SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

MANUAL FOR PREPARATION OF B. TECH [EEE] PROJECTREPORT

(Prescribed Format and Specification)

1. GENERAL:

The manual is intended to provide broad guidelines to the B.Tech students to prepare the project report.

2. NUMBER OF COPIES TO BESUBMITTED:

- a) Number of copies= Number of Students in the batch+1 [If guide needs hardcopy, submit them separately. Internal/External signature won't be there in guide's copy]
- b) 1 CD (PDF ONLY, Top of the CD write your batch number in permanent marker)

3. SIZE OF PROJECTREPORT:

The size of project report should not exceed 60 pages.

4. ARRANGEMENT OF CONTENTS OF PROJECTREPORT:

The sequence in which the project report should be arranged is as follows:

- 1. Cover Page & Title page
- 2. Bona fide Certificate
- 3. Acknowledgement
- 4. Abstract
- 5. Table of Contents
- 6. List of Tables
- 7. List of Figures
- 8. List of Symbols and Abbreviations
- 9. Chapters
- 10. References
- 11. Appendices
- 12. List of Publications

Tables and Figures shall be introduced in the appropriate places.

5. PAGE DIMENSIONS ANDMARGIN:

The dimensions of the final bound copies of the project report should be $297 \text{mm} \times 210 \text{mm}$ (Standard A4 size).

The project report should have the following page

margins Top edge : 25 to 30mm

Bottom edge : 25 to 30mm

Left side : 35 to 40 mm

Right side : 20 to 25mm

The project reports hould be prepared on good quality white paper preferably 75 gsm. Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

6. PROJECT REPORT PREPARATION:

The students shall submit a typed copy of the manuscript to the supervisor for the purpose of approval. In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final project report. Upon approval of the manuscript by the supervisor, the final project report should be prepared according to the specification outlined in this section as well as in the following sections

6.1 General Typing Instructions:

Corrections, interlineations and crossing out of letters or words will not be permitted in any of the copies of the project report intended for submission. Erasures, if made, should be neatly carried out in all copies. A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page. The last word of any page should not be split using a hyphen. One and a half spacing should be used for typing the general text.

The general text shall be typed in Font Style "Times New Roman" and Font Size12.

Single spacing should be used for typing:

- (i) Long Tables
- (ii) Long quotations
- (iii) Footnotes
- (iv) Multiline captions
- (v) References
- All quotations exceeding one line should be typed in an indented space the indentation being 15mm from either margin.
- The headings of all items 2 to 13 listed in section 4 should be typed in capital letters without punctuation and centered 50mm below the top of the page.
- The text should commence 4 spaces below this heading.
- The page numbering for all items 1 to 9 should be done using lower case Roman numerals
 and the pages thereafter from Chapter 1 onwards should be numbered using Arabic
 numerals.
- All page numbers (whether it is in Roman or Arabic numbers) should be typed without
 punctuation on the upper right hand corner 15mm from top with the last digit inline
 with the right hand margin.

- The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered (ii) of consecutively thereon for the remaining pages till the main text of chapter 1. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.
- Any statement to be highlighted or emphasized must be done using regular bold letters.
 Italics or underlining is not permitted for this purpose.
- **6.2 Cover Page & Title Page:** A specimen copy of the Cover page & Title page for project report is given in Annexure I.
- **6.3 Bona fide Certificate:** The Bona fide Certificate shall be in double line spacing using Font Style Times New Roman, Font Size 12, as per the format shown in Annexure.
 - The certificate shall carry the guide's signature and shall be followed by the guide's name, academic designation (not any other responsibilities of administrative nature), department and full address. The term 'GUIDE' must be typed in capital letters between the guide's name and academic designation.
- **6.4 Acknowledgement:** The acknowledgement shall be brief and should not exceed one page when typed in double spacing. The scholar's signature shall be made at the bottom end above his / her name typed in capitals.
- **6.5 Abstract:** An abstract is not an introduction. It summarizes the main highlights of your project report, including the results. The abstract should not exceed 4 pages typed with double line spacing,

Font Style Times New Roman and Font Size 12 and not include any citations or figures. The abstract should briefly

- Describe the problem and why it is being investigated.
- Summarize the primary methods used in your project report.
- Describe the major results of the project report.
- Summarize the conclusion of the results and the implications of your project report.
- **6.7 Table of contents:** The table of contents should list all material following it as well as any material which precedes it. The title page, Bona fide Certificate and Acknowledgment will not find a place among the items listed in the Table of contents but the page numbers in lower case Roman letters are to be accounted for them. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the Table of contents for project report is given in Annexure.
- **6.8 List of Tables:** The list of tables should have the same captions as they appear above the tables inthetext. One and a half spacing should be adopted for typing the matter under this head.
- **6.9 List of Figures:** The list of figures should have 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.

- **6.10 List of Symbols and Abbreviations:** One and a half spacing should be used for typing the matter under this head. Standard symbols, abbreviations etc. should be used.
- **6.11 Chapters:** Divide your overall work into logical portions, and then develop each portion as a chapter. The logical order is likely to be different from the chronological order you completed the work. 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.

The format for typing Chapter headings, Divisions headings and Sub-division headings are explained through the following illustrative examples.

Chapter heading : CHAPTER 1 INTRODUCTION

Division heading : 1.1 OUTLINE OF

THEISIS Sub-division heading: 1.1.2 Literature review

The word CHAPTER without punctuation should be centered 45mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left hand margin.

The division and sub-division captions along with their numberings should be left justified. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20mm from the left hand margin. Within a division or sub-division, paragraphs are permitted. Even paragraph should commence 3 spaces below the last line of the preceding paragraph, the first letter in the paragraph being offset from the left hand margin by 20 mm.

6.11.1 Numbering of Chapters, Divisions and Sub-Divisions:

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub-divisions within a chapter. For example sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow the number assigned to it.

Every chapter, beginning with the first chapter, should be serially numbered using Arabic numerals. Appendices included should also be numbered in an identical manner starting with Appendix 1.

6.11.2 Numbering of Equations:

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering commencing afresh for each Chapter or Appendix. Thus for example, an equation appearing in Chapter 2, if it happens to be the eighth equation in that Chapter should be numbered (2.8) thus: While referring to this equation in the body of the project report it should be referred to as "Equation (2.8)". (Without quotes).

6.11.3 Tables and Figures:

A Table is meant to tabulate numerical data in the body of the project report as well as in the appendices. All other non-verbal material used in the body of the project report and appendices such as charts, graphs, maps, photographs and diagrams may be designated as figures. A table or figure including caption should be accommodated within the prescribed margin limits and appear on the page following the page where their first reference is made.

Tables and figures on half page or less in length may appear on the same page along with the text, However, they should be separated from the text both above and below by triple spacing.

All tables and figures should be prepared on the same paper or material used for the preparation of the rest of the project report.

Two or more small tables or figures may be grouped if necessary in a single page. Wherever possible, the entire photograph(s) may be reproduced on a full sheet of photographic paper. Photographs if any, should be included in color photocopy form only. More than one photograph can be included in a page. Samples of Fabric, Leather etc, if absolutely necessary may be attached evenly in a page and fixed/pasted suitably and should be treated as figures

6.11.4 Numbering of Tables and Figures:

Tables and Figures appearing anywhere in the project report should bear appropriate numbers. The number of the Table should be given at the top of the table with a caption. The number of the figures should be given at the bottom of the figure—with caption. The rule for assigning such numbers is illustrated through an example. The fourth figure in chapter 3 will be designated as Figure 3.4. Similar rules apply for tables except that the word Figure is replaced by the word Table. If figures (or tables) appear in appendices then figure—3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into the next page—this may be done, but no line should be drawn underneath an unfinished table. The top line of the table continued into the next page should, for example read Table 2.1 (continued) placed centrally and underlined.

6.11.5 References: Within the text, references should be cited in numerical order according to their order of appearance. The numbered reference citation within text should be enclosed in

square brackets. Example: It was shown by Prusa [1] that the width of the plume decreases under these conditions. In the case of two citations, the numbers should be separated by a comma [1,2]. In the case of more than two references, the numbers should be separated by a dash[5-7].

6.11.6 Conclusion Chapter: The conclusion chapter in some sense comprises the "introduction written backwards." The conclusion should include the following:

Review: "Tell the reader what you just told them." Refresh the reader's memory about the contents of each preceding chapter at a level of approximately one to two sentences per chapter. The review can be very effective at enabling the reader to understand the overall scope of your work.

6.12 List of References: The listing should be typed 4 spaces below the heading "REFERENCES" in single spacing left-justified. The References should be arranged in numerical order according to the sequence of citations within the text.

A typical illustrative list is given below.

- [1] Ning, X., and Lovell, M. R., "On the Sliding Friction Characteristics of Unidirectional Continuous FRP Composites," ASME J. Tribol., 124(1), pp. 5-13, 2002.
- [2] Barnes, M., "Stresses in Solenoids," J. Appl. Phys., 48(5), pp. 2000–2008, 2001.
- [3] Jones, J., (2000), Contact Mechanics, Cambridge University Press, Cambridge, UK, Chap.6.
- [4] Lee, Y., Korpela, S. A., and Horne, R. N., "Structure of Multi-Cellular Natural Convection in a Tall Vertical Annulus," Proc. 7th International Heat Transfer Conference, U. Grigul et al., eds., Hemisphere, Washington, DC, 2, pp. 221–226, 1982.
- [5] Hashish, M., "600 MPa Waterjet Technology Development," High Pressure Technology, PVP-Vol. 406, pp. 135-140,2000.
- [6] Watson, D.W., "Thermodynamic Analysis," ASMEPaper No. 97-GT-288, 1997.
- [7] Tung, C. Y., (1982), "Evaporative Heat Transfer in the Contact Line of a Mixture," Thesis, Rensselaer Polytechnic Institute, Troy,NY.
- [8] Kwon, O. K., and Pletcher, R. H., (1981), "Prediction of the Incompressible Flow Over A Rearward-Facing Step," Technical Report No. HTL-26, CFD-4, Iowa State Univ., Ames,IA.
- [9] Smith, R., (2002), "Conformal Lubricated Contact of Cylindrical Surfaces Involved in a Non-Steady Motion," M. TECH PROJECT REPOET, http://www.cas.phys.unm.edu/rsmith/homepage.html

6.13 Appendices:

Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction and cloud the central theme under discussion. Common examples of information included in appendices are listing of computer programs used to obtain your results, documentation of experimental setups, standards required for your work, tables of raw data, and part drawings.

6.14 List of Publications:

The list of papers published by research scholar during the period of research shall be given under the heading "List of Publications". The listing as per the format specified in section 6.12 should be typed 4 spaces below the heading "LIST OF PUBLICATIONS" in single spacing left-justified.

7. Binding Specifications

Each copy of the project report submitted for evaluation should be sewn and bound using flexible cover of thick white art paper with black tape. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

8. Plagiarism:

Plagiarism is the representation of any work or idea of another author as one's own. Remember at all times that plagiarism is a serious offence that could jeopardize an academic career. Students are reminded that they are required to respect standards of academic honesty and intellectual property in the case of all material used in the report.