Requirements for Report Writing:

Your report should meet the following standards:

Font Name: Times New Roman
Left Margin: 1 inch
Right Margin: 1 inch
Top Margin: 1 inch
Bottom Margin: 1 inch
Header and Footer: 0.5 inch
Line Spacing: 1.5
Paragraph Spacing: 18 pt
Font Size: 12 pt (for normal text)

Follow following standard for headings.

1. Heading1 (16 pt, Bold)
1.1 Heading2 (14 pt, Bold)
1.1.1 Heading3 (13 pt, Bold)
1.1.1.1 Heading4 (12 pt, Bold)

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. Title Page
3. Acknowledgment
4. Abstract
5. Table of Contents
6. Chapters
7. Appendices (if any)

** Students can add their own topics or sub-topics as per necessity.*

** Justify (alignment) the report for clean look at both left and right side of page.*

**The level of English writing must be appropriate to the level of the respective classes. Normally, there should be no first person references (e.g., I, we, us) in the report. If self-reference is required, reference may be made to "the author" or "this study".*

MAHENDRA VIDYA ASHRAM

Barahi Pith, Bhaktapur - 03

Project Report on

"Project Title"

A ……. Terminal Project Report submitted in the partial fulfillment of the requirements for Grade …….. in <Subject Name>

Under the supervision of

"Supervisor Name"

"Designation"

Submitted by

Full Name

Submitted to

MAHENDRA VIDYA ASHRAM

Barahi Pith, Bhaktapur, Nepal

Mangsir ____, 2082

Project Title

[Subject Name]

A ……. Terminal Project Report submitted in partial fulfillment of the requirements for the Grade ..... in <Subject Name>

Submitted by

Full Name

Submitted to

MAHENDRA VIDYA ASHRAM

Barahi Pith, Bhaktapur, Nepal

Mangsir ____, 2082

ACKNOWLEDGEMENT

It gives us immense pleasure to express our deepest sense of gratitude and sincere thanks to our highly respected and esteemed guide, Er./Mr. …….(Supervisor name with full designation if any), for his/ her valuable guidance, encouragement, and help for completing this work. His/ her useful suggestions for this whole work and co-operative behavior are sincerely acknowledged.

We would like to express our sincere thanks to Er./Mr ……..(with full designation and department), for giving us this opportunity to undertake this project. We would also like to thank Er./Mr. ……..(Head of Department name with full designation) for wholehearted support.

We are also grateful to our teachers (teacher's name with full designation) for their constant support and guidance.

At the end, we would like to express our sincere thanks to all our friends and others who helped us directly or indirectly during this project work.

Student(s) Name

Full Name

ABSTRACT

The use of wastewater has been a great issue worldwide. Despite the issue of wastewater, the generation of electricity has also been crucial for the current scientific and technological world. So, 'Microbial Fuel Cell (MFC)' can be used for the reuse of wastewater to generate electricity.

Although the water that is used and thrown out, wastewater, is considered to be useless, despite its used in irrigation. But it can later carry the risk of damaging the environment. So, 'MFC' can be used for the reuse of the wastewater before irrigation. The MFC can be used effectively in the Bhaktapur district as well. The Hanumante River has more than enough wastewater to supply electricity to a small town, perhaps. Unlike the hydroelectric plants, which take ages to complete and require sophisticated technology, the MFC is cost-effective and time-saving.

In this research project, the anaerobic bacteria were studied in order to generate electricity. The MFC simply uses the bacteria that throw out electrons. The electrons are harvested to convert them into energy. A simple MFC was prepared with the help of top soil, wastewater, a salt bridge, wires, and a bulb. The topsoil was used as a source of bacteria (anode) and the wastewater as a cathode. After completing the task, the bulb lit, which showed that the electricity was being produced.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

1. 1 Background

The protection of sensitive data that has to be transmitted on the computer network has been the most challenging issue in the field of computer science. Cryptographic algorithms play a crucial role in the information society by providing protection from unauthorized access to sensitive data.

Although the security of encryption algorithm like Advanced Encryption Algorithm (AES) is beyond doubt, the limitations in computing power of a personal computer has caused the difficulties for encrypting the data file which is large in size. Hence, this system allows encrypting large files with the existing computational power of personal computers by the use of grid-based computation.

In this research work, a Grid-Based Cryptography application was studied and developed. It is an application that uses the computational resources and power of multiple personal computers to encrypt large files. The encryption standard Advanced Encryption Standard (AES) was used as the encryption. Grid nodes were generated for the computation. Grid manager splits the large text file into small files and distributes them among the available grid nodes. The grid manager constantly checks for untreated files and failures of any grid node. After completing the task, the grid nodes return the cipher text to the grid manager.