

## ASSIGNMENT 1

INSTRUCTOR: HARI NARAYANAN

- (1) Solve  $\frac{dy}{dt} + ay = g(t)$ , where  $a$  is a constant and  $g$  is a continuous function.
- (2) Solve  $\frac{dy}{dt} + p(t)y = g(t)$  where  $p$  and  $g$  are continuous functions.
- (3) The following questions are from the 10th edition. The numbers in the 9th edition are identical except for Section 2.3/ #13, which is # 9 in the 9th edition.

Section 2.1/ #2, 6, 14, 19

Section 2.2/ #2, 3, 8, 17

Section 2.3/ #5, 8, 13