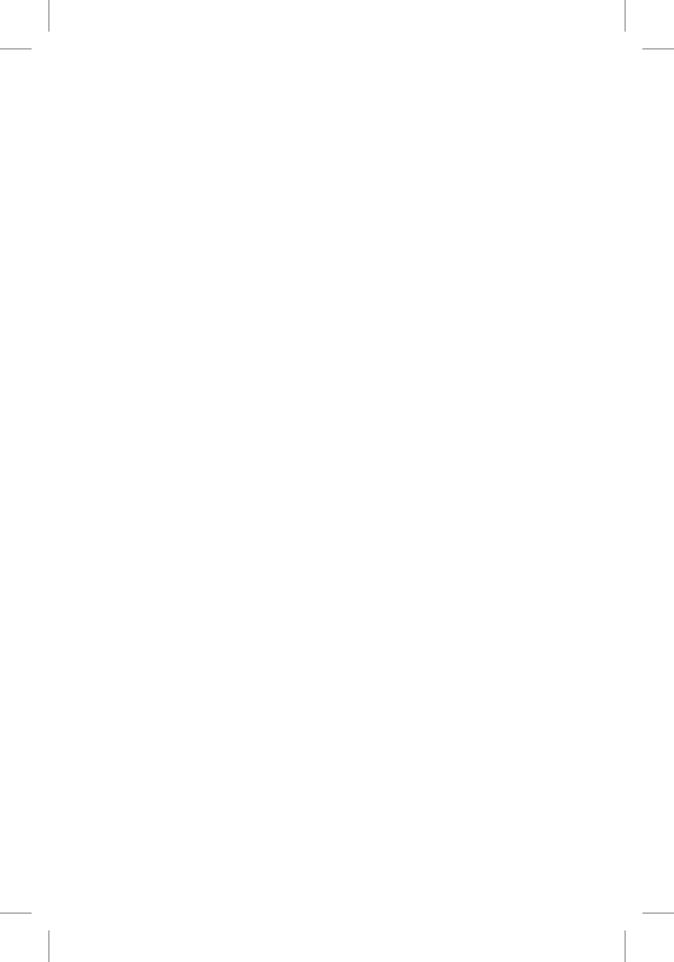
MATHEMATICS IN ECONOMY, MUSIC, AGRICULTURE AND APPLIED SCIENCES



MATHEMATICS IN ECONOMY, MUSIC, AGRICULTURE AND APPLIED SCIENCES

Edited by Zaiton Mat Isa Taufiq Khairi Ahmad Khairuddin



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PREFACE

Mathematics is an essential pillar of knowledge and a mandatory subject taught in schools and selected programme in universities. However, it is a common refrain to hear people ask, "When will I ever use mathematics in real life?" This question has inspired us to produce a book that explains how mathematical principles can be applied to solve real-life problems.

Undoubtedly, concepts like differentiation, integration, statistics and probability have practical applications in the real world. Moreover, real-life scenarios can be translated into mathematical language, providing an alternative means of understanding situations without resorting to experimental studies. Nonetheless, there seems to be a missing link between theoretical mathematics taught in classrooms and its real-world application.

We are excited to compile a book that presents some applications of mathematics in real-life problems and explains it in straightforward language accessible to everyone. This book will walk readers through step-by-step approaches to solving these problems, making it easily understandable for the layman. Additionally, the book will highlight research conducted by renowned mathematicians, providing insights into their contributions to the field.

This book will showcase five different mathematics applications, spanning a wide range of topics from economic growth to applied sciences. Each chapter will focus on a specific real-life application, allowing readers to grasp the concepts independently. Teachers and lecturers will find this book immensely valuable as it provides real-life examples to share with

their students. Furthermore, undergraduate students will gain insight into how mathematical theories and concepts can be practically applied.

In summary, this book aims to bridge the gap between theoretical mathematics and its real-world relevance. It will serve as a valuable resource for educators, students, and anyone curious about the fascinating applications of mathematics in our everyday lives.

Zaiton Mat Isa Taufiq Khairi Ahmad Khairuddin Universiti Teknologi Malaysia 2023