Assignment 8. Fixed point & Newton-Raphson   Marks 10

Posted on 10.09.2025 @ 2:30 pm and due on 10.09.2025 @ 6:00 pm

---

1. Find the solution for the following set of nonlinear equations using both fixed point and Newton-Raphson method. Compare their convergence rate.   **[4+6]**

$$x_1^2 + x_2 = 37$$
$$x_1 - x_2^2 = 5$$
$$x_1 + x_2 + x_3 = 3$$

Choose your own initial guess and fixed-point functions.