# ECAT Pre General Science Online Test

| Sr | Questions | Answers Choice |
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| 1 | Computer chips are made from | A. Conductors<br>B. Semiconductors<br>C. Insulators<br>D. Both A and B |
| 2 | The branch of physics which concerned with the ultimate particles of which the universe is composed is known as | A. SolidState physics<br>B. Particle Physics<br>C. Nuclear Physics<br>D. Atomic Physics |
| 3 | The instrument used to gather information form the far side of the universe is | A. Compound microscope<br>B. Radio telescope<br>C. Astronomical Telescope<br>D. Simple microscope |
| 4 | At the present time, the main frontiers of fundamental science are | A. 2<br>B. 3<br>C. 4<br>D. 5 |
| 5 | A choke coil is used as a resistance in | A. d.c. circuit<br>B. a.c. circuit<br>C. d.c. potentiometer circuit<br>D. wheatstone bridge |
| 6 | The A.M. transmission frequency range from | A. 500-1000 KHz<br>B. 540-1600 KHz<br>C. 300-490 KHz<br>D. 900-2040 KHz |
| 7 | Which of the following waves are more energetic | A. radio waves<br>B. infrared waves<br>C. ultraviolet<br>D. γ-rays |
| 8 | The electric field, magnetic field and the direction of their propagation are mutually | A. perpendicular<br>B. parallel<br>C. none of these |
| 9 | A piece of wire along which charges are made to accelerate is known as | A. transmitting antenna<br>B. receiving antenna<br>C. modulator<br>D. nor of these |
| 10 | In a three phase a.c generator if the first coil has a phase 0, then the other two coils will have phases | A. 90° - 120°<br>B. 20° and 140°<br>C. 120° and 240°<br>D. 120° and 140° |
| 11 | In a three phase a.c. generator, there are | A. 2 coils<br>B. 3 coils<br>C. 1 coild<br>D. No coil |

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| 12 | For a parallel resonant circuit at resonance, current from supply is | A. minimum<br>B. maximum<br>C. zero<br>D. none of these |
| 13 | The L-C parallel circuit the capacitor draws a | A. leading current<br>B. lagging current<br>C. main current<br>D. none of these |
| 14 | The circuit in which current and voltage are in phase, the power factor is | A. zero<br>B. 1<br>C. negative<br>D. 0.83 |
| 15 | The power dissipation in a pure inductive or capacitance circuit is | A. maximum<br>B. positive<br>C. zero<br>D. none |
| 16 | The ratio of the r.m.s value of the applied voltage to the r.m.s value of resulting a.c. is | A. Impedance<br>B. Inductance<br>C. Reactance<br>D. Resistance |
| 17 | Such an inductor coil which does not consume energy and is often employed for controlling a.c. without consumption of energy is called | A. Choke<br>B. impedance<br>C. Semi-conductor<br>D. None |
| 18 | Units of impedance are | A. Henry<br>B. Ohms<br>C. moh<br>D. Watt |
| 19 | The combined effect of resistance and reactance in a.c. circuit is called | A. conductance<br>B. resistance<br>C. impedance<br>D. choke |
| 20 | The reactance of a cell changes directly with | A. frequency of a.c<br>B. the inductance<br>C. both a and b<br>D. none of these |
| 21 | Current varies with voltage | A. Inversely<br>B. as square root<br>C. Directly<br>D. None of these |
| 22 | The basic circuit element in a d.c. circuit is a/an | A. Inductor<br>B. Resistor<br>C. Capacitor<br>D. Battery |
| 23 | The average value of current and voltage over a cycle is | A. Positive<br>B. Negative<br>C. Zero<br>D. May be positive or negative |
| 24 | The phase at the positive peak is | A. Π/2<br>B. Π<br>C. 3Π/2<br>D. 2Π |
| 25 | The r.m.s value of a.c. current is always | A. positive<br>B. negative<br>C. zero<br>D. all of these |

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| | | D. all of these |
| 26 | The sum of positive and negative peak values are usually written as | A. P-P value<br>B. negative<br>C. zero<br>D. may be positive or negative |
| 27 | The highest value reached by voltage or current in one cycle is called | A. root means square value<br>B. peak value<br>C. peak to peak value<br>D. instantaneous value |
| 28 | The angle which specifies the instantaneous value of the alternating voltage or current is called | A. phase<br>B. critical angle<br>C. angle of incidence<br>D. all of these |
| 29 | The root mean square voltage for alternating current is | D. All of these |
| 30 | The peak value of alternating voltage is given by | |