ECAT Pre General Science Physics Online Test

Sr	Questions	Answers Choice
1	The conventional current is the name given to current due to flow of	A. Positrons B. Positive charges C. Negative charges D. Both A and C E. None of these
2	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
3	The results of spectra obtained by Blamer were expressed in 1896 by	A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb
4	The range of wavelengths of colurs in the visible colours is	A. 140 nm to 456 nm B. 10 nm to 56 nm C. 410 nm to 656 nm D. 910 nm to 956 nm E. None of these
5	Atoms of hydrogen gas can be excited by passing electric current through it when the gas is filled into the discharge tube at a pressure which is	A. Less than atmospheric pressure B. Much less than atmospheric pressure C. Greater than atmospheric pressure D. Much greater than atmospheric pressure E. Both C and D
6	Field lines are closer to each other in the region where the filed is	A. Stronger B. Weaker C. Much weaker D. Absent E. None of these
7	Electric field lines emerge from the charges in	A. One dimension B. Two dimensions C. Three dimensions D. Four dimensions E. None of these
8	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
9	By placing a dielectric in between the charges, the electrostatic force between them	A. Is always reduced B. Is always increased C. Is not affected D. Is increased one million times E. None of these
10	Electric lines of force	A. Intersect each other B. Are always parallel C. Are always anti-parallel D. Never intersect E. None of these
11	The electric field lines start from	A. Positive charge B. Negative charge C. Either A or B D. Neutron E. An atom
12	The SI unit of charge is	A. Ampere B. Watt C. Coulomb D. Volt E. Joule

13	The intensity at a point due to a charge is inversely proportional to	A. Amount of charge B. Size of the charge C. Distance between charge and the point D. Square of the distance from the charge E. None of these
14	Electric intensity at a place due to a charged conductor is a	A. Scalar quantity B. Vector quantity C. Semi vector and semi scalar D. Dimensionless quantity E. Both A and D are true
15	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
16	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 and induced current in coil S D. All of these E. None of these
17	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
18	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
19	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
20	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 opposite direction E. None of these
21	When there is no relative motion between the magnet and coil, the galvanometer indicated	A. No current in the circuit B. An increasing current C. A decreasing current D. A constant current E. Either B or C
22	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
23	Michael Faraday and Joseph Henry belong respectively to	A. USA and England B. England and France C. England and USA D. USA and France E. None of these
24	In magnet-coil experiment, emf can be produced by	A. Keeping the coil stationary and moving the magnet B. Keeping the magnet stationary and moving C. Relative motion of the loop and magnet D. Any one of above E. All above
25	The induced current in the loop can be Increased by	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All above E. Both A and B

26	The body oscillates due to _____ accelerates and overshoots the rest position due to _____	A. Applied force, Inertia B. Restoring force, Friction C. Frictional force, Inertia D. Restoring force, Inertia
27	Amplitude in SHM is equivalent to _____ in circular motion	A. Diameter B. Radius C. Circumference D. None of these
28	The graph showing the variation of displacement with time is a	A. Sine curve B. Straight line C. Parabola D. None of these
29	When a body is vibrating, the displacement from mean position	A. Increases with time B. Decreases with time C. Changes with time D. None of these
30	The restoring force is _____ and opposite tot he applied force within _____	A. Equal, Elastic limit B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these