

MDCAT Physics Chapter 10 Electronics Online Test

Sr	Questions	Answers Choice
1	The efficiency of half wave rectifier is:	A. 25.6% B. 1.2% C. 40.6% D. 66.6%
2	A certain noninverting amplifier has R1 of 1 kΩ and R2 of 100 kΩ. The closed-loop voltage gain is	A. 100,000 B. 100 C. 1000 D. 101
3	The power output of a full wave rectifier is:	A. Equal to H.W.R B. Twice of H.W.R C. Half of H.W.R D. Four times of H.W.R
4	A pulsating DC can be converted into constant voltage by using	A. Filter B. Full wave rectifier C. Half wave rectifier D. Bridge rectifier
5	In full wave rectification by bridge the number of diodes required are	A. 3 B. 4 C. 2 D. 5
6	Gain of operational amplifier is independent of;	A. Internal structure B. External Structure C. Batteries D. Potential changes
7	In a full wave rectifier with input frequency 50Hz. The frequency of pulsating D(C) received as an output across the load is	A. 50 Hz B. 100 Hz C. 500 Hz D. zero
8	In full wave rectification, the output DC voltage across the load is obtained for.	A. The positive half cycle of input AC only B. The negative half cycle of input AC C. The complete cycle of input AC only D. All of the above
9	Inverting amplifier circuits have	A. A very high input impedance B. A very low input impedance C. A low output impedance D. Both A and C
10	The method by which only one half of A.C cycle is converted into direct current is called	A. half wave amplification B. half wave rectification C. Full wave rectification D. full wave amplification
11	In full wave rectification, the output D.C. voltage across the load is obtained for	A. The positive half cycle of input A.C. (C) The complete cycle of input A.C. B. The negative half cycle of input A.C. C. The complete cycle of D. All of the above
12	A non-conducting semiconductor diode is:	A. Forward biased B. Poorly biased C. Reverse biased D. None of them
13	A diode characteristics curve is a graph plotted between;	A. Current and time B. Voltage and time C. Voltage and current D. Forward voltage and reverse current
14	In a half wave rectifier circuit operating from 50 Hz mains frequency, the fundamental frequency in the ripple would be:	A. 25 Hz B. 70.7 Hz C. 50 Hz D. 100 Hz

		D. 100 Hz
15	The diodes works on	A. A.C B. D.C C. both A and B D. None of these
16	A PN junction diode cannot be use:	A. As rectifier B. For converting light energy to electrical energy C. For getting light radiation D. For increasing the amplitude of an ac signal
17	A device which convert DC into AC is calleD)	A. Invertor B. Generator C. Rectifier D. Motor
18	In a full wave rectifier, the diode conducts during	A. Both halves of the input cycle B. A portion of the positive half cycle of the input C. Positive half cycle of the input D. Positive half cycle of the input E. Both halves of the input cycle
19	The unit of gain (G) for non-inverting amplifier is	A. Ampere B. ohm C. Volt D. None of these
20	The simplest type of rectification known as half wave rectification is obtained by	A. Using a transistor B. Suppressing the harmonics in A.C. voltage C. Suppressing half wave of A.C. supply by using diode D. Using a Coolidge
21	The junction potential for Germanium is;	A. 3v B. 0.3 v C. 7v D. 0.7 v
22	A circuit that converts Pulsating DC into smooth DC contain :	A. Filter B. Capacitor C. Inductor D. LC circuit
23	The efficiency of full wave rectifier is:	A. 25.6% B. 81.2% C. 81.6% D. 71.2%
24	When two semiconductors of p- and n-type are brought into contact, they from a p-n junction which act like a:	A. Conductor B. Amplifier C. Oscillator D. Rectifier
25	A diode as a rectifier converts:	A. A)c into D)c B. D)c into A)c C. Varying D)c current into constant D)c current D. High voltage into low voltage and vice-versa
26	In a full wave rectifier:	A. DC current is twice that of half wave rectifier B. DC pulses are twice per cycle that of half wave rectifier C. DC voltage is twice that of half wave rectifier D. All are correct
27	A non-inverting amplifier has infinite input resistance then the voltage gain of noninverting amplifier will be:	A. Zero B. Infinite C. One D. 100
28	A pure semiconductor has:	A. An infinite resistance at $0 < \theta < C$ B. A finite resistance which does not depend upon temperature C. A finite resistance which decreases with temperature D. A finite resistance which increase with temperature
29		A. 0.7 v B. 0.3 V

29	The magnitude of potential barrier for Ge is	A. 0.3 v B. 0.7 v C. 7v D. 3 v
30	For the same value of resistors the output of non-inverting amplifier compared to the output of inverting amplifier is, (ignoring phase difference)	A. Greater B. Equal C. Smaller D. Undefined
31	For full wave rectification, the minimum number of diodes used is:	A. 1 B. 2 C. 3 D. 4
32	The resistance of operational amplifier between inverting and non-inverting terminal is of the order of:	A. Few Ohms B. Mega Ohms C. Few Kilo Ohms D. Micro Ohms
33	The diode characteristics curve is plot between	A. I & t B. V & t C. V & I D. None
34	For a normal AC cycle, during $T/2$ to T the diode act as:	A. Open switch B. full wave rectifier C. Close switch D. All are correct