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REPORT GUIDELINES PROJECT WORK-I (CE-711) AND PROJECT WORK-II (CE-808)



DETAILED GUIDELINES FOR B.TECH. PROJECT DOCUMENTATION

The final year project work in B.Tech. should represent a coherent body of original work by the students using the technical knowledge and skills acquired during the four years of engineering. It should portray a scholarly approach and thorough knowledge of the subject. B.Tech Project Report is an organized documentation of this work, involving correlation of facts already known. This report should demonstrate a quality as to make a definite contribution to the advancement of knowledge and the students' ability to present the findings in an appropriate manner along with actual accomplishments of the work plainly stated and honestly appraised. In view of above, detailed guidelines and formats for B.Tech. Project Report documentation are explained in the succeeding paragraphs-

B.Tech. Project Report will be submitted hard bounded. The 'Color Code' for binding files should be "Blue" with font of bright coloured print (Golden).

Students should submit **Three Copies** of the project report in the Department Office. The department will retain one copy, second copy will be sent to the departmental library for records and the third one will be the individual student's copy, which will be returned back.

e.g.: - If a Project Team consists of 3 students, then in total the team has to submit 5 copies of Project Report

Departmental Library Copy: 1 Supervisor Copy:1 Individual Copy: 3 (1 each) Total: 5

GENERAL TYPING INSTRUCTIONS

The project report shall be computer typed (**English- British, Font -Times New Roman, Size-12 point**) and printed on good quality A4 size paper. **Margins: Left – 1.5', Right – 1.0', Top – 1.0', Bottom – 1.0'.**

1) Oversize or undersize papers can be included but should not be binded in the report. They can be placed in a pocket at the back side of the report.

2) Tables and figures should conform to the margin specifications (i.e., in line with the text). Large size figures should be photographically or otherwise reduced to the appropriate size before insertion

- 3) Other specifications will be as under- (may be varied but should be uniform throughout the report)
- a. Chapter Headings Center, Bold with Font Size 16.



- b. Sub Heading Bold & Font Size 14
- c. Contents Font Size 12
- d. Paragraphs Justified
- e. Line spacing $1\frac{1}{2}(1.5)$
- f. Single line spacing (1) should be used for typing long tables. (extra space should not be left)

g. Foot notes/contents within header/footer can be 9 or 10 point size. (i.e., should be less than normal text).

h. The Title of all the entries in the 'Table of Contents' should be in Title Case.

NUMBERING INSTRUCTIONS

(a) All the page numbers (whether it is in Roman or Arabic number) should be typed without punctuation in sequence.

- **Preliminary page** of the report (Acknowledgement, Table of Contents etc.) should be numbered in **lowercase Roman numerals**.
- **Pages of main text**, starting with Chapter 1 should be consecutively numbered using **Arabic numerals**. Please ensure that there are no missing, blank, or duplicate pages.

(b) Page number shall be numbered and it should appear at the right-hand corner in the footer as already specified.

(c) Minimum font size is 10-point for page nos. with Times New Roman and should be kept consistent throughout the text.

(d) Equations appearing in each Chapter or Appendix should be numbered serially; the numbering commencing a fresh for each Chapter or Appendix. All the equations can be either center or left aligned. However, this should be followed consistently throughout the text. Equations should be written through "insert equation" feature of MS Word.

(e) Tables and Figures appearing anywhere in the project should bear appropriate numbers.

• Figures: Figure No. should be written at the bottom of the picture e.g. *If a figure in Chapter 3 happens to be the fourth then assign Figure 3.4.*



- *Tables:* Table No. should be written at the bottom of the picture e.g. *If a Table in Chapter 4 happens to be the fourth then assign Figure 4.4.*
- If figures (or tables) appear in appendices th*en figure 3 in Appendix 2 will be designated as Figure A 2.3.*

TABLES & FIGURES

Table: The term 'Table', is meant for tabulated numerical data in the body of the report as well as in the appendices.

Figure: All other non-verbal material used in the body of the report and appendices such as charts, graphs, maps, photographs and diagrams may be designated as 'Figures'.

(a) A table or a figure including their caption should be accommodated within the prescribed margin limits.

It should appear on the page following the text where their first reference has been made.

(b) A table and figure one half 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 appropriate spacing.

(c) Two or more small tables or figures may be grouped if necessary, in a single page.

(d) Unless colors are significant; Figures, Images or Tables may be be printed in gray scale.

e) The Figures number with caption/title are always appended at the bottom of the figure, while the Table number with caption/title is included at the top of the table.

STRUCTURE OF REPORT

Title Pages (Without page number)

- Outer title page
- Inner title page (same as that of outer title page)

Preliminary pages (page i, ii, iii...):

- Acknowledgement
- Declaration
- Certificate
- Abstract
- Table of contents
- List of tables



- List of figures
- List of abbreviations

Main Body (pages 1, 2, 3...):

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Project Methodology (Name may be changed as per the performed work)

Chapter 4: Results and Discussion

Chapter 5: Conclusion

- Conclusion
- Limitations
- Future scope of work

References

Appendices

GENERAL GUIDELINES

 \checkmark An established font of <u>12</u>, <u>Times New Roman and paragraph style</u> must be followed consistently throughout the report.

✓ Type <u>1.5 spacing</u> throughout the text.

 \checkmark Units and symbols should conform to the international system of units.

 \checkmark Avoid the use of jargon, nouns as adjectives, split infinitives, improper matching of subjects and verbs, changes of tense in mid-paragraph and redundancy and verbosity. More than a very few errors in spelling or typography leave an impression of carelessness on the examiners.

DESCRIPTION OF THE DIFFERENT SECTIONS OF A REPORT

Cover/Title Page: The first page of the report is the cover page; and the print-out of this should be taken on glossy paper (refer format in Appendix 'A'). This title page will be also printed on the hard bound cover of the Project Report.

• Cover Page: This should be written as per the format mentioned in Appendix A.



•Certificate: The Certificate shall be as per format mentioned in Appendix E. The certificate should bear original signatures of Project Coordinator, Project Guide and HOD/OIC, with date.

• **Declaration:** This should be written as per the format mentioned in Appendix D. It should be signed in original by all the students (project team members).

• Acknowledgement: This should be written as per the format mentioned in Appendix C. The acknowledgement shall be brief and should not exceed one page. The students' signature shall be made at the bottom of the page (above their name typed in capital). Over here the students can acknowledge the help and guidance received from different persons.

• Abstract: This is the most important part of the Project Report. It should be a distillation of the entire work: - a concise description of the problem addressed, methodology used to solve it along with obtained results and the conclusions drawn. It should be always written in third persons' language and not exceeding one page.

• **Table of Contents:** This should be written as per the format mentioned in Appendix B. This should list all the material following it as well as any material which precedes it. The Certificate, Decalration and Acknowledgement will be placed in the Table of Contents along with the page numbers in lower case Roman Numerals. Page starting with Introduction (Immediate after the Table of contents) should be consecutively numbered using Arabic Numerals. The contents page should be typed in Times New Roman; Font Size- 12 and 1.5 line spacing. (Refer format in Appendix 'D').

• List of Tables, Figures and Abbreviations: This should list all the tables, figures and abbreviations used in the report separately

• **Introduction:** The introduction should detail out the actual overview to the project. This should cover the identification of need, preliminary investigation and feasibility study. This study (feasibility) includes the technical, economical as well as operational feasibility. It may contain the advantages & applications of the Project.

• Literature Survey (Literature Review): The Report should contain a detailed account of the historical origin and significance of the associated technology and its related theory on which the entire project is based. (This should be organized as per individual's requirement.) This should include a review/survey of previous works done, their identified limitation as well as any recent developments done in the same area.

• Proposed Methodology: This chapter should cover the following heads as applicable-



(a) Formulation & Presentation of Problem: This should cover the problem definition (scope of project) along with its aims and objectives.

(b) Project Approach: The complete block diagram/flow diagrams of the planned project should be given and explanation should be mentioned block-wise in detail. It should detail out the entire methodology used.(c) Materials/ Equipment/ Test Procedures/Software: The basic requirements and specifications should be given for the implementation of the project.

• Result Analysis and Discussion-

(a) The test results can be presented in the form of figures, graphs, charts or tables as applicable. This can contain comparative analysis of the results obtained from the proposed as well as existing methods.

(b) Inferences: This should contain the inferences/logical findings drawn on the results obtained from the current proposed technique.

• Conclusion: This covers the various set of conclusions that are derived at the end of the work.

Limitations and Future Scope of the Project: The Limitations serves as a source for the future improvements/updations of the project. Enhancements done in the project, can serve as guidelines for further extension to the junior students.

• **Appendices:** Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction to the central theme under discussion. Appendices should be numbered using Arabic numerals, e.g., Appendix 1, Appendix 2, etc.

• **References & Bibliography:** The format for writing 'Bibliography' & 'References' should be as per APA Style Reference Citations. Typing font size should be 12 (Times New Roman). The citations and sequencing of references should be followed as per APA referencing guidelines. (enclosed)

• Except for the standard formats; it is not mandatory to stick exactly to the headings stated above. The idea and the content should be the same while the chapter headings may vary. The other concerned details (in exceptional cases) should be appended or updated as per the requirements specific to a particular project work.