Math 301-122 Quiz 3 (A)

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

Q.1: Find $\mathcal{L}\{t^2\cos(t)\}$

Q.2: Solve the integral equation $f(t) = \cos(t) + \int_0^t e^{-\tau} f(t-\tau)d\tau$

Q.3: Solve the differential equation $y'' + y = \delta(t - \frac{\pi}{2}) + \delta(t - \frac{3\pi}{2})$, $y(0) = 0$, $y'(0) = 0$