ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	Resistance of a conductor depends upon	A. the quantity of current passing through it B. the voltage applied between its end C. its dimensions, physical state and nature of its material D. all of the above
2	The potential difference across each resistance in series combination is	A. same B. different C. zero D. none of these
3	Magnetic effect at a point caused due to flow a current depend upon the	A. Quantity of current B. Distance from current C. Both the quantity of current and distance from current element D. None of the all
4	The unit of resistance is	A. volt B. ampere C. ohm D. coat
5	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
6	If we plot graph between potential difference (V) and current (I) obeying ohm's law, it will give us	A. parabola B. straight line C. hyper bola D. ellipse
7	What is the current is a 2×10^6 ohm resistor having a potential difference of 2×10^3 volts?	A. 10^{-1} A B. 10^{-2} A C. 10^{-4} A D. 1 mA
8	Resistor is a device which convert electric energy to	A. Heat energy B. Chemical energy C. Elastic energy D. All of the above
9	If one volt is needed to cause a current of one ampere to flow in a conductor, its resistance is	A. one ohm B. one joule C. one volt D. one ampere
10	Ohm's law states that	A. The current through a resistor is directly proportional to the applied voltage B. The voltage across a resistor is directly proportional to the current passing through it C. Resistance is the constant of proportionality between the voltage and current D. all of these
11	The electrode connected with the positive terminal of the current source is called	A. cathode B. anode C. electrolyte D. position
12	The material in the form of wire or rod or plate which leads the current into or cut of the electrolyte is known as	A. voltmeters B. resistance C. electrode D. current
13	Ohm established a relation between	A. voltage and resistance B. voltage and charge C. voltage and current D. voltage resistance and charge
		A. 1 ampere / 1 volts

14	The ohm's is defined as	B. 1 coulomb / 1 volt C. 1 volt / 1 ampere D. 1 volt / 1 coulomb
15	The relation V = IR represents	A. Ampere law B. Faraday's law C. Ohm's law D. Len's law
16	Ohm is the unit of	A. current B. capacitance C. energy D. resistance
17	The graphical representation of ohm's law is	A. hyperbola B. straight line C. ellipse D. parabola
18	In describing functions of digital systems, a closed switch will be shown as	A. 0 B. 1 C. low D. any one of these
19	Mathematical manipulation of the two quantized states can be best carried if they are represented by	A. high - low B. yes - no C. on - off D. 0 - 1
20	A digital system deals with quantities or variables which have	A. only one state B. only two discrete states C. three discrete states D. four discrete states
21	Most OP-AMP operates with	A. $+$ 6 V supply B. $+$ 10 V supply C. $+$ 12 V supply D. $+$ 24 V supply
22	The R_1= infinity and R_2= 0, then the gain of non-inverting amplifier is	A. zero B. infinity C. one D. any one of these
23	The closed loop gain of the non-inverting amplifier is given by	A. $G = R_2/R_1$ B. $G = -R_2/R_1$ C. $G = 1 - R_2/R_1$ D. $G = 1 + T_2/R_1$
24	The closed loop gain of the inverting amplifier is written as	A. $G = R_2/R_1$ B. $G = 1 + R_2/R_1$ C. $G = -R_2/R_1$ D. $G = 1 - R_2/R_1$
25	The open loop gain of OP-AMP is of the order of	A. 10^2 B. 10^3 C. 10^4 D. 10^5
26	The value of output resistance of OP-AMOP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several mega ohms
27	Due to the high value of the input resistance, practically, the value of the current which flows between the input terminals is	A. zero B. small C. large D. very large
28	The value of the input resistance of OP-AMP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several maga ohms
29	The input resistance of the OP-AMP is the resistance between the	A. (-) input and output B. (+) input and output C. (-) and (+) inputs D. between any inputs
		A. inverting input B. non-inverting input

30   A signal is amplified at the output without any change of phase, if it is applied at the

B. non-inverting input
C. at any of the input
D. none of these