BRAC
UNIVERSITY

Inspiring Excellence

Department of Mathematics and Natural Sciences

MAT 350

ASSIGNMENT 3

FALL 2023

You have to submit the assignment in a *zip* file containing the f90 and the input/output files using this form**. Submission Deadline: Before Mid**

1. Solve the following IVP in $[0, 2]$ using RK4 with $h = 0.1$ and compare with the actual solution. [Your final output should contain 4 columns: $t(i)$, $x(i)$, *actual solution*(i) and $error(i)$]

$$\frac{d^2x}{dt^2} + 25x = 0, \ x(0) = 1, x'(0) = 0.$$