



Student's Name	Student's ID	Group No.

Question No.	I	II	III	Total
Mark				

Instructions.

1. Attempt all questions.
 2. Use any source of information to handle this assignment WITH proper citation and no plagiarism.
 3. Feel free to use the computer lab on the ground floor of Building 21.
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[I]

- (a) Write a MATLAB code for the bisection method that is used to solve the root-finding problem.
 - (b) Apply your code to find the root of $e^x - x^2 + 3x - 2$ in $[0, 1]$ with accuracy 10^{-4} .
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[II] Use Newton's code implemented in MATLAB to find the root of $x^3 - x - 1$ in $[1, 2]$ with accuracy 10^{-4} .

[III] Use Newton-secant's code implemented in MATLAB to approximate the intersection point of e^{-x} and $\sin(x)$ in $[0, 1]$ with accuracy 10^{-3} .
