

**King Fahd University of Petroleum and Minerals**  
**Department of Mathematics and Statistics**  
**Math 301 – Term 181 – Quiz 3**

Name:

Student ID #:

Section #:

**Question 1.** Evaluate  $\mathcal{L}^{-1}\left\{\frac{e^{-2s}}{s^2(s-1)}\right\}$ .

**Question 2.** Solve  $y' + y = f(t)$ ,  $y(0) = 5$ ,  $f(t) = \begin{cases} 0 & 0 \leq t < \pi \\ 3 \cos t & t \geq \pi \end{cases}$ .