EE 475 Fall 2018 Quiz #1

Name: Key Score 10

1. **L**{ (t) } = 1 ; (unit impulse)
2. **L**{ u(t) } = 1/s ; (unit step)
3. **L**{ e*at* u(t) } = 1/(*s*-*a*) ; (exponential function)
4. When a system’s input is (t), the output is called the impulse response
5. When a system’s input is u(t), the output is called the step response
6. If a system has transfer function H(s), its impulse response is *h*(*t*) = **L** –1{ H(s) }
7. Its step response is given by *y*(*t*) = **L** –1{ H(s)/s }
8. Given , its input-out transfer function is D + C(sI – A)–1B
9. The poles of are 0 and –1 .
10. The zeros of are +1 .