

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

Sr	Questions	Answers Choice
1	magnetic field is a:	<p>A. <b>Vector quantity</b></p> <p>B. Scalar quantity</p> <p>C. Scalar as well as scalar quantity</p> <p>D. Any of (A) or (B)</p> <p>E. Neither (A) nor (B)</p>
2	When the upward drag force of the fluid becomes equal to downward force of gravity of the droplet, then its velocity:	<p>A. Starts increasing</p> <p>B. Starts decreasing</p> <p>C. <b>Becomes constant</b></p> <p>D. Is called escape velocity</p>
3	Silicon can be obtained from:	<p>A. Lead</p> <p>B. Uranium</p> <p>C. An isotope of oxygen</p> <p>D. <b>Sand</b></p>
4	The flux through a closed surface depends upon:	<p>A. Shape of geometry of the closed surface</p> <p>B. Charge enclosed</p> <p>C. Nature of the medium</p> <p>D. Both (A) and (B)</p> <p>E. <b>Both (A) and (C)</b></p>

style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"; mso-fareast-font-family: "Times New Roman"; mso-fareast-theme-font: minor-fareast">Both (B) and (C)</p></span></p>

5	Viscosity is defined as	A. the friction between fluid and its container's walls B. the internal friction between two layers of fluid C. the resistance to flow a fluid experiences D. the extent to which outside factors effect the fluid's flow
6	The diameter of an atom is of the order	A. $10^{-125}$ m B. $10^{-11}$ m C. $10^{-10}$ m D. $10^{-9}$ m
7	When using optical fiber in data transmission, the angle of incidence $\theta_i$ of the light source on the glass fiber should be.	A. Less than critical angle B. Less than angle of refraction C. Greater than critical angle D. Greater than angle of refraction
8	If the ends of a wire are connected to a battery an electric field E will be set up at:	A. <p class="MsoNormal" style="text-align: justify"><span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif";">The ends of the wire only</p></span></p> B. <p class="MsoNormal" style="text-align: justify"><span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif";">Mid points of the wire only</p></span></p> C. <p class="MsoNormal" style="text-align: justify"><span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif";">Every point within the wire</p></span></p> D. <p class="MsoNormal" style="text-align: justify"><span style="font-size: 12pt; line-height: 107%; font-family: "Times New Roman", "serif";">At nodes only</p></span></p> E. <p class="MsoNormal" style="text-align: justify"><span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif";">Both (B) and (D)</p></span></p>
9	The speed of sound in a medium depends on	A. The elastic property but not on the inertia property B. The inertia property but not on the elastic property C. The elastic property as well as the inertia property D. Neither the elastic property nor the inertia property
10	The SI unit of spring constant is identical with that of:	A. Force B. Surface tension C. Pressure D. Loudness
11	The contrast in the fringes in an interference pattern depends upon	A. Fringe width B. Relative difference intensities of the two sources C. Distance between the slits D. Wavelength
12	In a building, there are 15 bulbs of 40 watts, 5 bulbs of 100 watts, 5 fans of 80 watts and a heater of 1 kilowatt. The voltage of the electric main is 220 volts. The minimum efficiency of the main fuse of the building will be	A. 0.4 A B. 11.4 A C. 9.8 A D. 10.6 A
13	Which of the following type of force can do no work on the particle on which it acts:	A. Frictional force B. Gravitational force

13	which of the following type of force can do no work on the particle on which it acts.	C. Electric force D. Centripetal force
14	For a body executing S. H. M, its	A. momentum remains constant B. potential energy remains constant C. kinetic energy remains constant D. total energy remains constant
15	The energy of a photon in a beam of infrared radiation of wavelength 1240 nm is	A. 100 eV B. $10^6$ eV C. $10^3$ eV D. 1.0 eV
16	In crystalline solids, atoms are held about their equilibrium positions depending upon the strength of:	A. Adhesive force B. Nuclear forces C. Inter atomic cohesive force D. Electromagnetic force E. None of these
17	When two progressive waves of nearly same frequencies superimpose and give rise to beats, then	A. Frequency of beat changes with time B. Frequency of beat changes with location of observer C. All particles of medium vibrate simple harmonically with frequency equal to the difference between frequencies of component waves D. Amplitude of vibration of particles at any point changes simple harmonically with frequency equal to difference between two component waves
18	The Einstein's changes in length, mass and time are not observed in common life because	A. We don't observe them seriously B. The masses are too large C. Their speed is too small than the speed of light D. All of the above
19	If a material object moves with the speed of light 'C' its mass becomes	A. Equal to its rest mass B. Four times of its rest mass C. Double of its rest mass D. Infinite
20	The force exerted on a conductor of length L, carrying current I when placed in a magnetic field B is given by	A. $F = IB/L$ B. $F = L \times B/I$ C. $F = IL \times B$ D. $F = IL \cdot B$