

GUIDELINES FOR PREPARING THE PROJECT REPORT

FOR PG

1. ARRANGEMENT OF CONTENTS

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

1. Cover Page
2. Inside cover page
3. Certificate from external guide (if any)
4. Certificate from the college
5. Acknowledgement
6. Declaration
7. Abstract
8. Table of contents
9. List of tables
10. List of figures
11. Abbreviations (if any)
12. Nomenclature (if any)
13. Chapters
14. Appendices
15. References
16. List of papers published, based on the report (if any)

2. PAGE DIMENSION AND BINDING SPECIFICATIONS:

The project report should be prepared in A4 size. The dissertation shall be properly bound; using rexine of **Black** color otherwise it will be rejected. The bound front cover should indicate in **Gold** embossed letter.

3. PREPARATION FORMAT:

3.1 Cover Page – A specimen copy of the Cover page of the project report is given in **Annexure A**. The fonts and locations of various items on this page should be exactly as shown in **Annexure A**

3.2 Inside cover page Same as cover page shown in **Annexure B**

3.3 Acknowledgement This should not exceed one page. **Annexure C**

3.4 Certificate of external guide (if applicable) **Annexure E**

3.5 Abstract – Abstract should be one page synopsis of the project work, typed in 1.5 line spacing (about 300 words with key words). Font Style Times New Roman and Font Size 12. **See Annexure F**

3.6 Table of Contents – The table of contents should list all headings, sub headings after the table of contents page, as well as any titles preceding it. The title page and Bonafide Certificate will not find a place among the items listed in the Table of Contents. 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 G**

3.7 List of Tables – The list should use exactly the same captions as they appear above the tables in the body of the report. One and a half spacing should be adopted for typing the matter under this head. **See Annexure H.**

3.8 List of Figures – The list should use exactly the same captions as they appear below the figures in the body of the text. One and a half spacing should be adopted for typing the matter under this head. All charts, graphs, maps, photographs and diagrams should be designated as figures. X and Y axes titles are mandatory for all the graphs. **See Annexure I.**

3.9 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. **See Annexure J and K.**

3.10 Chapters – The chapters may be broadly divided into 3 or 4 parts, (i) Introductory chapter, (ii) Literature Review (if any) (iii) theoretical analysis, (iv) Experimental Investigations, (v) Experimental results, (vi) Discussion of results, (vii)

Summary, conclusions and recommendations, (viii) References, (ix) Appendices.

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. **See Annexure L.**

3.11 List of References –The listing of references should be typed 4 spaces below the heading “REFERENCES” in alphabetical order, in single spacing and left – justified. The reference material should be listed in the alphabetical order of the surname of the first author. The name of the author/authors should be immediately followed by the year and other details. **See Annexure M.**

3.13 List of papers published based on the report -See Annexure N.

4. TYPING INSTRUCTIONS:

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

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 12. Use A4 (210 mm X 297 mm) bond un-ruled paper (80 gsm) for all copies submitted. Use one only side of the paper for all printed/typed matter.

4.1. NUMBERING

Every page in the project report, except the project report title page, must be accounted for and numbered.

The page numbering, starting from acknowledgements and till the beginning of the introductory chapter, should be printed in small Roman numbers, i.e, i, ii, iii, iv.....

The page number of the first page of each chapter should not be printed (but must be accounted for). All page numbers from the second page of each chapter should be printed using Arabic numerals, i.e. 2,3,4,5...

All printed page numbers should be located at the right corner at the bottom of the page.

4.2 CHAPTERS

Use only Arabic numerals. Chapter numbering should be centered on the top of the page using large bold print. <size 15><Times new Roman>

4.3 SECTIONS

Use only Arabic numerals with decimals. Section numbering should be left justified using bold print. Example: 1.1, 1.2, 1.3, etc.

4.3.1 SUB SECTIONS

Use only Arabic numerals with two decimals. Subsection numbering should be left Justified using bold print. Example: 1.1.1, 1.1.2, 1.1.3, etc.

4.4 EQUATION(S)/FORMULE

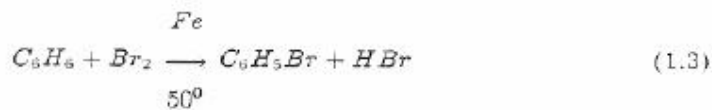
Use only Arabic numerals with single decimal. Equation numbers should be right justified using normal print.

Format: (<Chapter number>.<Equation serial number>).

Example Chapter 1

$$L = f_1(\underline{x}) + \sum_{i=1}^m \mu_i g_i(\underline{x}) + \sum_{j=2}^k \lambda_{1j} (f_j(\underline{x}) - \varepsilon_j) \quad (1.1)$$

$$\int dU = \int \left[\frac{1}{2} \epsilon_0 E(cB) + \frac{1}{\mu_0} B \left(\frac{E}{c} \right) \right] A dx \quad (1.2)$$



4.5 REFERENCES IN THE TEXT - In a project report there is a need to make references in the text, and relate them to notes, or to a list of bibliographical references, at the end of the description of the work.

one author: Williams, G. State and Society in. *Onco State, Nigeria, Afrographika*, 1980.

two authors: Phizacklea, A & Miles, R. Labour and Racism. *London, Routledge&Kegan Paul*, 1980.

3 + authors: O'Donovan, P., et al. The United States. *Amsterdam, Time-Life International*, 1966.

4.6 REFERENCES

Use only Arabic numerals. Serial numbering should be carried out based on Alphabetical order of surname or last name of first author. The format is written like, author name followed by year followed by title of the work followed by details of the journal. **Ref. Annexure 10.**

5 TEXT

5.1 COLOR - Black

5.2 FONT

5.2.1 REGULAR TEXT - Times Roman 12 pts. and normal print.

5.2.2 CHAPTER HEADING - Times Roman 15 pts. Bold and capital.

5.2.3 SECTION HEADINGS - Times Roman 12 pts. Bold and capital.

5.2.4 SUBSECTION HEADINGS - Times Roman 12 pts. Bold print and leading capitals i.e, only first letter in each word should be in capital.

5.2.5 SPECIAL TEXT - Italics/Superscript /Subscript/Special symbols, etc., as per necessity. Special text may include footnotes, endnotes, physical or chemical symbols, mathematical notations, etc.

5.2.6 REFERENCES – same font as regular text, serial number and all authors names to be in bold print. Title and Journal names should be in italic

6. PARAGRAPH SPACING

Use 6 pts before & 6 pts after paragraphs.

All paragraphs in the seminar/project report should be left justified completely, from the first line to the last line.

Use 1.5 spacing between the regular text and quotations.

6.1 Provide double spaces between:

- (a) From top of page to chapter title,
- (a) Chapter title and first sentence of a chapter,

6.2 Use single spacing

- (a) In footnotes and endnotes for text.

(b) in explanatory notes for tables and figures.

(c) in text corresponding to bullets, listings, and quotations in the main body of seminar/project report .

6.3 Use single space in references and double space between references.

7 JUSTIFICATION

The text should be fully justified

8 MARGINGS

The margins for the regular text are as follows

LEFT - 1.5”

RIGHT - 1”

TOP - 1”

BOTTOM - 1”

9 TABLES

All tables should have sharp lines, drawn in black ink, to separate rows/columns as and when necessary.

Tables should follow immediately after they are referred to for the first time in the text. Splitting of paragraphs, for including tables on a page, should be avoided. Provide double spaces on the top and the bottom of all tables to separate them from the regular text, wherever applicable.

The title of the table etc. should be placed on the top of the table

The title should be centered with respect to the table. The titles must be in the same font as the regular text and should be single spaced. The title format is given below: Table<blank><chapter number>.<serial number><left indent><table title>.

10 FIGURES

All figures, drawings, and graphs should be drawn in black ink with sharp lines and adequate contrast between different plots if more than one plot is present in the same graph.

The title of the figure etc. should be placed on the bottom of the figure.

Figures should follow immediately after they are referred to for the first time in

the text. Splitting of paragraphs, for including figures on a page, should be avoided. Provide double spaces on the top and the bottom of all figures to separate them from the regular text, wherever applicable. Figures should be centered with respect to the figure. The titles must be in the same font as the regular text and should be single spaced. The title format is given below:

Fig. <blank><chapter number>.<serial number><left indent><figure

Annexure A

Sample Format of Bound front Cover:

YOUR PROJECT TITLE< Centered, Font Size 16 - 1.5line spacing>

A Project report submitted to

VELAGAPUDI RAMAKRISHNA

SIDDHARTHA ENGINEERING COLLEGE

*In partial fulfillment of the Requirements for the award of the Degree
of*(font – 14 and 1.5 line spacing)

MASTER OF TECHNOLOGY

in

**STRUCTURAL ENGINEERING (or)
GEOTECHNICAL ENGINEERING**

by

(NAMES AND ROLL.NO OF WHOLE BATCH)

Under the esteemed Guidance of

Guide name

Designation (font -14 and bold)



DEPARTMENT OF CIVIL ENGINEERING (font – 12)

V.R.SIDDHARTHA ENGINEERING COLLEGE (font -16 and bold)
(Autonomous)

**(AFFILIATED TO JAWAHARLAL NEHRU TECHNOLOGICAL
UNIVERSITYKAKINADA)**

APPROVED BY AICTE- ACCREDITED BY NBA

VIJAYAWADA-520007 (font – 12)

2020 (font – 14)

Annexure B

Sample format of Third page

YOUR PROJECT TITLE< Centered, Font Size 16 - 1.5line spacing>

A Project report submitted to

VELAGAPUDI RAMAKRISHNA

SIDDHARTHA ENGINEERING COLLEGE

*In partial fulfillment of the Requirements for the award of the Degree
of*(font – 14 and 1.5 line spacing)

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(Autonomous)

**(AFFILIATED TO JAWAHARLAL NEHRU TECHNOLOGICAL
UNIVERSITY KAKINADA)**

APPROVED BY AICTE- ACCREDITED BY NBA

VIJAYAWADA-520007 (font – 12)

2020 (font – 14)

Annexure C

ACKNOWLEDGEMENT (font 12)

It gives me great pleasure to thank(name, designation of the guide), Department of Civil Engineering, for the constant support and guidance given to us throughout the course of this project. He/she has been a constant source of inspiration for us.

We also take the opportunity to acknowledge the contribution of Professor and Head, Department of Civil Engineering, for his support and assistance during the development of the project.

We also take this the opportunity to acknowledge the contribution of all faculty members of the department for their assistance and cooperation during the development of our project. We also thank all the Non Teaching Staff of the Department who helped us in the course of the project. Last but not the least, we acknowledge our friends for their encouragement in the completion of the project.

Names of the students.

Annexure D

DECLARATION

I hereby declare that the project titled “PROJECT TITLE” is a bonfide work duly completed by us. It does not contain any part of the project or thesis submitted by any other candidate to this or any other institute or university.

All such materials that have been obtained from other sources have been duly acknowledged.

(signature)

STUDENT's NAME

(REG.NO.)

Annexure E

CERTIFICATE

This is to certify that the project report entitled “**TITLE OF PROJECT WORK**” submitted by “**NAME OF STUDENTS**” in partial fulfillment for the award of the Degree of Master of Technology in Structural Engineering/ Geotechnical Engineering to the VR Siddhartha Engineering College affiliated to JNTUK, Kakinada is a record of the bonafide work carried out under my guidance and supervision. The results presented in this project report have not been submitted to any other university or Institute for the award of any degree.

SIGNATURE OF THE GUIDE:

NAME

Date

HEAD OF THE DEPARTMENT

NAME

Date

Annexure F

ABSTRACT

The present site under investigation at Ajitsingh Nagar in Vijayawada of Andhra Pradesh is initially a low lying area and used for disposing the urban solid waste for the last few years, through open dumping with out taking any measures to protect the Ground water against pollution. The present study has been taken up to measure the degree of pollution of ground water due to leachate produced in the landfill site. Bore holes were made at eight random locations to measure the depth and characteristics of solid waste. Four sampling wells were made for the collection of ground water samples and they were analyzed for various parameters. All parameters were measured based on Standard methods. It is found that the ground water is contaminated due leachates of Landfill to the large extent and is not suitable for Drinking, Domestic and Irrigation purposes.

Key Words: Landfill, Leachate, Soil profile, Sampling wells

Annexure G

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Annexure J

NOMENCLATURE

C_u Uniformity Coefficient

C_c Curvature Coefficient

Annexure K

ABBREVIATIONS

OMC	Optimum Moisture Content
MDD	Maximum Dry Density
LL	Liquid Limit
PI	Plasticity Index
SI	Shrinkage Index

Annexure L

CHAPTER -1

INTRODUCTION

A common problem of the storage of wastes in landfills, is the potential contamination of soil, groundwater and surface waters that may occur as leachate. This is usually produced by water or liquid wastes moving into, through and out of the landfill and migrates into adjacent areas.

The quantity of leachate produced is affected to some extent by decomposition reactions and initial moisture content; however it is largely governed by the amount of external water entering the landfill, the climate and geomorphology of the area.

The chemical quality of leachate varies as a function of a number of factors. It includes the original nature of the buried waste materials and the various chemical and biochemical reactions that may occur as well as the conditions prevailing throughout the waste materials decomposition.

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Annexure M

REFERENCES

- Abraham, J., F.V. Bracco, and R.D. Reitz (1985)** Comparison of Computed and Measured Premixed Charge Engine Combustion. *Combustion and Flame*, Vol. 60, 309–322.
- Affes, H., N. Trigui, D. Smith, and V. Griaznov (1998)** Shape Optimization of ICEngine Ports and Chambers. *SAE Paper No.980127*.
- Arcoumanis, C., A.F. Bicen, and J.H. Whitelaw (1993)** Measurements in a Motored FourStroke Reciprocating Model Engine. *Journal of Fluids Engineering*, Vol.104.
- Arcoumanis, C., J.H. Whitelaw, W. Hentschel, K.P. Schindler (1994)** Flow and Combustion in a Transparent 1.9 Litre Direct Injection Diesel Engine. *Proc. Instn. Mech.Engrs.*, Vol. 208.
- Arcoumanis, C., Z. Hu, and J.H. Whitelaw (1993)** Steady Flow Characterization of Tumble-Generating Four – Valve Cylinder Heads. *Proc.Instn. Mech. Engrs. Vol 207*.
- Babu, S.S., P.I. Haneef, P.A. Lakshminarayanan, P. Deshpande, N. Bhalla, P. Sagar, and J. Sekar (2005)** Two Methods for Improving Torque of a Diesel Engine in the LowSpeed Range. *SAE Paper No. 2005-26-001*.

Annexure N

LIST OF PUBLICATIONS

I

I REFEREED JOURNALS

1. **Paul,B and V. Ganesan**(2008) Effect of spiral manifold configuration on in-cylinder air motion and turbulence in DI Diesel engine. *Journal of EngineeringApplication of Computational Fluid Mechanics. (Communicated).*

II PRESENTATIONS IN INTERNATIONAL CONFERENCES

1. **Paul, B and V. Ganesan**(2005) Study of air motion inside the cylinder of a DI diesel engine with spiral intake port. *14thInternational Conference of IndianSociety of Mechanical Engineers in the Knowledge Age*, New Delhi, December2005.
2. **Paul, B and V. Ganesan**(2006) Effect of manifold configuration in turbulenceinside the cylinder of a direct injection diesel Engine by CFD Simulation. *Third BSME-ASME International Conference on Thermal Engineering*, Dhaka,Bangladesh, December 2006.
- 4 **Paul, B and V. Ganesan**(2007) Effect of spiral manifold configuration on swirland emissions in a DI diesel engine - A CFD study. *Third InternationalConference on Thermal Engineering*. Jordan, May 2007.
- 5 **Paul, B and V. Ganesan**(2007) Effect of helical-spiral combined manifoldconfiguration on swirl and emissions in a DI diesel engine A CFD study. *International Conference on Computer Aided Engineering*, IIT Madras, India,December 2007.

II PRESENTATIONS IN NATIONAL CONFERENCES

1. **Paul, B and V. Ganesan**(2005) CFD Analysis of the effect of port

configurations

on air motion inside the cylinder of a DI diesel engine. *19th National Conference on IC Engine Combustion, The Combustion Institute, Chidambaram, India, December 2005*