

Name:.....ID#:.....Ser:.....

Q.1: Solve $y' + 4y = e^{3t}$, $y(0) = 2$.

Q.2: Solve $y'' - 8y' + 25y = 0$, $y(0) = 0$, $y'(0) = -5$.

Q.3: Use Laplace transform to solve the integral equation $f(t) = \cos t + 2 \int_0^t e^{-2\tau} f(t - \tau) d\tau$.