University of Portland School of Engineering

EE 262 Spring 2016 A. Inan

Homework #5-Laplace Transform

(Assigned: Monday, February 22, 2016) (Due: Wednesday, March 2, 2016, 9:15a.m.)

These problems are assigned from <u>Engineering Signals and Systems</u> by Ulaby/Yeagle (2013) (pages 122-127):

- 3.2. Parts (b) & (d). Laplace transform of periodic waveforms.
- 3.4. Laplace transform of special signals.
- 3.5. Parts (a), (b) & (c). Properties of Laplace transform.
- 3.6. Properties of Laplace transform.
- 3.7. Parts (c) & (d). Laplace transform of special signals.
- 3.8. Parts (a) & (c). Laplace transform of special signals.
- 3.10. Initial and final values of a signal.
- 3.12. Initial and final values of a signal.
- 3.13. Parts (a) & (b). Inverse Laplace transform using PFE*.
- 3.14. Parts (b) & (c). Inverse Laplace transform using PFE*.
- *Partial Fraction Expansion.

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top center, write: Homework #5-Solutions.
- 2) Provide <u>your full name</u> on the upper right corner of the first sheet.
- 3) Also write: EE 262/Spring 2016 on the upper left corner of the first sheet.
- 4) Solve each problem on a separate sheet unless your solution is very short.
- 5) Box all of your answers.
- 6) Staple your solutions in the above order before you turn them in.

Please turn in your homework on time.