The adomian decomposition method for avascular tumour model with a necrotic core

ABSTRACT

In this work, a powerful analytical method called Adomian decomposition method (ADM) is used to solve a model of the avascular tumor growth with a necrotic core. The main objective is to propose alternative methods of solution, which do not require small parameters and avoid linearization and biologically unrealistic assumptions. The results show that this method is very efficient and convenient and can be applied to a large class of problems.

Keyword: Adomian decomposition method; Avascular tumor; Necrotic core; Analytical method