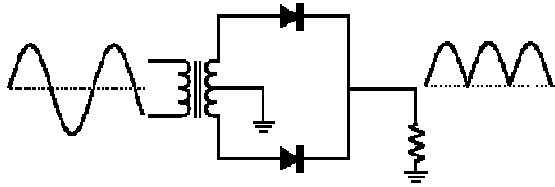


Instrumentation IP Red Seal Practice Exam

1. What type of power supply requires the use of a center tap transformer?
2. To check a diode, one would use a?
3. What are the fins used for on a transformer?
4. Signal Dampening in an electronic recorder?
5. What is the waveform for full wave rectification?
6. If a 10Ω , 20Ω , 40Ω , and 80Ω resistors are connected in series, which will dissipate the most heat?
7. What will a P/I transmitter do?
8. If the voltage remains constant and the resistance increases, what will the current do?
9. What current will a 600W solder iron draw for voltage?
10. The diode of a PNP transistor is always biased?
11. Beta gain of a transistor is?
12. What is always constant in a series circuit?
13. What is the bias of an NPN transistor?
14. Picture of a weight scale on a conveyor belt. Required flow can't be obtained, what should be done?
15. If you have a tank and want to measure the weight in and one end is a fulcrum and the other end has two sensors under it, what do you read?
16. A rotary weight gauge has a LVDT. What must be done first for the system to operate correctly?

ANSWER KEY

1. Full Wave
2. Ohmmeter
3. Heat dissipation
4. Adjust the gain
5. A



6. $80\ \Omega$ $P = I^2 * R$
7. Convert a pneumatic signal to an electronic DC Current
8. Decrease, $I = V/R$
9. $P = E * I$
 $I = \frac{600W}{110V}$
 $I = 5.45A$
10. Forward (negative) Pointing in Proudly
11. $\frac{I_c}{I_b}$
12. Current
13. Reverse (positive) Not Pointing in
14. You need to increase the speed of the belt
15. The average of the two meters
16. Center core – of the coil to get a 0 output