

# FACULTY OF ENGINEERING, BHOPAL (M.P.)

## GUIDELINES FOR PREPARATION AND SUBMISSION OF B.E. MAJOR PROJECT REPORT

### NO OF COPIES TO BE SUBMITTED TO THE DEPARTMENT

One copy of the project is to be submitted to the Department. The corrections, if any, suggested by the guide/HOD at the time pre submission examination will have to be incorporated in the project before final submission. A soft copy on good quality CD will have to be submitted to the Digital Library through guide incorporating all the corrections.

### 1. ARRANGEMENT OF CONTENTS:

The sequence in which the project report material should be arranged and bound should be as follows:

1. Cover Page & Title Page (Appendix 1)
2. Certificate (Appendix 2)
3. Abstract
4. Acknowledgment (Specimen copy)
5. Table of Contents (Appendix 3)
6. List of Tables
7. List of Figures
8. List of Symbols, Abbreviations and Nomenclature
9. Chapters (Appendix 4)
10. Appendices
11. References

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

### 2. PAGE DIMENSION AND BINDING SPECIFICATIONS:

The dimension of the project report should be in A4 size. The project report should be bound using flexible cover of the thick white art paper. It is suggested that the cover page should be in **Black Colour** to the background. The printing in the cover page should be in **Golden Colour**.

**Guard Sheets-** A blank white page (Preferably thick) must be placed at the beginning and end of the report.

**Transparent Sheet-** A transparent sheet must be attached before the Title Page ,certificate, acknowledgment and abstract page.

### 3. PREPARATION FORMAT:

- 3.1 **Cover Page & Title Page** – A specimen copy of the Cover page & Title page of the project report are given in **Appendix 1**.

- 3.2 Certificate** – The Certificate shall be in double line spacing using Font Style Times New Roman and Font Size 14, as per the format in **Appendix 2**.

The certificate shall carry the supervisor's signature and shall be 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.

- 3.3 Acknowledgment**- A specimen copy of the Acknowledgment of the project report are given **After Appendix 2**

- 3.4 Abstract** – Abstract should be one page synopsis of the project report typed double line spacing, Font Style Times New Roman and Font Size 14.

- 3.5 Table of Contents** – The table of contents should list all material following it as well as any material which precedes it. The title page 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 **Appendix 3**.

- 3.6 List of Tables** – The list should use exactly the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.

- 3.7 List of Figures** – The list should use exactly the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head.

- 3.8 List of Symbols, Abbreviations and Nomenclature** – One and a half spacing should be adopted or typing the matter under this head. Standard symbols, abbreviations etc. should be used.

- 3.9 Page numbering**

The preliminary parts are numbered in roman numerals (i, ii, etc). The first page of the first chapter (Introduction) onwards will be numbered in Arabic numerals 1 2 3 etc at the bottom, centered

- 3.10 Spacing**

The project, including the abstract, dedication, acknowledgements, and introduction, must be 1.5 line-spaced. Footnotes, bibliographies, long quoted passages, as well as items in lists, tables, and appendices may be single-spaced if that style is recommended by the committee chair. Your project must be printed on one side of the paper.

- 3.11 Numbering sections, subsections, equations, figures etc**

A word on numbering scheme used in the project is in order. It is common practice to use decimal numbering in the project. If the chapter number is 2, the section numbers will be 2.1, 2.2, 2.3 etc. The subsections in section 2.2 will be numbered as 2.2.1, 2.2.2 etc. Unless

essential, it is not necessary to use numbers to lower levels than three stages. Headings of paragraphs below the subsections may be bold faced and in sentence case.

Similarly, it is useful and convenient to number the figures also chapter-wise. The figures in chapter 4 will be numbered Fig.4.1, Fig 4.2 etc. This helps you in assembling the figures and putting it in proper order. Similarly, the tables are also numbered as Table 4.1 Table 4.2 etc. All figures and tables should have proper captions. Usually the figure captions are written below the figure and table captions on top of the table. All figures should have proper description by legends, title of the axes and any other information to make the figures self explanatory. Figures in color are not essential, but if it is essential, can be given. If used, all copies submitted should have figures in color.

The same numbering scheme can be used for equations also. Only thing to be remembered is that references to the figures are made like Fig 4.2 and equations as Eqn(5.8) and tables as Table 3.8. If there are some appendices, these can be numbered as A1, A2, A3 etc. The equations in these appendices can be numbered as (A1.1), (A2.3) etc.

### 3.12 Font Type and Margin

Details	Font Type	Font size	Spacing
<b>Chapter headings with chapter number on top</b>	Times New Roman	14pt bold capitals	Centered
<b>Section headings</b>	Times New Roman	12pt bold capitals	Left adjusted
<b>Subsection headings</b>	Times New Roman	12pt. sentence case	Left adjusted
<b>Paragraph headings</b>	Times New Roman	12pt. bold sentence case	Left adjusted
<b>Body of thesis</b>	Times New Roman	12 pt	Adjusted on both left and right and with 1.5 spacing for text and double spacing for equations
<b>Margins</b>	Left Margin	1.5 inch	To accommodate binding area
	Right Margin	1.25 inch	
	Top	2.0inch	On pages on which chapter begins
		1.0 inch	Other pages
	Bottom	1.25 inch	

**3.13 Chapters** – The chapters may be broadly divided into 3 parts (i) Introductory chapter, (ii) Chapters developing the main theme of the project work (iii) and Conclusion.

The main text will be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

- ❖ Each chapter should be given an appropriate title.
- ❖ Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
- ❖ 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.

Chapter – I	:	Introduction
Chapter – II	:	Analysis
Chapter – III	:	Design
Chapter – IV	:	Implementation
Chapter – V	:	Conclusion &Future work

**3.14 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.

**3.15 List of References** –The listing of references should be typed 4 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 Phenomena of Sm Se1 – X Asx', Pramana – Journal of Physics Vol.42, No.1, pp.421-425.
2. Barnard, R.W. and Kellogg, C. (1980) 'Applications of Convolution Operators to Problems in Univalent Function Theory', Michigan Math. 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. TYPING INSTRUCTIONS:

The impression on the typed copies should be black in colour.

One and a half spacing should be used for typing the general text. The general text shall be typed in the Font style 'Times New Roman' and Font size 14.

\* \* \* \* \*

**APPENDIX 1**

(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**

<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 14><1.5 line spacing><Italic>

**NAME OF THE DEGREE**

<Font Size 16>

**IN**

**BRANCH OF STUDY**

<Font Size 14>

**NAME OF THE COLLEGE**

<Font Size 14>

College LOGO

**MONTH & YEAR**

<Font Size 14>

**UNIVERSITY NAME**

<Font Size 16><1.5 line spacing>

**SPECIMEN**

**SOME PERFORMANCE ASPECTS CONSIDERATIONS OF  
A CLASS OF ARTIFICIAL NEURAL NETWORK**

**A PROJECT REPORT**

*Submitted by*

**DEEPTESH AGARWAL  
ANIL KUMAR GUPTA**

*in partial fulfillment for the award of the degree*

*of*

**BACHELOR OF ENGINEERING**

*in*

**COMPUTER SCIENCE AND ENGINEERING**



**JUNE 2009**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**FACULTY OF ENGINEERING  
(AFFILIATED TO RGTU)**

**BHOPAL (M.P.)**

**APPENDIX 2**  
(A typical specimen of Bonafide Certificate)  
<Font Style Times New Roman>

**COLLEGE NAME**

COLLEGE LOGO

**CERTIFICATE**

This is to Certified that this project report “.....**TITLE OF THE PROJECT.....**”is submitted by “.....**NAME OF THE CANDIDATE(S).....**” who carried out the project work under my supervision.

I approve this project for submission of the Bachelor of Engineering in the Department of <Department name>, College name, affiliated to University name.

<<Signature of the Head of the Department>>  
**SIGNATURE**

<<Name>>  
**HEAD OF THE DEPARTMENT**

<<Department>>

<<Full address of the Dept & College >>

<<Signature of the Supervisor>>  
**SIGNATURE**

<<Name>>  
**SUPERVISOR**

<<Academic Designation>>

<<Department>>

<<Full address of the Dept & College >>

## SPECIMEN

# FACULTY OF ENGINEERING BHOPAL (M.P)



## CERTIFICATE

This is to Certified that this project report “.....**TITLE OF THE PROJECT**.....”is submitted by “.....**NAME OF THE CANDIDATE(S)**.....” who carried out the project work under my supervision.

I approve this project for submission of the Bachelor of Engineering in the Department of Computer Science & Engineering, Faculty of Engineering, affiliated to RGTU, Bhopal (M.P.).

Prof. S.K.Pandey  
**HEAD OF THE DEPARTMENT**

Computer Science and Engineering  
Faculty of Engineering  
Bhopal

Prof. G.S.Prajapati  
**SUPERVISOR**

Asst. Professor  
Computer Science and Engineering  
Faculty of Engineering  
Bhopal

## SPECIMEN

## ACKNOWLEDGEMENT

It gives me immense pleasure to express my deepest sense of gratitude and sincere thanks to my highly respected and esteemed guide .....(name of guide with deptt. name)...., VNSFE Bhopal, for their valuable guidance, encouragement and help for completing this work. Their useful suggestions for this whole work and co-operative behavior are sincerely acknowledged.

I would like to express my sincere thank to **Dr. D.K. Swami, Director, VNSFE, Bhopal** for giving me this opportunity to undertake this project. I would also like to thank **Dr. S.R. Nigam, principal** for whole hearted support.

I also wish to express my gratitudes to **Asst. prof. S.K. Pandey HOD (Computer Science and Engineering)** for his kind hearted support. I am also grateful to my teachers .....(put teachers name)..... for their constant support and guidance.

I also wish to express my indebtedness to my parents as well as my family member whose blessings and support always helped me to face the challenges ahead.

At the end I would like to express my sincere thanks to all my friends and others who helped me directly or indirectly during this project work.

**Place: Bhopal**

**Student Name**

Date:

Enrollment no.

**APPENDIX 3**  
 (A typical specimen of table of contents)  
 <Font Style Times New Roman>

**TABLE OF CONTENTS**

<b>CHAPTER NO.</b>	<b>TITLE</b>	<b>PAGE NO.</b>
	<b>TITLE PAGE</b>	<b>(WITHOUT ANY NUMBER)</b>
	<b>CERTIFICATE</b>	<b>i</b>
	<b>ABSTRACT</b>	<b>ii</b>
	<b>ACKNOWLEDGEMENT</b>	<b>iii</b>
	<b>TABLE OF CONTENTS</b>	<b>iv</b>
	<b>LIST OF TABLE</b>	<b>xvi</b>
	<b>LIST OF FIGURES</b>	<b>xviii</b>
	<b>LIST OF SYMBOLS</b>	<b>xxvii</b>
<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 GENERAL	1
	1.2 .....	2
	1.2.1 General	5
	1.2.2 .....	12
	1.2.2.1 General	19
	1.2.2.2 .....	25
	1.2.2.3 .....	29
	1.2.3 .....	30
	1.3 .....	45
	1.4 .....	58
<b>2.</b>	<b>LITERATURE REVIEW</b>	<b>69</b>
	2.1 GENERAL	75
	2.2 .....	99
	2.2 .....	100

**APPENDIX 4**

*Chapter – I*  
*Introduction*