

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Truth table of logic function:	A. Summarizes its output values B. Tabulates all its input conditions only C. Display all its input/output possibilities D. Is not based on logic algebra E. None of these
2	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
3	Op-amp has been discussed as comparator of:	A. Distances B. Voltages C. Velocities D. Magnetic fields E. Both (A) and (C)
4	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
5	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)
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 number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
8	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
9	To display a digit of EIGHT, the number of ON LED'S are:	A. Two B. Three C. Five D. Seven E. Eight
10	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)
11	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
12	A transistor has:	A. One region B. Two regions C. Three regions D. Four regions E. None is correct

13	The number of LED'S needed to display all the digits is:	B. Five C. Nine D. Six E. Seven
14	A diode which can turn its current ON and OFF in nano seconds is called:	A. LED B. Photodiode C. An ordinary diode. D. Both (A) and (B) E. Both (B) and (C)
15	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
16	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)
17	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
18	A potential barrier of 0.7 V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
19	A hole in p-type may be due to:	A. Trivalent impurity B. Breaking of some covalent bond C. Pentavalent impurity D. Germanium E. Either (A) or (B)
20	Majority charge carriers in the p-region of p-n junction are:	A. electrons B. positrons C. Holes D. Neutrons E. None of these
21	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)
22	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)
23	The use of chips in electronics is described in the form of:	A. Yellow boxes B. Black boxes C. Red boxes D. White boxes E. Orange boxes
24	Silicon is one of the most commonly used:	A. conductor B. Dielectric C. Insulator D. Semiconduction E. Both (B) and (C)
25	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
26	Polymers are the chemical combination of carbon with:	A. Nitrogen B. Oxygen C. Hydrogen D. All of these E. None of these
27	Examples of crystalline solids are:	A. Copper B. NaCl C. Zirconia D. Both (A) and (B)

D. Both (A) and (B)  
E. All of these

28 Examples of polymeric substances are:

- A. Plastic
- B. Synthetic rubbers
- C. Zirconia
- D. All of these
- E. Both (A) and (B)

29 A structure of polymeric solid is:

- A. An ordered structure
- B. A disordered structure
- C. Intermediate between order and disorder
- D. Any of these
- E. None of these

30 When relatively simple molecules are chemically combined into massive molecules, the reaction is called:

- A. Fission reaction
- B. Fusion reaction
- C. Polymerization
- D. Any of these
- E. None of these