

CLASS WORK NO(2)	Group:	Marks:
Subject Name:	Standard Number:	
Name:	ID:	Date :

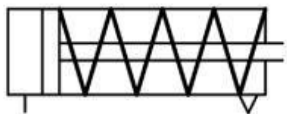
Q1. Put (T) for the correct answer and (F) for the false answer.

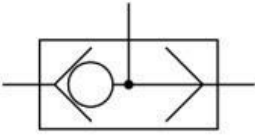
5 Marks

1. Special Oil is used to activate a pneumatic cylinder.	
2. The function of AND gate is to make sure that all inputs are pressed or ON, to activate the output.	
3. According to ohm's law voltage drop is equal to current divided by resistance.	
4. A proximity switch works by emitting an electromagnetic field and monitoring it, activating whenever a sensor detects a change in the field.	
5. PB in Ladder Diagram means Power Board.	

Q2. Circle the correct answer.

5 Marks

1. The figure below shows.	
a. Double Acting Cylinder b. Single Acting Valve c. Double Acting Valve d. Single Acting Cylinder	
2. The function of shuttle valve is ...	
e. A control valve by outputting the higher of two inputs pressure. f. Convert the electrical energy into mechanical energy. g. Generate fresh air. h. All of the above.	
3. AND function gates ...	
a. Control the speed of compressed air. b. Filter the air. c. Delivers an output only when there is more than one input pressure. d. Produce more air.	
4. If the current following through the solenoid of a directional valve is 2 A and the voltage drop across the solenoid is 10 V, then the power consumed by the solenoid is ...	

a. 40 W b. 200 W c. 20 W d. 5 W	
5. The figure below shows	
a. Shuttle Valve b. AND function gate c. Tees d. Accumulator	

Q3. By neat sketch show how can an AND function valve be made using two directional valve.

7 Marks

Q4. Explain why a shuttle valve outputs the higher of its input pressures. **3 Marks**

Good Luck