

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The substances which break just after the elastic limit is reached, are known as	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
2	A tube tapers from 20 cm diameter to 2 cm, the velocity at first cross-section is 50 ms^{-1} then velocity at second cross-section is	A. 5000 cms^{-1} B. 500 cms^{-1} C. 50 cms^{-1} D. 0.5 cm/s
3	Which one of the following is dimensionless.	A. Acceleration B. Velocity C. Density D. Angle
4	The measure of the deformation in a solid when stress is applied to its is called	A. elastic constant B. young's modulus C. strain D. elasticity
5	The waves produced in a microwave oven have frequency	A. 2450 Hz B. 2450 K Hz C. 2450 M Hz D. 2450 G Hz
6	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
7	Distance covered by a freely falling body in 2 sec will be	A. 4.9 m B. 19.6 m C. 29.2 m D. 44.1 m
8	The unit of resistance is	A. volt B. ampere C. ohm D. coat
9	In a normal healthy person the value of systolic pressure is	A. 75 torr B. 80 torr C. 120 torr D. all of them
10	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
11	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)
12	The electric potential at the surface of an atomic nucleus ($Z = 50$) of radius $9.0 \times 10^{-15} \text{ m}$ is	A. $9 \times 10^5 \text{ V}$ B. 9 V C. $8 \times 10^6 \text{ V}$ D. 80 V
13	The vertical and horizontal range will be equal if angle of projection is	A. 76° B. 45° C. 60° D. 100°

D. 120°

14	First law of thermodynamics tells us that heat energy can be converted into equivalent amount of work, but it is silent about	A. how heat is absorbed B. how heat extracted C. how this conversion takes place D. none of them
15	If the length of the conductor is double and its cross sectional area is halved, its conductance will	A. Increase four fold B. Become one-fourth C. Become one-half D. Remains unchanged
16	Heat travels through vacuum by	A. Conduction B. Convection C. Radiation D. Both A and B
17	An emf is set up in a conductor when it:	A. is kept in a magnetic field B. is kept in a electric field C. Move across a magnetic field D. Both (A) and (B) E. None of these
18	The portion of the water above its mean level forms a:	A. Crest B. Trough C. Both A and B D. None of these
19	The SI unit of magnetic flux is.	A. weber B. $\text{Nm}^{-1}\text{A}^{-1}$ C. tesla D. gauss
20	An electric charge at rest is	A. Only an electric field B. Only a magnetic field C. Both electric and magnetic fields D. None of the above