

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

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | The un-steady streamline flow is called   | A. laminar flow<br>B. turbulent flow<br>C. both of them<br>D. none of them  |
| 2  | In case of mechanical waves, we study the motion of   | A. a single particle<br>B. collection of particle<br>C. any one of them<br>D. none of them  |
| 3  | The induced current in the loop can be increased by:  | A. Using a strong magnetic field<br>B. Moving the loop faster<br>C. Replacing the loop by a coil of many turns<br>D. All of above<br>E. None of these |
| 4  | Of the following, the option _____ reminds of longitudinal waves.   | A. Sound waves<br>B. Heat waves<br>C. Electromagnetic waves<br>D. Light waves   |
| 5  | A body moving along the circumference of a circle of radius R completes one revolution. The radius of a covered path to the angle subtended at the centre is: | A. Radius of the circle<br>B. Twice the radius<br>C. Thrice the radius<br>D. None of these  |
| 6  | The number of protons inside a nucleus is called  | A. mass number<br>B. atomic weight<br>C. atomic number<br>D. none of these  |
| 7  | The power of an electric generating station is expressed in:  | A. Kilo Jule<br>B. Kilowatt-hour<br>C. Kilo watt<br>D. Watt   |
| 8  | If the number of turns of a solenoid (carrying a steady current I) is doubled without changing the length of a solenoid, then magnetic field:                 | A. Becomes Half<br>B. Becomes double<br>C. Is not affected<br>D. Becomes one fourth<br>E. None of these   |
| 9  | A wave, which transfer energy by moving away from the source of disturbance is called a   | A. progressive wave<br>B. travelling wave<br>C. both of them<br>D. none of them   |
| 10 | The magnitude of the force producing an acceleration of $10 \text{ m/sec}^2$ in a body of mass 500 grams is:  | A. 3 N<br>B. 4 N<br>C. 5 N<br>D. 6 N  |
| 11 | The net force acting on a 100 kg man standing in an elevator accelerating downward with a $= 9.8 \text{ m sec}^{-2}$ comes out to be                          | A. 980 N<br>B. 580 N<br>C. 1380 N<br>D. Zero  |
| 12 | The body of physics involves  | A. Structure of space and time<br>B. Interaction of electromagnetic radiation with matter<br>C. Both of them<br>D. Chemical Changes                   |
| 13 | In frequency modulation (FM), the carrier waves amplitude   | A. Remains constant<br>B. Increase<br>C. Decreases<br>D. None of these  |
| 14 | Which one of the following physical quantities changes with relativistic speed  | A. Length<br>B. Mass<br>C. Time<br>D. All of the above  |

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| 15 | Peak value of alternative current is:   | <p>A. one of its Instantaneous value</p> <p>B. Equal to its RMS value</p> <p>C. The same as its peak-to-peak value</p> <p>D. Both (B) and (C)</p> <p>E. None of these</p> |
| 16 | If rope of lift breaks suddenly. The tension exerted by the surface of lift is ( $a$ =Acceleration of lift)   | <p>A. <math>mg</math></p> <p>B. <math>m(g+a)</math></p> <p>C. <math>m(g - a)</math></p> <p>D. 0</p>   |
| 17 | The mechanics, which deals with the objects moving with velocities approaching that of light is called  | <p>A. Relativistic mechanics</p> <p>B. Wave mechanics</p> <p>C. Quantum mechanics</p> <p>D. Statics</p>   |
| 18 | Einstein's theory about gravity is better than Newton's because it gave explanation of:   | <p>A. Inverse square law</p> <p>B. Bending of light</p> <p>C. Both A and B</p> <p>D. None of above</p>  |
| 19 | Data transmitted along glass-fiber cables is in the form of pulses of monochromatic red light each of duration 2.5 ns. Which of the following is the best estimate of the number of wavelength in each pulse? | <p>A. <math>10^3</math></p> <p>B. <math>10^6</math></p> <p>C. <math>10^9</math></p> <p>D. <math>10^{12}</math></p>  |
| 20 | To design a resonant circuit of frequency 100 KHz with an inductor of inductance 5 mH, we need a capacitor of capacitance   | <p>A. 5.07 pF</p> <p>B. 50 pF</p> <p>C. 0.507 pF</p> <p>D. 507 pF</p>   |