**PLUMBING TRADE PROJECT**

TITLE: HACKSAW

CANDIDATES NAME: KIGO YVONNE WAMBUI

INDEX NUMBER: 2051010620

INSTITUTION: KIAMBU NATIONAL POLYUTECHNIC

CLIENT: THE KENYA NATIONAL EXAMINATION COUNCIL AS APARTIAL FULFILLMENT FOR THE AWARD OF A CERTIFICATE IN PLUMBING AND WATER SUPPLY

PROJECT NUMBER:

SUPERVISED BY: MR. PETER KIARIE

SERIES: JUNE-JULY SERIES

TABLE OF CONTENTS

ACKNOWLEDGEMENT

DECLERATION

DEDICATION

PROJECT DESCRIPTION :

1. WORKING DRAWING FOR PLAN SHOWING
   1. CROSS SECTIONAL DRAWING OF HACKSAW AND PIPE LAYOUT
   2. PLAN FOR HACKSAW

2.0 WORKING DRAWING FOR ISOMETRIC SHOWING

2.1 ISOMETRIC DRAWING OF A HACKSAW

3.0 MATERIALS AND APPLIANCES ESTIMATION

3.1 APPLIANCES

3.2 MATERIALS

3.3 COST ESTIMATION OF MATERIALS

3.4 COST ESTIMATION OF APPLIANCES

4.0 LABOR COST ESTIMATION

5.0 WORKING PROGRAMME OF ACTIVITIES FOR THE FIRST PROJECT

5.1 ACTIVITIES PROGRAMME

5.2 OUTLINE PROGRAMME

ACKNOWLEDGEMENT

First I acknowledge the almighty God for His empowerment throughout my entire course. I also acknowledge the efforts of Gifton Kigo, who has been instrumental in research and support throughout the project.

DECLARATION

I declare that this project is my original work and has not been submitted for examination or any other award of plumbing certificate in any institution of higher learning or to the Kenya National Examinations Council.



This project has been handed over to the Kenya National Examinations council with the approval of my lecturer



DEDICATION

I dedicate this project to my beloved mom for her support and encouragement that has left an indelible mark on my educational journey. . Special thanks to my siblings for their support and encouragement during my study.

**PROJECT DESCRIPTION**

This project aims to design and manufacture a high-quality hacksaw, catering to both hobbyists and professionals in metalworking and woodworking. The hacksaw will feature a robust frame constructed from durable materials like steel or aluminum, ensuring longevity and stability during use. An adjustable blade mechanism will provide versatility, allowing users to easily change blades for different cutting needs and materials. Ergonomic handle grips will enhance comfort and control, promoting precise cutting and reducing fatigue. The final design will prioritize user safety and ease of maintenance, offering a reliable tool for precise and efficient cutting tasks in various workshop environments.

1.0 WORKING DRAWING FOR PLAN SHOWING