ECAT Physics Chapter 18 Electronics

Sr	Questions	Answers Choice
1	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
2	Electric lines of force	A. Intersect each other B. Are always parallel C. Are always anti-parallel D. Never intersect E. None of these
3	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
4	Truth table of logic function:	A. Summarizes its output values B. Tabulates all its input conditions only C. Display all its input/output possibilites D. Is not based on logic algebra E. None of these
5	Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
6	Electric field strength is defined as	A. Work done on unit charge B. Force exerted on unit charge C. Distance covered by unit charge D. Power exerted by unit charge E. None of these
7	The SI unit of charge is	A. Ampere B. Watt C. Coulomb D. Volt E. Joule
8	A potential barrier of 0.7 V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
9	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
10	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
11	The number of LED'S needed to display all the digits is:	A. Four B. Five C. Nine D. Six E. Seven
12	Silicon is one of the mot commonly used:	A. onductor B. Dielectric C. Insulator D. Semiconduction E. Both (B) and (C)

13	In a transistor, collector current is controlled by	A. Collector voltage B. Base current C. Collector resistance D. All of the above
14	All the valence electrons present in a crystal of silicon are bound in their orbits by	A. Ionic bond B. covalent bond C. Molecular bond D. Both (A) and (B) E. Both (B) and (C)
15	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
16	To make an LED, it is impreacticable to use:	A. Silicon B. Gallium arsenide C. Gallium arsenide phosphide D. Iron E. Both (B) and (C)
17	The electric field lines start from	A. Positive charge B. Negative charge C. Either A or B D. Neutron E. An atom
18	.Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
19	The values 1 and 0 are designated as:	A. Continuous values B. Binary values C. Boolean values D. Decimal values E. Either (B) and (C)
20	If the distance between two charges is doubled, the force between them will become	A. Double B. Half C. Three times D. One fourth E. One third