MDCAT Physics Chapter 10 Electronics Online Test

Sr	Questions	Answers Choice
1	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 completes cycle of input AC only D. All of the above
2	A non-conducting semiconductor diode is:	A. Forward biased B. Poorly biased C. Reverse biased D. None of them
3	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
4	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
5	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
6	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
7	A device which convert DC into AC is calleD)	A. Invertor B. Generator C. Rectifier D. Motor
8	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
9	The efficiency of half wave rectifier is:	A. 25.6% B. 1.2% C. 40.6% D. 66.6%
10	The efficiency of full wave rectifier is:	A. 25.6% B. 81.2% C. 81.6% D. 71.2%
11	A circuit that converts Pulsating DC into smooth DC contain :	A. Filter B. Capacitor C. Inductor D. LC circuit
12	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
13	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
14	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

15	A pulsating DC can be converted into constant voltage by using	A. Filter B. Full wave rectifier C. Half wave rectifie D. Bridge rectifier
16	The magnitude of potential barrier for Ge is	A. 0.7 v B. 0.3 V C. 7v D. 3 v
17	The diode charactristics curve is plot between	A. I & t B. V& t C. V& I D. None
18	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
19	A pure semiconductor has:	A. An infinite resistance at 0^oC) 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
20	For full wave rectification, the minimum number of diodes used is:	A. 1 B. 2 C. 3 D. 4
21	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
22	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
23	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
24	The junction potential for Germanium is;	A. 3v B. 0.3 v C. 7v D. 0.7 v
25	Gain of operational amplifier is independent of;	A. Internal structure B. External Structure C. Batteries D. Potential changes
26	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
27	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
28	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
29	In full wave rectification, the output D.C. voltage across the load is obtainedfor	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

		D. All of the above
30	Inverting amplifier circuits have	A. A very high input impendance B. A very low input impendance C. A low output impendance D. Both A and C
31	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
32	The unit of gain (G) for non-inverting amplifier is	A. Ampere B. ohm C. Volt D. None of these
33	The diodes works on	A. A.C B. D.C C. both A and B D. None of these
34	In full wave rectification by bridge the number of diodes required are	A. 3 B. 4 C. 2 D. 5