

## ECAT Pre General Science MCQ's Test For Physics Full Book

| Sr | Questions  | Answers Choice  |
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| 1  | Units of impedance are   | A. Henry<br>B. Ohms<br>C. moh<br>D. Watt  |
| 2  | If the stress increased beyond the elastic limit of the material. the deformation produced in the material will be                             | A. permanent<br>B. temporary<br>C. either of them<br>D. none of them  |
| 3  | The relationship between Boltzmann constant $k$ with $R$ and $N_A$ is given as:  | A. $k = R/N_A$<br>B. $k = R/N_A$<br>C. $k = NR/N_A$<br>D. None of these   |
| 4  | A certain force gives an acceleration of $2 \text{ m/sec}^2$ to a body mass 5 kg. The same force would give a 20 kg object an acceleration of: | A. $0.5 \text{ m/sec}^2$<br>B. $5 \text{ m/sec}^2$<br>C. $1.5 \text{ m/sec}^2$<br>D. $9.8 \text{ m/sec}^2$  |
| 5  | The value of the input resistance of OP-AMP is of the order of   | A. few ohms<br>B. few hundred ohms<br>C. several kilo ohms<br>D. several mega ohms  |
| 6  | The magnetic force exerted on an electron moving with velocity ' $v$ ' at right angle to the magnetic field is given by                        | A. $F = eVB$<br>B. $F = e^2 V/B$<br>C. $F = e/VB$<br>D. $F = B^2 v/ev$  |
| 7  | When a dielectric material is introduced between the plates of a charged condenser the electric field between the plates                       | A. Decreases<br>B. Increases<br>C. No change<br>D. May increase or decrease   |
| 8  | During the negative half-cycle of the half-wave rectification, the diode   | A. does not conduct<br>B. conducts<br>C. either of these<br>D. none of these  |
| 9  | A simple pendulum consists of a  | A. small light bob<br>B. small heavy bob<br>C. big light bob<br>D. big heavy bob  |
| 10 | For a body executing S. H. M, its  | A. momentum remains constant<br>B. potential energy remains constant<br>C. kinetic energy remains constant<br>D. total energy remains constant                |
| 11 | A diode which can turn its current ON and OFF in nano seconds is called:   | A. LED<br>B. Photodiode<br>C. An ordinary diode.<br>D. Both (A) and (B)<br>E. Both (B) and (C)  |
| 12 | Resonance occurs when one of the natural frequencies of vibration of the forced or driven harmonic oscillator                                  | A. greater than the frequency of applied force<br>B. equal to the frequency of applied force<br>C. less than the frequency of applied force<br>D. all of them |
| 13 | When an electron is accelerated through a P.D. of one volt, it will acquire energy equal to  | A. One joule<br>B. One erg<br>C. One electron volt<br>D. None of these  |
| 14 | The value of universal gas constant $R$ is:  | A. $8.314 \text{ J/K mole K}$<br>B. $8314 \text{ J/K mole K}$<br>C. $8.314 \text{ J/mole K}$<br>D. None of these  |

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| 15 | Laser is a beam of:  | A. Visible light<br>B. Infra red light<br>C. Ultra violet light<br>D. Violet light only<br>E. yellow light only                       |
| 16 | Swimming is based on the principle of  | A. Newton's 1st law<br>B. Newton's 2nd law<br>C. Newton's 3rd law<br>D. All   |
| 17 | The waves produced in a microwave oven have frequency  | A. 2450 Hz<br>B. 2450 K Hz<br>C. 2450 M Hz<br>D. 2450 G Hz  |
| 18 | The Instantaneous value of alternative current maybe:  | A. The same as its RMS value<br>B. Greater than its Rms value<br>C. The same as its peak value<br>D. Any of these<br>E. None of these |
| 19 | According to the special theory of relativity, time is   | A. absolute quantity<br>B. not absolute quantity<br>C. constant quantity<br>D. none of these  |
| 20 | A body moving with an acceleration of $5 \text{ m/sec}^2$ started with velocity of $10 \text{ m/sec}$ . What will be the distance traversed in 10 seconds? | A. 150 m<br>B. 250 m<br>C. 350 m<br>D. 400 m  |