# ECAT Pre General Science Physics Online Test

| Sr | Questions | Answers Choice |
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| 1 | The way through which electromagnetic radiations or photons interact with matter depends upon their: | A. Wavelength<br>B. Frequency<br>C. Energy<br>D. Temperature<br>E. All of these |
| 2 | Op-amp has been discussed as comparator of: | A. Distances<br>B. Voltages<br>C. Velocities<br>D. Magnetic fields<br>E. Both (A) and (C) |
| 3 | Watt x second is unit of: | A. Force<br>B. Work<br>C. Power<br>D. None of these |
| 4 | In the formula R = N x m for diffraction grating, N denotes: | A. No. of lines/cm<br>B. No. of lines/meter<br>C. Total number of lines<br>D. None of above |
| 5 | The maximum possible error in the reading for a meter rod with least count 1 mm is: | A. 0.005 mm<br>B. 0.05mm<br>C. 0.5mm<br>D. 5.0mm |
| 6 | The change of order of vectors in a dot product of two vectors: | A. Changes its value<br>B. Doesn't change it's value<br>C. Changes the direction product quantity<br>D. None of these |
| 7 | A person starts his journey from a point 0, travels 4 Km SW, then 4 Km NW, and finally 4 Km north-east. At what distance is he now from point 0? | A. 0 Km<br>B. 4 Km<br>C. 8 Km<br>D. 12 Km |
| 8 | The velocity of sound in air not effected by changes in | A. Moisture contents in air<br>B. Temperature of air<br>C. The atmosphere pressure<br>D. The composition of air |
| 9 | Brownian motion increases due to | A. Increase in size of Brownian particle<br>B. Increase in temperature of medium<br>C. Increase in density of medium<br>D. Increase in viscosity of medium |
| 10 | Which are not the elementary particles? | A. Photons<br>B. Leptons<br>C. Hadrons<br>D. Quarks<br>E. None of these |
| 11 | What will be the ratio of the distance moved by a freely falling body from rest in 4th and 5th seconds of journey? | A. 4 : 5<br>B. 7 : 9<br>C. 16 : 25<br>D. 1 : 1 |
| 12 | The average of A.C. current and voltage over a complete cycle is | A. Maximum<br>B. zero<br>C. Neither zero nor maximum<br>D. None of these |
| 13 | The temperature of gas is produced by | A. At potential energy of its molecules<br>B. The kinetic energy of its molecules<br>C. The attractive force between its molecules<br>D. The repulsive force between its molecules |

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| 14 | If two bodies of equal masses moving in the same direction collide elastically, then their velocities. | A. Are added<br>B. Are subtracted<br>C. Do not change<br>D. Are exchanged |
| 15 | Braking radiation causes: | A. Continuous spectrum<br>B. Line Spectrum<br>C. Band spectrum<br>D. Discrete specturm<br>E. All of these |
| 16 | Waves transport energy | A. without transport energy<br>B. with matter<br>C. both of them<br>D. none of them |
| 17 | The bridge circuit of full wave rectification uses | A. one diode<br>B. two diode<br>C. three diode<br>D. four diode |
| 18 | Which one of the following is dimensionless: | A. Acceleration<br>B. Velocity<br>C. Density<br>D. Angle |
| 19 | A body moving with an acceleration of 5 m/sec$^2$started with velocity of 10 m/sec. What will be the distance traversed in 10 seconds? | A. 150 m<br>B. 250 m<br>C. 350 m<br>D. 400 m |
| 20 | The conventional current in a circuit is defined as " current which passes from a point at higher potential to a point at lower potential as if it represent a movement of | A. negative charges<br>B. positive charges<br>C. protons<br>D. electrons |