## 7.0.0 Introduction

In this chapter, we will discuss limit theorems and convergence modes for random variables. Limit theorems are among the most fundamental results in probability theory. We will discuss two important limit theorems in Section 7.1: *the law of large numbers (LLN)* and *the central limit theorem (CLT)*. We will also talk about the importance of these theorems as applied in practice. In Section <u>7.2</u>, we will discuss the convergence of sequences of random variables.