated name of State: Publisher, 00–00.

Book title: title case, italicized. City of publisher, State Name Abbreviated 2 capital letters: Publisher name.

All in-text citations must be crossmatched with the reference list

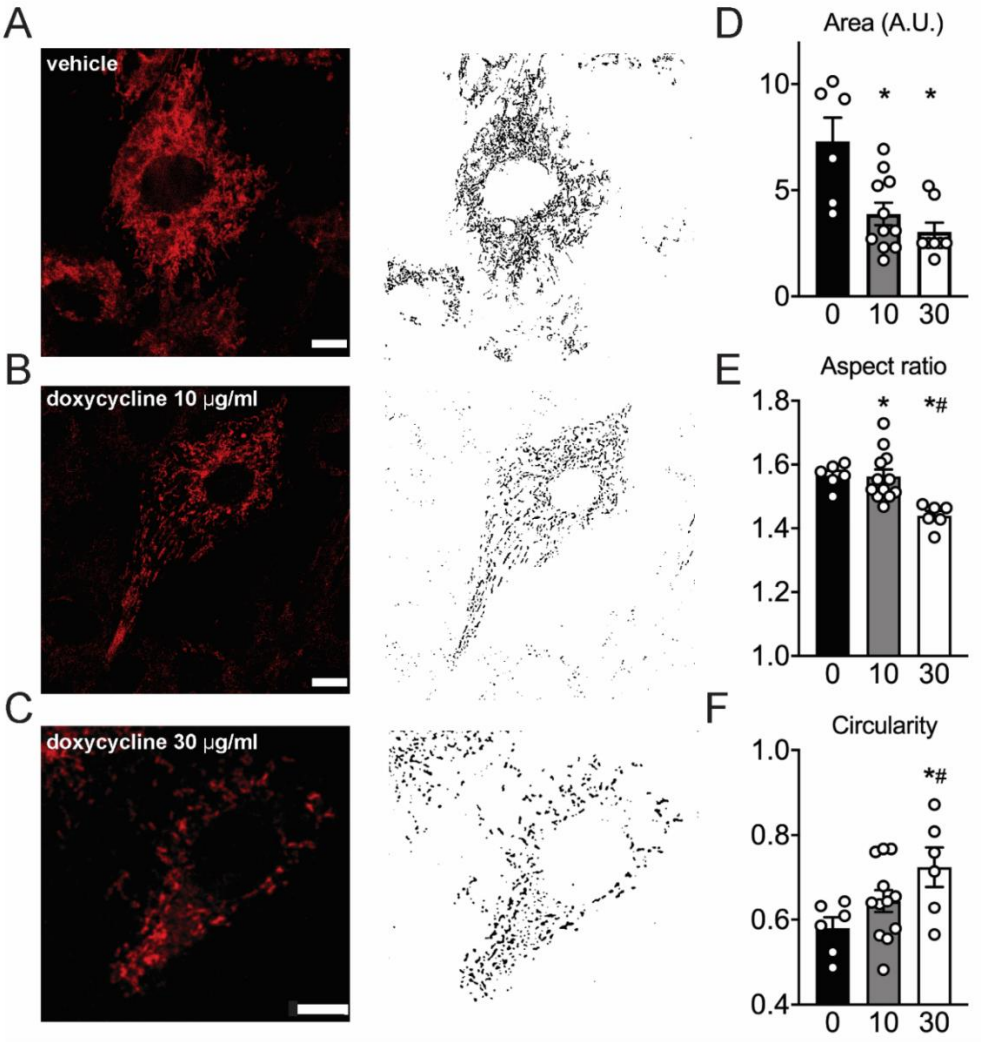

Figure Centered, Times New Romans

Figure 1: Mitochondria appear more fragmented in doxycycline-treated H9C2 cells. (A–C), representative H9C2 cells loaded with TMRM with corresponding masks for quantification. (D–F), Mitochondria in doxycycline-treated H9C2 cells appeared more fragmented, were smaller, had lower aspect ratios and higher circularity compared to vehicle. Values are median (area and aspect ratio) or 25% percentile values (circularity) because of non-normal distribution. n = 5–12 independent samples per group on four different days. Error bars are SEM. Scale bar: 10 µM. *: $p < 0.05$ vs. vehicle; #: $p < 0.05$ vs. 10 µg/mL doxycycline, one-way ANOVA followed by Tukey's post-hoc test for multiple comparisons. (Caption 12pt justified, Sentence case. Properly cited intext. All figures and their captions must be clear and self-explanatory, porperly cited, insert figures in relevant sections, cite source if figure is not self-drawn)

Annexure-8

Table 1: Antimicrobial groups based on their mode of action obtained from rat treated with treated water in laboratory experiments (12pt justified, sentence case. Porperly cited in text. Insert in relevant sections, all tables and their captions must be clear and self-explanatory, Cite source if table is not self-drawn.)

No.	Mode of Action	Antimicrobial Groups
1.	Cell wall synthesis inhibitor	ββ-lactams: Penicillin, Cephalosporins, monobactams, carbapenemsGlycopeptides: Vancomycin
2.	Depolarization of cell membrane	Lipopeptide
3.	Protein synthesis inhibitors	Bind to 30 s ribosomal subunit: • Aminoglycosides • Tetracyclines Bind to 50 s ribosomal subunit: • Macrolides • Chloramphenicol • Lincosamides
4.	Nucleic acid synthesis inhibitor	Quinolones, Fluoroquinolones
5.	Inhibitors of metabolic pathways	Sulfonamides, Trimethoprim

Un bold times New Roman 12 font size, Sentence Case