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KAMPUS BUKIT BESI**

PROGRAMME : DIPLOMA OF MECHANICAL ENGINEERING
COURSE NAME : MECHANICAL ENGINEERING DESIGN
COURSE CODE : MEC332
GROUP : EM1105D

DESIGN PROJECT REPORT

FRUIT COLLECTOR

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DATE OF SUBMISSION:

26 JANUARY 2021

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CHAPTER ONE

INTRODUCTION

1.1 Overview of the Project

Fruit picking is most common work in fruit harvesting industry. It is applied a lot of concept to make that work. In this modern era, our team make new design and tech to make fruit picking faster to increase efficiency. Fruit Collector is our team project for this course the Mechanical Engineering Design (MEC332).

By understand the fundamentals of designing parts, components, and product of various machines the fruit picker become more advance. Our team goals to make fruit collector that reduce cost and time consumption. The fruit collector is made by stainless steel and rubber. These materials are cheap and affordable and long lasting. The materials are lightweight which would make it easy to transport the fruit collector easily. The processes have been simplified and requires much less time and energy to operate. Hence, the cost can reduce significantly. In a conclusion, we can be achieved the objectives of the project by using this device.

1.2 Design Objective

- a) To fulfill requirements for Mechanical Engineering Design (MEC332) projects.
- b) To make new design fruit collector
- c) Designing a new fruit collector using SolidWork software.

1.3 Scope of the Project

- a) This product is to be use by the worker at apple farm.
- b) The product can collect the fruits on a short time(fast).
- c) The design is meant for increase in performance and quality (longer product life span).

1.4 Significant of the Project

1.4.1 To increase engineering knowledge.

To build the new design for fruit collector is related on what kind of the appropriate materials that we can use to lift complex shape of fruit and power screw can be quite hard. After we make a research of the literature review based on this product, we able to improve our knowledge and get a new idea how to set up our product to be better. Then, every group member can give their own idea to create a good criterion of this product so that it can be useful product to others.

1.4.2 Creating the nature of cooperation between group members.

All the members in the group have the same objective which is to design a fruit collector that can be used by the workers at the field. This project gives the opportunity to each group member to show their capability to collaborate by developing ideas to complete this project. This project required of five students to be in one group. All members of the project are involved, every effort is counted to make sure nobody feels