



Department of Electrical and Electronics Engineering

CONTROL LAB 1

PRELAB: You should do all calculations on paper!!!

- 1) Find the laplace transformation for $f(t) = 3e^{-5t}\cos(t) - e^{-5t}\sin(t)$ function via MATLAB*.
- 2) Find the laplace transformation for $f(t) = \delta(t) + 2u(t - 3) + at^2 + bt\sin(wt)$ function via MATLAB* where a and b are symbolic constants.
- 3) Find the inverse laplace transformation for $F(s) = \frac{s+4}{s^2+5s+6}$ function via MATLAB*.
- 4) For $F(s) = \frac{11s+28}{(s+2)^2(s+5)}$ function, solve using partial fraction decomposition via MATLAB*.

Note: MATLAB* means that you should do your operations in Matlab Editor and you should save it as m-file.