

Question block created by wizard

This exam contains 20 questions.

1. What kind of diode symbol is shown here?

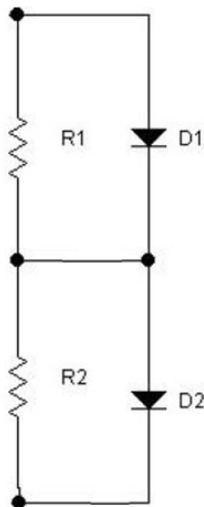


- a. Zener diode.
- b. Signal diode.
- c. Light emitting diode.

2. What is in excess present in N type semi-conductor material?

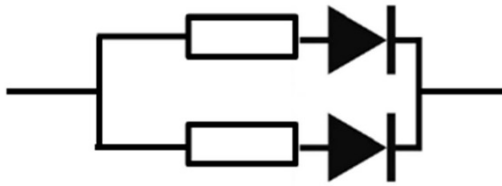
- a. Holes.
- b. Non.
- c. Electrons.

3. See figure. This circuit is used if....



- a. the maximal reverse voltage of the circuit is too high for one diode.
- b. the current of the circuit proves to be too high for one diode.
- c. a regulated power supply is required.

4. See figure. This circuit is used if...



- a. the breakdown voltage of one diode proves to be too low for one diode.
 - b. the current of the circuit proves to be too high for one diode.
 - c. a regulated power supply is required.
5. What is a requirement to turn a thyristor on?
- a. A gate current must flow.
 - b. The voltage between Anode and Cathode must be low.
 - c. No conducting current must flow.
6. What happens when the voltage across a varistor increases?
- a. The varistor will stop conducting immediately at its defined voltage level.
 - b. The varistor will start conducting slowly at its defined voltage level.
 - c. The varistor will start conducting immediately at its defined voltage level.
7. What is the function of a full bridge (Graetz) rectifier?
- a. It generates a positive voltage for only the positive cycle on an AC voltage.
 - b. It generates a positive voltage for only the negative cycle on an AC voltage.
 - c. It generates a positive voltage for both positive and negative cycles on an AC voltage.
8. A diode, measured both ways with an ohm meter, indicates infinite both ways. What is your conclusion about this diode?
- a. The diode is good.
 - b. The diode is open and defective.
 - c. The diode is shorted and defective.

9. This is the symbol of a...



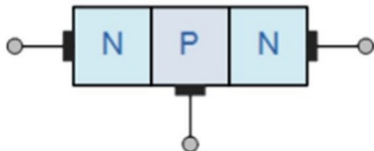
- a. P-channel FET.
- b. N-channel FET.
- c. P-channel depletion FET.




10. See picture. What are the names of the leads of this transistor?



- a. Anode, Cathode, Gate.
- b. Drain, Source, Gate.
- c. Base, Emitter, Collector.

11. See picture. Which transistor symbol matches with this physical construction?



- a. 
- b. 
- c. 

12. What is an advantage of a FET compared to bipolar transistor?

- a. The input impedance of a FET is lower.
- b. The gain of a FET is higher.
- c. The input impedance of a FET is higher.

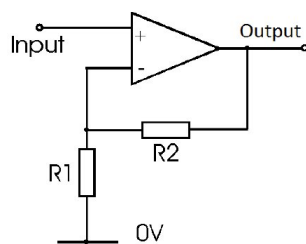
13. What is a basic characteristic of an ideal operational amplifier?

- a. The input impedance is finite.
- b. The input impedance is zero.
- c. The input impedance is infinite.

14. What is a disadvantage of an electronic switch compared to a mechanical switch?

- a. The switch resistance when closed is never zero.
- b. The reliability is lower.
- c. The life span is shorter.

15. What will happen with a signal supplied to the input of this amplifier?

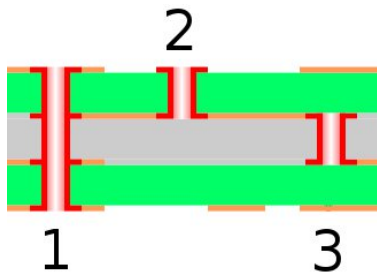


- a. The signal will appear inverted at the output.
- b. The signal will appear not inverted at the output.
- c. The signal will either appear inverted or not inverted at the output.

16. Flexible PCB are made out of

- a. Kapton.
- b. Pertinax.
- c. PTFE (Poly-Tetra-Fluor-Ethylene).

17. How is the connection number 1 named?



- a. Via.
- b. Buried via.
- c. Blind via.

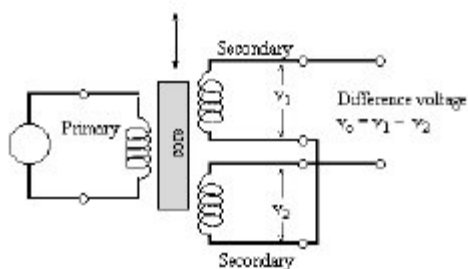
18. What is a closed loop servo system?

- a. This is a servo system with a positive feedback.
- b. This is a servo system with a negative feedback.
- c. This is a servo system with a differential feedback.

19. What is meant with an "error signal"?

- a. This is the difference between the "actual value" and the position of the output servo.
- b. This is the difference between the "wanted value" and the "actual value".
- c. This is the difference between the "wanted value" and the position of the input servo.

20. This the schematic picture of a:



- a. LVDT.
- b. Differential synchro.
- c. RVDT.