**Answer the fowling questions**

1. The point at which p-type and n-type semiconductors are joined is called … (a) p-n junction (b) semiconductor diode, (c) depletion layer
2. …….. is the voltage or electric field build near the p-n junction, which prevents the electric current through the semiconductor. (a) Reverse voltage, (b) Barrier voltage, (c) high resistance.
3. …… is the region present near the p-n junction where no mobile charge carriers are present. (a) forward bias, (b) reverse bias, (c) Depletion region
4. The process of applying voltage across the p-n junction diode is called (a) biasing of diode. (b) Zener effect, (c) I-V characteristic of diode.
5. A p-n junction diode allows electric current only in (a) forward bias, (b) reveres bias , (c) forward and reverse bias.
6. Zener diode is a p-n junction diode specially designed for operation in the breakdown region in …… bias condition. (a) regulator, (b) dynamic resistance, (c) reverse.
7. The voltage at which the Zener diode breaks down is called the …. voltage. (a) breakdown, (b) Zener, (c) reverse
8. When the voltage across the Zener diode exceeds its Zener voltage rating VZ . In ‘on’ state, the voltage across Zener diode remains constant until the voltage across it drops less than VZ . This property of Zener diode makes its use as a (a) voltage regulator, (b) reference voltage, (c) both (a) and (b)
9. The breakdown mechanism in a lightly doped p-n junction under reverse biased condition is (a) Avalanche breakdown (b) Zener breakdown (c) non of these
10. The breakdown mechanism in a highly doped p-n junction under reverse biased condition is (a) Avalanche breakdown , (b) Zener breakdown, (c) non of these
11. The resistance offered by a p-n junction diode to the changing forward current is defined as the (a) forward resistance, Ohmic resistance, (c) dynamic resistance.
12. the ratio of the diode voltage and current at the point of interest and is not sensitive to the shape of the V-I characteristic curve is the (a) static or dc resistance, (b) dynamic resistance, (c) none of these
13. the peak value of the output waveform in the following circuit is (a) 15 V , (b) 25 V , (c) –25 V,



1. The peak for both half cycles of the output waveform of the following circuit is (a) 16 V, –4 V , (b)16 V, 4 V ,(c) –16 V, 4 V,



1. the peak inverse voltage (PIV rating) for the 1N4007 rectifier diode is (a) 0.7V, (b) 1000V, (c) 2000V
2. The type of diode circuit is used to add or restore a dc level to an electrical signal is called (a) clipper or limiter,(b) clamper , (c) R-C filter network.
3. the current level of the following circuit is (a) 0A, (b) 4.76mA, (c )5mA

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1. If the ac supply is 50 Hz, Then the be the ripple frequency out of the full-wave rectifier is (a) 50 Hz , (b) 100Hz, (c) 0Hz
2. The following circuit is (a) Half-wave rectifier, (b) Clipper, (c) Clamper



1. For the following circuit the value of the load resistor RLis (a) 5 k , (b) 5.5 k , (c) None of these

