University of Portland School of Engineering

EE 262 Spring 2014 A. Inan

Homework # 5-Laplace Transform & its Applications

(Assigned: Monday, March 17, 2014) (Due: Wednesday, March 26, 2014, 9:15a.m.)

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

- 3.15. Parts (a) & (c). Inverse Laplace transform.
- 3.16. Part (b). Inverse Laplace transform.
- 3.17. Part (c). Inverse Laplace transform.
- 3.18. Part (b). Inverse Laplace transform.
- 3.19. Laplace transform applied to electric circuits.
- 3.23. Transfer function and impulse response of a system.
- 3.25. Transfer function and impulse response of a system.
- 3.27. Transfer function and impulse response of a system.
- 3.29. Laplace transform applied to electric circuits.
- 3.46. Laplace transform applied to electric circuits.

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 2014 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.

Important reminder:

EE 262-Midterm Exam # 2 is on Friday, April 4, 2014, 9:15-10:10a.m. Closed book exam, only 2 to 3 formula sheets are allowed.