

ELE8959 Final Exam Review

Multiple Choice (25 questions – 25 marks)

1. The six laws.
2. Calculate WORK.
3. Advantages of pneumatic systems over hydraulic systems.
4. Pneumatic components.
5. Air generation and distribution.
6. Hydraulic components.
7. ControlLogix basics.
8. SFC knowledge.
9. Types of Basic Machines.
10. Gear ratios.
11. Pulleys.
12. Mechanical Advantage
13. Bearings
14. Motor sizing (calc HP)

Short Answer (15 questions – 34 marks)

15. Hydraulic reservoirs.
16. Hydraulic pumps.
17. Hydraulic fluid.
18. Hydraulic components.
19. ControlLogix routines.
20. Function Block knowledge.
21. Basic Machines.
22. Gear types.
23. Bearing types.
24. Spring types.

Pneumatic Symbols (5 marks)

Pneumatic Circuit (16 marks)

- 3 cylinders
- Limit switch position indication

Hydraulic Hand Pump Problem (12 marks)

Booster Circuit Problem (8 marks)

Total of 100 marks.