CHAPTER – 9
Sequences and Series

9.1 Introduction

A progression is a sequence whose terms follow a certain pattern *i.e.*, the terms are arranged under a definite rule.

Example : 1, 3, 5, 7, 9, …….. is a progression whose terms are obtained by the rule : $T_n = 2n - 1$, where T_n denotes the nth term of the progression.

Progression is mainly three types : Arithmetic progression, Geometric progression and Harmonic progression.

However, here we have classified the study of progression into five parts as :

- Arithmetic progression • Geometric progression
- Arithmetico-geometric progression
- Harmonic progressio •Miscellaneous progressions