

## ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	There is no way to detect:	A. Absolute uniform motion B. Accelerated motion C. State rest D. State of motion E. None of these
2	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
3	The special theory of relatively treats the problems involving:	A. Inertial frames of reference B. Non-inertial frames C. Non-accelerated frame D. Botha (A) and (C) E. Both (B) and (C)
4	Strictly speaking, the earth is:	A. An accelerated frame of reference B. A non-inertial frame of reference C. An inertial frame of reference D. <sup>A non-accelerated frame of reference</sup> E. Both (A) and (B)
5	The concept of direction is purely:	A. Absolute B. Relative C. Relative to stars always D. Relative to the sun always E. None of these
6	Conversion of A.C. into D.C. is called:	A. Reftification B. Amplification C. Electric induction D. Magnetic induction E. None of these
7	If both the inputs given to a gate ae 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)
8	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
9	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
10	Op-amp has been discussed as comparator of:	A. Distances B. Voltages C. Velocities D. Magnetic fields E. Both (A) and (C)
11	To turn the transistor OFF, the base current is set:	A. At maximum value B. At zero C. Either (A) or (B) D. All are correct E. None of correct
12	In AND gate, the output is 1 if:	A. Both inputs are 0 B. Both inputs are 1 C. Only one input is 0 D. Both (A) and (B) E. Both (A) and (C)

13	A digital system deals with quantities which has discrete values:	A. I wo in number B. One in number C. Three in number D. Four in number E. None of these
14	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
15	An electronic computer is basically a vast arrangement of electronic switches which are made from	A. Resistors B. Transistors C. N -type crystals D. P-Type crystals E. Capacitors
16	To display a digit of EIGHT, the number of ON LED'S are:	A. Two B. Three C. Five D. Seven E. Eight
17	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)
18	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
19	A transistor has:	A. One region B. Two regions C. Three regions D. Four regions E. None is correct
20	The number of LED'S needed to display all the digits is:	A. Four B. Five C. Nine D. Six E. Seven
21	A diode which can turn its current ON and OFF in nono seconds is called:	A. LED B. Photodiode C. An ordinary diode. D. Both (A) and (B) E. Both (B) and (C)
22	In full wave rectification, simultaneous action is that:	A. Two diodes conduct and two do not.  B. One diode conduct and three do not.  C. Three diodes conduct and one does not.  D. All the four diodes conduct  E. None of these
23	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)
24	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
25	A potential barrier of 0.7 V exists across p-n junction made from:	E. None of these A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
26	A hole in p-type my be due to:	A. Trivalent impurity B. Breking of some covalent bond C. Pentavalent impurity D. Germanium E. Either (A) or (B)
27	Majority charge corriers in the a region of a a junction are:	A. electrons B. positrons

<b>4</b> 1	iviajonity change camers in the p-region of p-n junction are.	D. Neutrons E. None of these
28	All the valence electrons present in a crystal of silicon are bound in their orbits by	A. lonic bond B. covalent bond C. Molecular bond D. Both (A) and (B) E. Both (B) and (C)
29	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)
30	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