Physics ECAT Pre Engineering Chapter 18 Electronics Physics

Sr	Questions	Answers Choice
1	Electric intensity at a place due to a charged conductor is a	A. Scalar quantity B. Vector quantity C. Semi vector and semi scalar D. Dimensionless quantity E. Both A and D are true
2	Electric field lines emerge from the charges in	A. One dimension B. Two dimensions C. Three dimensions D. Four dimensions E. None of these
3	A transistor has:	A. One region B. Two regions C. Three regions D. Four regions E. None is correct
4	Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
5	The intensity at a point due to a charge is inversely proportional to	A. Amount of charge B. Size of the charge C. Distance between charge and the point D. Square of the distance from the charge E. None of these
6	Crystal of germanium or silicon in its pure form at absolute zero acts as:	A. A conductor B. A semiconductor C. an insulator D. Both (A) and (C) E. Both (A) and (B)
7	To designate the voltage as low or 0 by a logic gate, the specified minimum value is:	A. 0.2 volt B. 0.8 volt C. 0 volt D. 2.0 volt E. 5.0 volt
8	The reverse saturation current in a PN junction diode is only due to	A. Majority carriers B. Minority Carriers C. Acceptor ions D. Donor ions
9	The SI unit of charge is	A. Ampere B. Watt C. Coulomb D. Volt E. Joule
10	In an N-type silicon, which of the following statement is true	A. Electrons are majority carriers and trivalent atoms are the dopants B. Electrons are minority carriers and pentavalent atoms are the dopants C. Holes are minority carriers and pentavalent atoms are the dopants D. Holes are majority carriers and trivalent atoms are the dopants
11	The use of chips in electrons is described in the form of:	A. Yellow boxes B. Black boxes C. Red boxes D. White boxes E. Orange boxes
12	Whenever a covalent bond breaks, it creates:	A. An electron B. A hole C. An electron-hole pair D. A positron E. All of these

13	By placing a dielectric in between the charges, the electrostatic force between them	A. Is always reduced B. Is always increased C. Is not affected D. Is increased one million times E. None of these
14	In the text book, the transistor amplifier circuit is a:	A. Common emitter circuit B. Common collector circuit C. Common base circuit D. Any of these E. None of these
15	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
16	.Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
17	A digital system deals with quantities which has discrete values:	A. Two in number B. One in number C. Three in number D. Four in number E. None of these
18	In the forward biases situation, the current flowing across the p-n junction is a few:	A. amperes B. Milli amperes C. Micro amperes D. Pico amperes E. None of these
19	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
20	Most of the electrons in the base of an NPN transistor flow	A. Out of the base lead B. Into the collector C. Into the emit D. Into the base supply