# GUIDELINES FOR B.TECH PROJECT REPORT PREPARATION

# Guidelines for preparation of Project Reports

## Preamble

The aim is to present the basic guidelines on how a report should be prepared for B.Tech project. Any student must follow the guidelines that have been given in the following sections while writing their final report. The soft copy of the report will also have to be submitted in the university library for future reference through their project coordinators.

## 1. Organization of the Project Report

This project report shall be presented in a number of chapters, starting with Introduction and ending with Summary and Conclusions. Each of the other chapters will have a title related to the contents of the chapter. A chapter can be subdivided into sections and subsections so as to present the content neatly and with clarity.

### 1.1 Introduction

The title of **Chapter 1** shall be Introduction. It shall define the problem in current scenario and explain the aim and scope of the work presented in the project report. It may also highlight the objectives of the project.

### 1.2 Review of Literature

This shall form **Chapter 2** and shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. A minimum of 8 – 10 literatures has to be referred and included in the chapter. The base or key paper shall be discussed in detail. The direction of the work shall be evolved from the literature study.

## 1.3 Report on the present investigation

Experimental setups and tools used to be clearly given in **Chapter 3**. It should also include the methodology adopted for the work carried out in the project. From **Chapter 4** onwards, each objective defined in Introduction should form a separate chapter. The following general guidelines can be adhered to:

(a) Derivations/formulae should normally be presented in the text of these chapters.

(b) Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages.

(c) Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbersmentioned to the right side.

## 1.4 Results and Discussions

This shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. This can be sub divided into sub sections, each dealing with result of each objective. The discussion shall lead to inferences and conclusions as well as scope for possible further future work.

## 1.5 Summary and Conclusions

This will be the **final chapter** of the project report. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

# 2 PROJECT REPORT FORMAT

## 2.1. General Instructions

- The project report should be printed in A4 size (297 mm x 210 mm). The dimensions of the final bound project reports (one copy per student + one copy for supervisor + two copies for library) should be 290 mm x 205 mm. Project reports should be bound with black calico cloth and using flexible cover of thick white art paper. The report should be prepared on good quality white paper preferably not lower than **80 gsm.**

- Margins to be set: **Left: 1.5", Right: 0.75", Top: 1" and Bottom: 1"**

- Report should be on **single side printing** and paragraphs must be fully justified.

- The cover and the inside text should be printed in black letters.

- Printing should be done with Font style "**Times New Roman" and size 12 and with a uniform line spacing of 1.5.**

- Headings may be printed with Font style **"Times New Roman" and size 14 and bold. – Refer Annexure - V**

- Sections shall be printed with Font style **"Times New Roman" and size 12 and bold. – Refer Annexure – V**

- Sub - Sections shall be printed with Font style **"Times New Roman" and size 12, title case, and bold. – Refer Annexure - V**

- For tables and figures– **Refer Annexure – VI**

- **For equations** – **Refer Annexure – VI**

- All non-verbal materials used in the body of the project work and appendices such as charts, graphs, maps, photographs and diagrams maybe designated as figures.

## 2.2. <u>Components of the Project Report:</u>

The following sequence should be used in arranging the project material and the report should be bound using flexible cover with a thick art paper before submission.

1. Cover Page & Title Page
2. Declaration by the student
3. Bonafide Certificate by the guide
4. Acknowledgement
5. Abstract
6. Table of Contents
7. List of Tables
8. List of Figures
9. List of Symbols, Abbreviations and Nomenclature
10. Chapters
11. Appendices
12. References

The table and figures shall be introduced in the appropriate places.

### <u>Page Numbering</u>

All page numbers (whether it be in Roman or Arabic numbers) should be typed without punctuation on the upper right hand corner  20 mm from the top with the last digit in line with the right hand margin. The preliminary pages of theThesis (item 1 to 9) should be numbered in lower case Roman numerals. The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered as (ii) and it should appear at the top right hand corner as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

# 3. Preparation format

1.  **Cover Page & Title Page:** The cover page and the title page should include the Title of the project work, Name of the Candidate (RegistrationNo.), Department Name, University Name (and emblem) and Place, Academic Year. (Refer the specimen copy of the Cover page & Title page of the project report given in **Annexure- I**)**.**

2.  **Declaration by the student:** The declaration given by the students should be as per the format in **Annexure- II.**

3.  **Bonafide Certificate by the Guide:** The Bonafide Certificate given by the guide should be as per the format in **Annexure- III.** The certificate should have the supervisor's signature followed by the supervisor's name, academic designation (not any other responsibilities of administrative nature), department and full address of the institution where the supervisor has guided the student. The term **'SUPERVISOR'** must be typed in capital letters between the supervisor's name and academic designation.

2.  **Acknowledgements:** The candidate may give credits and appreciations for all those who helped in the preparation of project. Acknowledgement to **Research Laboratories** of the concerned department (involved in your project work) is must.

3.  **Abstract :** Abstract of the report should be of one page (250 words or less) and shall include the purpose of the study; the methodology used and a summary of the major findings, conclusions and recommendations.

4.  **Table of Contents:** The table of contents should list all material following it as well as any material which precedes it. The title page, declaration and

Bonafide Certificate will not find a place among the items listed in the table of contents but the page numbers of which are in lower case Roman letters. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the Table of Contents of the project report is given in **Annexure- IV**.

5. **List of Tables:** The list should use exactly the same captions as they appear above the tables in the text. The list should be prepared with 1.5 line spacing.

6. **List of Figures:** The list should use exactly the same captions as they appear below the figures in the text. The list should be prepared with 1.5 line spacing.

7. **List of Symbols, Abbreviations and Nomenclature:** Standard symbols, abbreviations etc. should be used. The list should be prepared with 1.5 line spacing.

8. **Chapters**: This forms the main body of the project. The main text will be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

    1. Each chapter should be given an appropriate title.
    2. Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
    3. Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page, which refers to the material they annotate.
    4. A Specimen copy of Heading, Section and Sub-section is given in **Annexure – V**.

9. **Appendices:** Appendices are provided to give supplementary information, which is included in the main text may serve as a distraction and cloud the central theme.

> ➢ Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc.

> ➢ Appendices, Tables and References appearing in appendices should be numbered and referred to at appropriate places just as in the case of chapters.

> ➢ Appendices shall carry the title of the work reported and the same title shall be made in the contents page also.

10. **List of References** –The listing of references should be typed 2 spaces below the heading "REFERENCES" in alphabetical order in  single spacing left – justified. The reference material should be listed in the alphabetical order of the first author. The name of the  author/authors should be immediately followed by the year and other details.

A typical illustrative list given below relates to the citation example quoted above.

### REFERENCES

1. Ariponnammal, S. and Natarajan, S. (1994) 'Transport Phonomena of SmSel – X Asx', Pramana – Journal of Physics, Vol.42, pp.421-425.

2. Barnard, R.W. and Kellogg, C. (1980) 'Applications of Convolution Operators to Problems in Univalent Function Theory', Michigan Mach. J., Vol.27, pp.81–94.

3. Shin, K.G. and Mckay, N.D. (1984) 'Open Loop Minimum Time Control of Mechanical Manipulations and its Applications', Proc. Amer. Contr. Conf., San Diego, CA, pp. 1231-1236.

4. Abramowitz, M. and I. A. Stegun, I.A. (Eds.,) (1964) *Handbook of Mathematical Functions* (Applied Mathematics Series  55).Washington, DC: NBS, pp. 32-33.

5. Williams, J.O. (1993) "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, USA.

6. Kawasaki, N. (1993) "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan.

7. J. Jones. (1991, May 10). *Networks (2nd ed.)* [Online]. Available: http://www.atm.com

(A typical Specimen of Cover Page & Title Page)

<Font Style Times New Roman – Bold>

# TITLE OF PROJECT REPORT

<Font Size 18><1.5 line spacing>

## A PROJECT REPORT – PHASE I

<Font Size 14>

### *Submitted by*

<Font Size 14><Italic>

## NAME OF THE CANDIDATE(S)

<Font Size 16>

*In partial fulfillment for the award of the degree*

*of*

<Font Size 12><1.5 line spacing><Italic>

## NAME OF THE DEGREE

<Font Size 16>

**IN**

BRANCH OF STUDY

<Font Size 14>



## NAME OF THE DEPARTMENT

<Font Size 16>

# KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION
## (Deemed to be University)

<Font Size 14>

Academic Year (eg. 2010-11)

<Font Size 12>

**ANNEXURE - II**

# Kalasalingam Academy of Research and Education

## KRISHNANKOIL 626 126

<Font Style Times New Roman – size -16>

## DECLARATION BY THE STUDENT

<Font Style Times New Roman – size -14>

I/We hereby declare that this project **"……….TITLE OF THE PROJECT…..................."** is my/our genuine work and no part of it has been reproduced from any other works.

<Font Style Times New Roman – size -12>

<<Signature >>                <<Signature >>                <<Signature >>

<<Name>>                      <<Name>>                      <<Name>>

<<Reg. No: >>                 <<Reg. No: >>                 <<Reg. No: >>

Date:

(A typical specimen of Bonafide Certificate)

# KALASALINGAM UNIVERSITY
## (Kalasalingam Academy of Research and Education)

## KRISHNANKOIL  626 126
<Font Style Times New Roman – size -16>

## BONAFIDE CERTIFICATE

<Font Style Times New Roman – size -14>

Certified that this project report **"……….TITLE OF THE PROJECT…………………………………………"** is the bonafide work of **"…………..NAME OF THE CANDIDATE(S) WITH REGISTER NUMBERS. ................"**who carried out the project work under my supervision.

<Font Style Times New Roman – size -12>

<<Signature of the Head of the Department>>        <<Signature of the   Supervisor>>

<<Name>>                                        <<Name>>

**HEAD OF THE DEPARTMENT**                        **SUPERVISOR 1**

<<Name of the Department>>                        <<Name of the Department>>

<<Academic Designation>>                        <<Academic Designation>>

**SUPERVISOR 2** (if any)

Project Viva-voce held on _____

**Internal Examiner**                                        **External Examiner**

**ANNEXURE - IV**

## (A typical specimen of table of contents)
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## TABLE OF CONTENTS

| CHAPTER  NO. | TITLE | PAGE NO. |
|---|---|---|

**ANNEXURE - V**

**(A typical specimen of Heading, Section and sub section)**

- Use only Arabic Numerals. Chapter Numbering should be centered on the top of the page using large bold print. Example:

# CHAPTER 1

## INTRODUCTION

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- **Sections -** A chapter can be divided into Sections, Sub-sections and Sub-sub-sections so as to present different concepts separately. Sections and sub-sections can be numbered using decimal points, e.g., 2.2 for the second Section in Chapter 2 and 2.3.4 for the fourth Sub- section in third Section of Chapter 2. Use only Arabic Numerals with decimals. Section numbering should be left justified using large bold print.

*Example:*

**1.1 GENERAL**

**1.2 ADSORPTION**

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- **Sub Sections -** Use only Arabic Numerals with two decimals. Sub section numbering should be left justified using bold print.

*Example:*

**1.1.1 Adsorption Isotherms**

**1.1.2 Langmuir Isotherms etc**

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**(A typical specimen of Tables and Figures)**

**Tables:** Good quality of table - Center aligned; Numbered at the top of the table along with chapter number (Example: Table 5.2 – table 2 in chapter 5)

Table 5.2 Recommended wear and size for different tool material and operations

| S.No | Wear(in) | Tool Material | Remarks |
|------|----------|---------------|---------|
| 1 | 0.030 (0.76 mm) | Carbide | Roughingpasses |
| 2 | 0.010-0.015 (0.25-0.38mm) | Carbide | Finishingpasses |
| 3 | 0.060 total destruction(1.25 mm) | H.S.S. | Roughingpasses |
| 4 | 0.010-0.015 (0.25-0.38mm) | H.S.S. | Finishingpasses |
| 5 | 0.010-0.015 (0.25-0.38mm) | Cemented oxides | Roughingand finishingpasses |

**Figures:** Good quality of figure - Center aligned; Numbered at the bottom of the figure along with chapter number (Example: Figure 6.2 – Figure 2 in chapter 6)
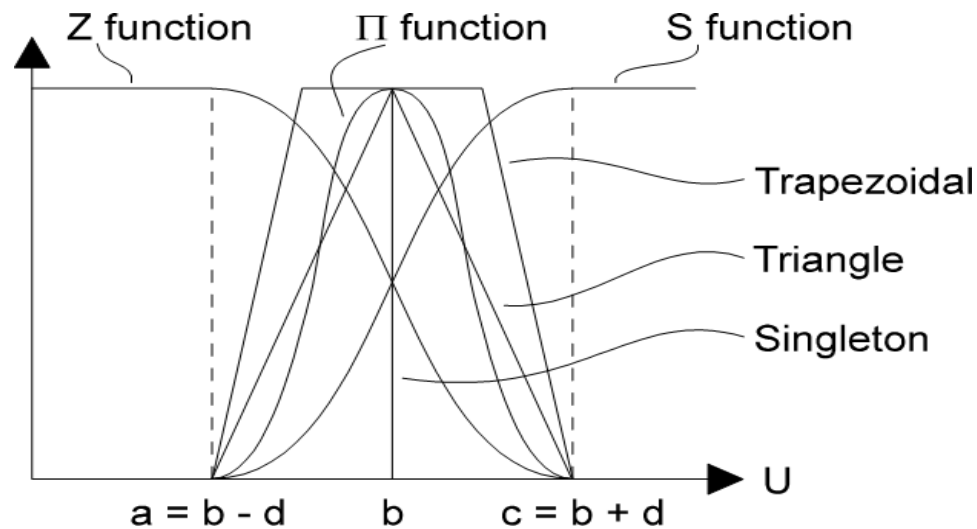


Figure 6.2 Types of fuzzy membership functions

**Equations:** Numbered aligned with the equation along with chapter number (Example: 2.1 – equation 1 in chapter 2)

$$\lceil X_{att} \rceil [W_{att}] = [A] \tag{2.1}$$

⊔    ⊔