## NEW YORK UNIVERSITY TANDON SCHOOL OF ENGINEERING Department of Mechanical and Aerospace Engineering

## Mechatronics (ROB-GY 5103) Midterm Study Guide: Sample Questions

Fall 2023 — Section A — 3.0 credits

- 1. What is the difference between forward bias and reverse bias?
- 2. Explain the difference between RAM and ROM.
- 3. Explain the importance of registers.
- 4. When might you use an inductor in a circuit?
- 5. Explain the terminals of a comparator.
- 6. When might you use a comparator?
- 7. Explain debouncing.
- 8. What is the purpose of a pull-up/down resistor?
- 9. Describe at least one method for circuit isolation.