



SRM Institute of Science and Technology
Department of Mathematics
21MAB206T- Numerical Methods and Analysis
UNIT –I Tutorial Sheet-1

Part-A

1. Solve $e^x - 3x = 0$ using method of successive approximations. *Ans.* 0.6190
2. Find the root lies between -3 and -2 of the equation $2^x - x - 3 = 0$, by
Iteration method. *Ans.* -2.8625
3. Find the positive root of $x - \cos x = 0$ by bisection method, *Ans.* 0.7388
4. Find the root of $xe^x = 3$ by method of false position. *Ans.* 1.048

Part-B

5. Solve by iteration method $2x - \log_{10} x = 7$. *Ans.* 3.78927
6. Use bisection method, find the negative root of $x^3 - 4x + 9 = 0$. *Ans.* -2.7065
7. Use bisection method, find the positive root of $3x = \cos x + 1$. *Ans.* 0.66664
8. Solve the equation $xe^x = \cos x$ by Regula Falsi method. *Ans.* 0.51776
9. Solve the equation $2x - 3 \sin x = 5$ by Regula Falsi method. *Ans.* 2.8832