How to prepare a Technical report using LATEX

A Project Report

Submitted to the APJ Abdul Kalam Technological University in partial fulfillment of requirements for the award of degree

Bachelor of Technology

in

Electronics and Communication Engineering

by

batch member 1(batch member1 roll no)
batch member 2(batch member2 roll no)

batch member 4(batch member4 roll no)

batch member 3(batch member3 roll no)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING COLLEGE OF ENGINEERING TRIVANDRUM KERALA

June 2021

DEPT. OF ELECTRONICS & COMMUNICATION ENGINEERING COLLEGE OF ENGINEERING TRIVANDRUM

2020 - 21



CERTIFICATE

This is to certify that the report entitled **How to prepare a Technical report using LateX** submitted by **batch member 1** (batch member1 roll no), **batch member 2** (batch member2 roll no), **batch member 3** (batch member3 roll no) & **batch member 4** (batch member4 roll no) to the APJ Abdul Kalam Technological University in partial fulfillment of the B.Tech. degree in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Prof. Project guide

(Project Guide)
Assistant Professor
Dept.of ECE
College of Engineering
Trivandrum

Prof. Project coordinator

(Project Coordinator)
Assistant Professor
Dept.of ECE
College of Engineering
Trivandrum

Dr. Head of Dept

Professor and Head Dept.of ECE College of Engineering Trivandrum **DECLARATION**

We hereby declare that the project report How to prepare a Technical report using

LETEX, submitted for partial fulfillment of the requirements for the award of degree of

Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is

a bonafide work done by us under supervision of Prof. Project guide

This submission represents our ideas in our own words and where ideas or words

of others have been included, we have adequately and accurately cited and referenced

the original sources.

We also declare that I have adhered to ethics of academic honesty and integrity

and have not misrepresented or fabricated any data or idea or fact or source in my

submission. We understand that any violation of the above will be a cause for

disciplinary action by the institute and/or the University and can also evoke penal

action from the sources which have thus not been properly cited or from whom proper

permission has not been obtained. This report has not been previously formed the basis

for the award of any degree, diploma or similar title of any other University.

batch member 1

batch member 2

batch member 3

batch member 4

Trivandrum

15-06-2021

Abstract

This document contains essential templates required to write technical reports using LaTeX. This template may be used for the preparation of B.Tech seminar reports of APJ Abdul Kalam Technological University, Kerala. Also minimum working examples to create equations, include figure, include table, table of contents symbols list and bibliographic citation in a LaTeX document are provided.

Please note that this template is provided without warranty on an AS IS basis.

JIM

Acknowledgement

We take this opportunity to express my deepest sense of gratitude and sincere thanks to everyone who helped us to complete this work successfully. We express our sincere thanks to Dr. Head of Dept, Head of Department, Electronics and Communication Engineering, College of Engineering Trivandrum for providing us with all the necessary facilities and support.

We would like to express my sincere gratitude to the Prof. Project coordinator, department of Electronics and Communication Engineering, College of Engineering Trivandrum Trivandrum for the support and co-operation.

We would like to place on record my sincere gratitude to our project guide Prof. Project guide, Assistant Professor, Electronics and Communication Engineering, College of Engineering Trivandrum for the guidance and mentorship throughout this work.

Finally I thank my family, and friends who contributed to the successful fulfilment of this seminar work.

batch member 1

batch member 2

batch member 3

batch member 4

Contents

Al	bstract	i
A	cknowledgement	ii
Li	st of Figures	iv
Li	st of Tables	V
Li	st of Symbols	vi
1	Introduction	1
2	Literature Review	2
	2.1 section1	2
	2.1.1 title 2	3
3	System Development	5
	3.1 section1	5
	3.1.1 title 2	5
4	Results and Discussion	7
	4.1 section1	7
	4.1.1 title 2	7
5	Conclusion	9
Re	eferences	10

List of Figures

2.1	Autonomous System Hierarchy	2
2.2	The Sine and Cosine waves	4

List of Tables

4.1	test table.																																	8
	tobt tacto.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_

List of Symbols

- Ω Unit of Resistance
- $\varepsilon^{'}$ Real part of dielectric constant
- c Speed of light
- λ Wavelength
- δ Delta

Introduction

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Literature Review

Each chapter is to begin with a brief introduction (in 4 or 5 sentences) about its contents. The contents can then be presented below organised into sections and subsections.

Technical writing is writing or drafting technical communication used in technical and occupational fields [1], such as computer hardware and software [2], engineering, chemistry, aeronautics, robotics, finance [3], medical, consumer electronics, biotechnology, and forestry. Technical writing encompasses the largest sub-field in technical communication. See figure 2.1 that shows the autonomous systems in Internet.

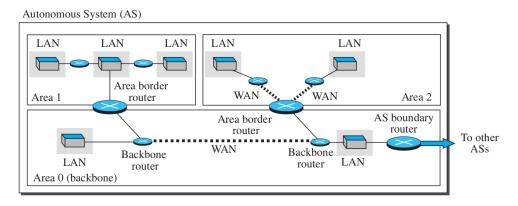


Figure 2.1: Autonomous System Hierarchy

2.1 section1

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

2.1.1 title 2

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

The system is described by the equation 2.1 below. Here y is the ordinate and x is the abscissa, m is the slope and c a constant.

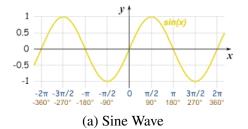
$$y = mx + c \tag{2.1}$$

Page centered and unnumbered multiple equations. The * symbol supresses equation numbering.

$$2x - 5y = 8$$

$$3x + 9y = -12$$

Side by side figures can be created using this environment. See fig 2.2 below.



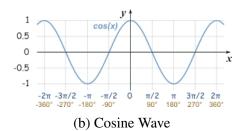


Figure 2.2: The Sine and Cosine waves

System Development

Each chapter is to begin with a brief introduction (in 4 or 5 sentences) about its contents. The contents can then be presented below organised into sections and subsections.

3.1 section1

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

3.1.1 title 2

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus

vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Results and Discussion

Each chapter is to begin with a brief introduction (in 4 or 5 sentences) about its contents. The contents can then be presented below organised into sections and subsections.

4.1 section1

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

4.1.1 title 2

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus

vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Table 4.1: test table

Sl. No	Item 1	Itm 2
1	37	45
2	42	23
3	47	1
4	52	-21
5	57	-43
6	62	-65
7	67	-87
8	72	-109
9	77	-131
10	82	-153

Conclusion

Each chapter is to begin with a brief introduction (in 4 or 5 sentences) about its contents. The contents can then be presented below organised into sections and subsections.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

References

- [1] HU, Yun Chao, et al., *Mobile edge computing?A key technology towards 5G*, ETSI white paper, 2015, vol. 11, no 11, p. 1-16.
- [2] @online Raspberry pi, https://www.raspberrypi.org/ Online; accessed 10-June-2019
- [3] HU, Yun Chao, et al., *Mobile edge computing?A key technology towards 5G*, ETSI white paper, 2015, vol. 11, no 11, p. 1-16.