In this paper, the numerical solution of delay differential equations using a predictor-corrector scheme in modified block method is presented. In this developed algorithm, each coefficient in the predictor and corrector formula are recalculated when the step size changing. The Runge-Kutta Fehlberg step size strategy has been applied in the algorithm in order to achieve better results in terms of accuracy and total steps. Numerical results are given to illustrate the performance of this modified block method for solving delay differential equations with constant lag.

**Keywords**: delay differential equations; modified block method; variable step size

**References**


Institute for Mathematical Research
Universiti Putra Malaysia
43400 UPM Serdang
Selangor DE, MALAYSIA
E-mail: am_zana@upm.edu.my*

Mathematics Department, Universiti Putra Malaysia
43400 UPM Serdang
Selangor DE, MALAYSIA
E-mail: am_zana@upm.edu.my, fudziah@upm.edu.my

Institute of Engineering Mathematics
Universiti Malaysia Perlis
02600 Arau
Perlis IK, MALAYSIA
E-mail: nurul_6425@yahoo.com

*Corresponding author