

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-301 Semester-142 QUIZ III

NAME:

S.No.

ID:

Maximum Marks: 10

Section:06

Time Allowed: 35 minutes

(1) $\mathcal{L}^{-1}\left(\frac{3s+7}{s^2-2s-3}\right)$

(2) Find inverse Laplace transform of $G(s) = \frac{s}{s^4+6s^2+9}$, without using partial fractions.

(3) Solve the following differential :

$$y'' - 2y' + y = 3\delta(t - 2), \quad y(0) = 0, \quad y'(0) = 1$$