

CARE College of Engineering  
(An Autonomous Institution)  
Affiliated to Anna University, Chennai, Approved by AICTE New Delhi.  
Accredited by NAAC with 'A' Grade  
No.27, Thayanur, Tiruchirappalli. 620 009. Tamilnadu.

**A MANUAL**  
*For*  
**PREPARATION OF MINI PROJECT REPORT**  
**B.E./B.Tech.**

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## **FORMAT FOR PREPARATION OF MINI PROJECT REPORT**

### **for B.E./B.TECH.**

#### **1. GENERAL:**

The manual is intended to provide broad guidelines to the B.E. Candidates in the preparation of the project report. In general, the project report shall report, in an organized and scholarly fashion an account of original research work of the candidate leading to the discovery of new facts or techniques or correlation of facts ready known (analytical, experiments, hardware oriented etc.)

#### **2. NUMBER OF COPIES TO BE SUBMITTED:**

B.E./B.Tech. Students should submit six copies to the Head of the Department concerned on or before the specified date. The Head of the Department shall send

- i. One copy to the office of Controller of Examinations.
- ii. One copy to the Department library.
- iii. One copy to the Main library.
- iv. One copy to the supervisor and
- v. One copy to the student concerned.

#### **3. SIZE OF PROJECT REPORT:**

The size of project report should not exceed 60 pages of typed matter reckoned from the first page of chapter 1 to the last page.

#### **4. 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
2. Bonafide Certificate
3. Abstract
4. Acknowledgement
5. Table of Contents
6. List of Tables
6. List of Figures
8. List of Symbols, Abbreviations and Nomenclature
9. Chapters
10. Appendices
11. References

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

#### **5. PAGE DIMENSION AND BINDING SPECIFICATIONS:**

The dimensions of the report/thesis should be 290mmx205mm. Standard A4 size (297 mm x 210 mm) paper may be used for preparing the copies. The Report /Thesis (at the time of submission) should have the following page margins:

Top edge	:	30 to 35 mm
Bottom edge	:	25 to 30 mm
Left side	:	35 to 40 mm

Right side : 20 to 25 mm

The report/thesis should be prepared on good quality white paper preferably not lower than 80gsm.

Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

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. The cover should be **printed in black letters** and the text for printing should be identical.

## **6. PREPARATION FORMAT:**

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

**6.2 Bonafide Certificate** - The Bonafide 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.

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

**6.4 Table of Contents**–The table of contents should include 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**.

**6.5 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.

**6.6 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.

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

**6.8 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. Foot notes 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.

**6.9 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 an 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.

**6.10 List of References** – The listing of references should be typed 4s paces 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. Aripnammal S. and Natarajan S. (1994), ‘Transport Phenomena of Sm Se1-x Asx’, Pramana–Journal of Physics, Vol. 42, No.5, pp.421-425.
2. Barnard R.W.and KelloggC.(1980)‘Applications of Convolution operators to Problems in univalent function theory’, Michigan Mach.Journal,Vol.27, pp.1-94.3.
3. Jankins G.M. and Walts D.G. (1968), ‘Spectral Analysis and its Applications’, Holder Day, Sanfrancisco.
4. 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.

**6.10.1 Table and figures** – By the word Table, is meant tabulated numerical data in the body of the project report as well as in the appendices. All other non-verbal materials used in the body of the project work and appendices such as charts, graphs, maps, photographs and diagrams may be designated as figures.

## 7. TYPING INSTRUCTION

The impression on the typed copies should be black in colour. One and half spacing should be used for typing the general text. The general text shall be typed in the Front style ‘Times New Roman’ and Font size 14. The word CHAPTER without punctuation should be centered 50mm 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 20 mm, inside from the left hand margin.

\*\*\*\*\*

## **APPENDIX 1**

(A typical Specimen of Cover Page & Title Page)  
<Font Style Times New Roman–Bold>

# **TITLE OF MINI PROJECT REPORT**

<Font Size18><1.5line spacing>

## **A MINI PROJECT REPORT**

<Font Size14>

*Submitted by*

<Font Size14><Italic>

**NAME OF THE CANDIDATE(S) (Reg.No.)**

<Font Size16>

*In partial fulfillment for the award of the degree of*

<Font Size14><1.5line spacing><Italic>

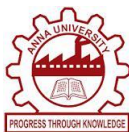
**NAME OF THE DEGREE**

<Font Size14>

**IN**

**BRANCH OF STUDY**

<Font Size14>



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**No.27, Thayanur, Tiruchirappalli. 620 009. Tamilnadu.**

<FontSize16><1.15linespacing>

**MONTH & YEAR**

<FontSize14>

**SPECIMEN**

# **PRODUCTION OF ETHANOL FROM CASSAVA STEM**

**A MINI PROJECT  
REPORT**

*Submitted by*

**S.ANITHA(Reg.No.)  
A.JEEVITHA(Reg.No.)**

*In partial fulfillment for the award of the degree of*  
**BACHELOR OF TECHNOLOGY**

**IN  
BIOTECHNOLOGY**



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**NOVEMBER 2016**

## APPENDIX 2

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

# CARECOLLEGE OF ENGINEERING

<Font Style Times New Roman–size-18>

## BONAFIDE CERTIFICATE

<Font Style Times New Roman–size-16>

<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) (Reg.No.).....” who carried out the mini project work under my supervision.

<<Signature of the HOD with date>><<Signature of the Supervisor with date>>

<<Name of the HOD>>

<<Name of the Supervisor>>

Professor and Head

<<Academic Designation of Supervisor>>

Submitted to the Viva voce Examination held on \_\_\_\_\_

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**



**APPENDIX 3** (A typical specimen of table of contents)

<Font Style Times New Roman>

**TABLE OF CONTENTS**

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	List of Figures	v
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	1.1.1 Applications	
	1.1.2 Advantages	
	1.2 ENVIRONMENTAL AND HEALTH IMPLICATION OF ETHANOL	
	1.3 GLOBAL PRODUCTION OF ETHANOL	
	1.4 GLOBAL CASSAVA PRODUCTION	
	1.5 CASSAVA PLANT AND NEED FOR ETHANOL PRODUCTION	
	1.6. CASSAVA STEM	
<b>2.</b>	<b>REVIEW OF LITERATURE</b>	
<b>3</b>	<b>MATERIALS AND METHODS</b>	
	3.1 BIOCHEMICAL CHARACTERIZATION	
	3.1.1 Estimation of moisture and total solids	
	3.1.2 Estimation of ash content	
	3.1.3 Estimation of total soluble sugar	
	3.1.4 Estimation of starch	
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	3.1.6 Estimation of cellulose content	

3.1.7 Estimation of hollocellulose and hemicellulose

3.1.8 Estimation of lignin content

3.1.9 Estimation of pectin content

3.1.10 Estimation of lipid content

3.1.11 Estimation of crude fiber

### 3.2 OPTIMIZATION OF PRODUCTION MEDIUM USING ONE FACTOR AT A TIME METHOD

3.2.1 Medium components

3.2.2 Microorganism and culture condition

3.2.3 Effect of carbon sources

3.2.4 Effect of nitrogen sources

3.2.5 Effect of minerals

## 4. **RESULTS AND DISCUSSIONS**

### 4.1 BIOCHEMICAL CHARACTERIZATION

### 4.2 OPTIMIZATION OF PRODUCTION MEDIUM USING ONE-FACTOR-AT-A-TIME METHOD

4.2.1 Effect of carbon source

4.2.2 Effect of nitrogen sources

4.2.3 Effect of minerals

## 5. **CONCLUSION**

## **REFERENCES**

## **APPENDICES**

### **Annexure I**

### **Annexure II**

***APPENDIX – 4 (A typical Sample of List of Tables)***

**LIST OF TABLES**

<b>TABLE</b>	<b>TITLE</b>	<b>PAGE NUMBER</b>
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4.2	Optimization of production medium for one factor at a time	

***APPENDIX – 5 (A typical Sample of List of Figures)***

**LIST OF FIGURES**

FIGURE	TITLE	PAGE NUMBER
4.1	Biochemical characterization of YTP1 and H740/92	
4.2	Optimization of production medium for one factor at a time	

*APPENDIX – 6: (A typical Sample of List of Symbols and Abbreviations)*

**ABBREVIATIONS**

BSA	Bovine serum albumin
FCR	Folin-Ciocalteu's Phenol Reagent
g	Gram
g/l	Gram/ Litre
mg	Milligram
wt	Weight
μl	Microlitre
ml	Millilitre
hr	Hour
min	Minutes
rpm	Rotation per minutes
nm	Nanometer
%	Percentage