

Assignment-I

Computer Lab-II

Batch: I.M.Tech-2019

July 3, 2021

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- a) Find a real root for the equation $x^3 + 3x^2 - 3 = 0$ using
- (i) Bisection Method
 - (ii) Regula Falsi Method
 - (iii) Iteration Method
 - (iv) Newton-Raphson method
- by developing python code for each method.(correct upto five decimal places).
Also, numerically find the root using the methods (iii) and (iv) with an accuracy 10^{-3}
- b) Find a real root for the equations (i) $x^{2.2} - 69 = 0$ and (ii) $2x - \cos x = 3$ using
- (i) Bisection Method
 - (ii) Regula Falsi Method
 - (iii) Iteration Method
 - (iv) Newton-Raphson method
- by developing python code for each method.(correct upto five decimal places).