



Introduction of research methods

Define

Thesis vs. Research Paper.

- ❖ **The thesis:** - is a document which is written by students about higher education to gain an academic degree or qualification.
- ❖ **Research paper:** - is a piece of academic writing, usually used as a requirement for a class. In research, you have to do independent research.

Both of them are **academic writings**. They both have a **similar internal structure** like both containing:

1. introduction,
2. research methodology (Methods),
3. data analysis (results or findings),
4. interpretations (discussion),
5. conclusions,
6. etc.

But differ by:

1. Purpose,
2. Style of writing,
3. Specific components.

There are many differences between the thesis and research paper:

1. The thesis is related to the statement of central questions or arguments of scholars which leads to further research, while a research paper is about to prove that central argument. It should mention and include all the main points that the research paper wants to address.
2. A thesis is much longer and takes up to years to complete while research papers are shorter and may take a few weeks or a month to complete.
3. The thesis should be the length, approximately 100–130 pages. While the research paper should be the length, one or more pages.
4. A thesis works towards interpreting data for proving or disproving the hypothesis. While a research paper analyses a single thesis statement from all possible angles.
5. Completing a thesis will get you a degree in itself. While research papers are a part of the coursework, usually completed for partial fulfillment of a degree.
6. The thesis may have more than one research goal while research papers have a single research goal.

Thesis contents: It is prepared within a general structure that contains the following paragraphs:

1. English title
2. Quran verse
3. Certifications
4. Dedication
5. Acknowledgements
6. Summary (or Abstract)
7. List of Contents
8. List of Figures
9. List of Tables
10. List of Abbreviations
11. Chapter One: Introduction
12. Chapter Two: Review of Literature
13. Chapter Three : Materials and Methods
14. Chapter Four : Results and Discussion
15. Chapter Five : Conclusions and Recommendations
16. Chapter six : References
17. صفحة الخلاصة باللغة العربية
18. صفحة العنوان باللغة العربية

Notes about: How to write graduation research for fourth-year students

1. Do not place **decorations** in the frame of writing pages or on the searchinterface
2. The writing is in **Times New Roman** font, size **14**.
3. commitment to side margin so that it does not exceed **one and a half inches** from the **left** and **one and a quarter** from the **right**.
4. The **space** between **one line and another** should be **1.5**.
5. Indexing and numbering of search contents
6. The **reference** in the research are written in the manner of **(Name and year)** according to **the following model:**

Hepatitis B virus is a member of the *hepadnaviridae* virus family. The virus particle consists of an outer lipid envelope and an icosahedral nucleocapsid core composed of protein **(Le, 2014)**.

During the early phase of viral infections, the production of pro-inflammatory cytokines and interferons (IFNs), besides the activation of natural killer (NK) cells and frequently observed **(Zhang and Lu, 2015)**.

The hepatitis B viral genome is present in infectious particles in the form of 3.2kb partially double-stranded, relaxed circular DNA (rcDNA). Following infection, the

virus gains entry into hepatocytes via its receptor, the human sodium taurocholate co-transporting polypeptide (NTCP), The viral genome is uncoated in the cytoplasm, then transported to the nucleus where the rcDNA is converted to covalently closed circular DNA (cccDNA), **(Makokha *et al.*, 2019).**

7. Writing the reference to the references chapter as follows:

Le, V. (2014). Safe Blood Transfusion: Screening for Hepatitis B and Hepatitis C Virus Infections in Potential Blood Donors in Rural Southeast Asia.

Zhang, E., and Lu, M. (2015). Toll-like receptor (TLR)-mediated innate immune responses in controlling hepatitis B virus (HBV) infection. *Medical microbiology and immunology*, 204(1), 11-20.

Makokha, G. N., Abe-Chayama, H., Chowdhury, S., Hayes, C. N., Tsuge, M., Yoshima, T., Ishida, Y., Zhang, Y., Uchida, T., Tatenno, C., Akiyama, R., and Chayama, K. (2019). Regulation of the Hepatitis B virus replication and gene expression by the multi-functional protein TARDBP. *Sci Rep*, 9(1), 8462