

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

Name:

Student ID #:

Section #:

**Question 1.** Find the Laplace transform of  $f(t) = e^{3t}(1 - 2t) \cos 2t$ .

**Question 2.** Solve  $y'' - 4y' + 4y = t^2e^{3t}$ ,  $y(0) = 2$ ,  $y'(0) = 17$ .