

## Physics ECAT Pre Engineering Chapter 18 Electronics Physics

Sr	Questions	Answers Choice
1	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)
2	A potential barrier of 0.7 V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
3	The value of LDR depends upon intensity of:	A. Sound falling on it B. Current passing through it C. Magnetic field surrounding it D. Light falling on it E. Non of these
4	An LED emits light when it is:	A. Forward biased B. Reverse biased C. Operated without battery D. Operated with heat source E. None of these
5	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
6	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
7	The concept of electric field theory was introduced by	A. Michael Faraday B. Newton C. Dalton D. Kepler E. Einstein
8	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
9	The number of LED'S needed to display all the digits is:	A. Four B. Five C. Nine D. Six E. Seven
10	Inverter is the name given to:	A. NOT gate B. OR gate C. NOR gate D. AND gate E. XOR gate
11	The SI unit of charge is	A. Ampere B. Watt C. Coulomb D. Volt E. Joule
12	Michael Faraday is known by his work on	A. Nuclear strong force B. Gravitational force C. Nuclear weak force D. Electric force E. None of these
13	In a transistor, collector current is controlled by	A. Collector voltage B. Base current C. Collector resistance D. All of these

		D. All of the above
14	To make an LED, it is impracticable to use:	A. Silicon B. Gallium arsenide C. Gallium arsenide phosphide D. Iron E. Both (B) and (C)
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	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
17	Field lines are closer to each other in the region where the field is	A. Stronger B. Weaker C. Much weaker D. Absent E. None of these
18	Improper biasing of a transistor circuit produces	A. Heavy loading of emitter current B. Distortion in the output signal C. Excessive heat at collector terminal D. Faulty location of load line
19	The value of relative permittivity of different dielectrics are	A. Equal B. Different C. Greater than one D. Smaller than one E. Both B and C
20	If both the inputs given to a gate are 1 such that the output is 0, then it is:	A. AND gate B. NOR gate C. OR gate D. NOT gate E. Both (A) and (C)