

UNIVERSITI TEKNOLOGI MARA

**MUSCULOSKELETAL PAIN FOR TABLE
TENNIS ACTIVITY: (REBA) ASSESSMENT**

**MUHAMMAD FAIZ BIN MUHAMAD FAUZRI
(2019293022)**

Diploma in Mechanical Engineering

March 2022

ACKNOWLEDGEMENT

Assalamualaikum, praises be to Allah Subhanahuwata'ala for providing me the time, good health, and strength to work in completing this study. Acknowledgements are due to on the behalf of the Faculty of Mechanical of Engineering academics for giving me the opportunity to undergo this course of Final Year Project II (MEC300) as one of the diploma course requirements. High appreciation and deepest gratitude are given to my supervisor Dr. Shukriah Binti Abdullah as the lecturer of Mechanical Engineering (MEC) for his invaluable guidance, encouragement, generous assistance, patience, and strong support throughout this study work, and for his trust on my ability to produce the case study. Other than that, thank you very much, I thank my family for their faith in me because they have sacrificed to give words of encouragement and pray that the project runs smoothly and also, thank you to everyone who helped me in making the Final Year Project a success .Let's not forget the hard work and determination by Dr. Shukriah Binti Abdullah as our Final Year Project Coordinator and my supervisor who has been managing our program very well and guiding the supervisors, panels, and students in order to ensure everything according to schedules smoothly. Above all, I wish everyone happiness and prosperity in their life. May Allah Bless our lives with loved ones in this world and the hereafter. Thank you so much.

ABSTRACT

Today, musculoskeletal disorders are of extensive occupational injuries around the world. These problems represent one-third of all the injuries when playing table tennis. However, because of improper position of students during play a table tennis, the risk of adopting abnormal postures is common. In order to establish appropriate strategies to prevent this deterioration, having accurate information about them is necessary. The purpose of this study was to determine the risk of musculoskeletal pain amongst UiTM Bukit Besi student who playing table tennis. For this project, the methodology used is The Rapid Entire Body Assessment (REBA). The Rapid Entire Body Assessment tool uses a systematic process to evaluate both upper and lower parts of musculoskeletal system for biomechanical and MSD risks associated with the job the task being evaluated. However, the expected result is body posture was evaluated using REBA sheet and it can be concluded that the major areas susceptible to uncomfortable and painful working postures.

TABLE OF CONTENTS

	Page
CONFIRMATION BY SUPERVISOR	3
AUTHOR'S DECLARATION	4
ABSTRACT	5
ACKNOWLEDGEMENT	6
TABLE OF CONTENTS	7
LIST OF TABLES	9
LIST OF FIGURES	10
CHAPTER ONE INTRODUCTION	11
1.1 Background of Study	11
1.2 Problem Statement	12
1.3 Objectives	12
1.4 Scope of Work	12
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Musculoskeletal Pain	14
2.2 Rapid Entire Body Assessment (REBA)	15
2.3 Table Tennis	16
CHAPTER THREE METHODOLOGY	18
3.1 Introduction	18
3.2 Description of How to Analyze using REBA	18
3.3 Flowchart	25
3.4 Gantt Chart FYP I	26
3.5 Gantt Chart FYP II	27
CHAPTER FOUR: RESULTS AND DISCUSSION	28
4.1 Introduction	28

4.2	Reba Score for The Justification of Work	28
4.3	Result of Analysis using REBA Assessment	28
4.4	Analysis posture	30
4.5	Identify Musculoskeletal Pain	30
4.6	Discussion	32
 CHAPTER FIVE : CONCLUSION AND RECOMMENDATIONS		33
5.1	Conclusions	33
5.2	Recommendation	33
REFERENCES		35