

ABSTRACT

TAUBERIAN THEOREMS FOR SUBSEQUENTIAL CONVERGENCE

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In this thesis, some well-known summability methods, regular generated sequences and Tauberian theorems for some classes of sequence which contain the class of convergent sequences are given. On the conditions that are given in this theorems, subsequential convergence of a sequence is obtained by using concepts like general control modulo of oscillatory behaviors of the sequence, slow oscillation of the sequence and moderate oscillation of the sequence. Also generalizations of theorems, from which subsequential convergence is obtained, are given.

In the first chapter, introduction is done to thesis.

In the second chapter, all the definitions and notations used in the thesis are given, and Tauberian theory is mentioned.

In the third chapter, the concept of subsequential convergent is mentioned comprehensively, and Tauberian theorems, from which subsequential convergence is obtained, are given.

In the fourth chapter, the concept of regular generated sequence is given, and Tauberian theorems, from which subsequential convergence of these sequences is obtained, are given.

Key Words

Tauberian theorem, subsequential convergent sequence, general control modulo, classical control modulo, slowly oscillating sequence, moderately oscillating sequence.