

**NUMERICAL SOLUTIONS OF THE FORCED PERTURBED
KORTEWEG-DE VRIES EQUATION WITH
VARIABLE COEFFICIENTS**

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Abstract: In this paper, we solved the forced perturbed Korteweg-de vries (FpKdV) with variable coefficient arises in nonlinear wave propagation in an elastic tube filled with a symmetrical stenosis filled with a viscous fluid by two numerical methods, namely method of lines and pseudospectral method. We then compared both numerical solution with its progressive wave solution. Both methods solve FpKdV equation with maximum absolute errors of 10^{-2} .

Received: October 23, 2016

Revised: December 18, 2016

Published: February 9, 2017

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url: www.acadpubl.eu