

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	Physics is one of the branches of:	A. Social sciences B. Physical sciences C. Biological sciences D. Abstract art
2	Branch of physics which deals with the study of stars and galaxies is called:	A. Solid state physics B. Astrophysics C. Molecular physics D. Chemical physics
3	Silicon can be obtained from:	A. Lead B. Uranium C. An isotope of oxygen D. Sand
4	Particles have the mass smallest of following is:	A. Electron B. Proton C. Neutron D. Quark
5	The machines which deals with the objects moving with velocities approaching that of light is called:	A. Relativistic mechanics B. Wave mechanics C. Quantum D. Statics mechanics
6	Astrophysics is a branch of physics, which deals with:	A. Sub-atomic particles B. Stars and galaxies C. Light and sound D. Music
7	The information from far side of the universe are gathered by:	A. Radio telescope B. Microscope C. Telescope D. Spectro scope
8	The study of physics involves?	A. Structure of space and time B. Interaction of electromagnetic radiation with matter C. Both of them D. Chemical changes E. None of them
9	The quantity having dimension of ML^2T^{-2} will earth is:	A. 80 sec B. 500 sec C. 1.802×10^4 sec D. Aerophysics
10	Which quantity has different dimension:	A. Work B. Pressure C. Energy D. Torque
11	Addition of 2.189 kg, 11.8 kg and 5.32 kg gives the rounded off answer as:	A. 19.398 B. 19.400 C. 19.4 D. 19.3
12	Significant figures in 0.0010 are:	A. Four B. Three C. Two D. One
13	Which one is the least multiple:	A. Pico B. Femto C. Nano D. Atto
14	1 gm-cm^3 is equal to:	A. 10^3 kg-m^3 B. 10^{-3} kg-m^3 C. 1 kg-m^3 D. 10^6 kg-m^3

15	Light year is a unit of:	A. Time B. Distance C. Velocity D. Intensity of light
16	When a conductor is moved across a magnetic field:	A. Emf induced is similar to that of a battery B. Emf induced gives rise to induced current C. An emf is induced across its ends D. All are correct E. None of these
17	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Induced emf B. Both A and B C. Both A and C D. Motion emf E. Electrostatic emf
18	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Motion emf B. Both A and B C. Both A and C D. Electrostatic emf E. Induced emf
19	When a conductor is moved across a magnetic field, the redistribution of charge sets up:	A. Magnetic field B. Electrostatic field C. Electromagnetic field D. All of these E. None of these
20	When a conductor moved with its length parallel to the lines of magnetic field:	A. An emf is induced across its ends B. Emf induced is similar to that of a battery C. Emf passes through the conductor D. Both A and B E. None of these
21	The product of induced current and the resistance of the wire through which the current is passing is called:	A. Electromagnetic induction B. induced emf C. Induced current D. Self induced E. None of these
22	The unit of induced emf is:	A. Volt B. Nm/As C. Joule coul ⁻¹ D. Both A and C E. All of these
23	Referring to above figure, a changing current in coil P can be produced:	A. At the instant the switch is closed B. At the instant the switch is opened C. With the help of rheostat D. All of these E. None of these
24	Referring to above figure, due to change in current in the coil P, the change in magnetic flux:	A. Is associated with coil P B. Is associated with coil S C. Causes an induced current in coil S D. All of these E. None of these
25	Referring to above figure, current in coil P falls from its maximum value to zero:	A. At the instant the switch is closed B. At the instant the switch is opened C. When switch is kept open D. When switch is kept closed E. None of these
26	Referring to above figure, current in the coil P grows from zero to its maximum value:	A. At the instant the switch is closed B. At the instant the switch is opened C. When switch is kept open D. All of above E. Neither of above
27	A coil of constant area is placed in a constant magnetic field. An induced current is produced in the coil when:	A. The coil is distorted B. The coil is rotated C. The coil is neither distorted nor rotated D. Both A and B E. None of these
28	Instead of moving the coil towards a magnet, the magnet is moved towards the coil with the same speed. The galvanometer shows current:	A. Of same magnitude in the same direction B. Of different magnitude in the same direction C. Of same magnitude but in opposite direction D. Of different magnitude in the

D. Of different magnitude in the opposite direction
E. None of these

29 When there is no relative motion between the magnet and coil, the galvanometer indicates:

- A. No current in circuit
B. An increasing current
C. A decreasing current
D. Either B or C

30 The magnitude of induced emf depends upon the:

- A. Rate of decrease of magnetic field
B. Rate of change of magnetic field
C. Rate of increase of magnetic flux
D. Constancy of magnetic field
E. None of these