Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A body moves a distance of 10 m along a straight line under the action of a force of 5 N. If the work done is 25 J, the angle which force makes with the direction of motion of a body is:	A. 0<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 30<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 60<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°
2	A dimension stands for the _____ nature of certain physical quantity.	A. super B. Quantitative C. Qualitative D. Both B and C
3	The path described by a projectile is called its	A. orbit B. trajectory C. range D. distance
4	The ratio of the diameter of two convex lenses is _____-the ratio of their focal lengths:	A. Greater than B. Less than C. Equal to D. None of these
5	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 B. 4 Km C. 8 Km D. 12 Km
6	Pair production is the phenomenon in which	A. matter is converted into energy B. energy is converted into matter C. light is converted into electrical energy D. electrical energy is converted into light
7	When a conductor is moved across a magnetic field, the redistribution of charge sets up:	A. Magnetic field B. Electrostatic field C. Electromagnetic field D. All of these E. None of these
8	If the external driving force is periodic with a period compareable to the natural period of the oscillator, then we get	A. diffraction B. beat C. interference D. resonance
9	Silicon can be obtained from	A. Lead B. Uranium C. An isotope of oxygen D. Sand

10	When a mass 'm' is pulled slowly, the spring stretches by an amount x_0,then the average force would be	A. F= Kx₀ B. F=1/2Kx₀ C. F=2Kx₀ D. F=4Kx₀
11	A man sitting in a bus travelling in a direction from west to east with a speed of 40 km/h observes that the rain drops are falling vertically down. To the another man standing on ground the rain will appear	A. To fall vertically down B. To fall at an angle going from west to east C. To fall at an angle going from east to west D. The information given is insufficient to decide the direction of rain
12	The photoelectric effect, the maximum energy of photoelectrons depends on the	A. particular metal surface B. frequency of incident light C. both of them D. none of them
13	A particle of mass 5.0 mg moves with a speed of 8.0 m/s. Its de-Brogile wavelength is	A. 1.66 m B. 1.66 x 10⁻¹⁰m C. 1.66 x 10⁻²⁹cm D. 1.66 x 10⁻²⁹m
14	In case of constructive interference of two waves, the amplitude of the resultant wave is _____ either of the waves:	A. Greater than B. Equal to C. Smaller than D. None of these
15	Tick the correct statement:	A. <span 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 the potential and potential difference is scalars<o:p></o:p> B. <span 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">Potential is a scalar but potential difference is a vector<o:p></o:p> C. Both are vectors <span 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"><o:p></o:p> D. <span 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">Potential is vector but potential difference is scalar<o:p></o:p> E. <span 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">None of these<o:p></o:p>
16	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
17	The waves in which the particles of the medium are displaced in a direction perpendicular to the direction of propagation of waves are known as	A. longitudinal waves B. transverse waves C. non-mechanical waves D. none of them

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18	Huygen's theory cannot explain	A. Diffraction B. Interference C. Polarization D. Photoelectric effect
19	What must be changing when a body is accelerating uniformly?	A. the force acting on a body B. the velocity of the body C. the mass of the body D. the speed of the body
20	A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s	A. One coulomb B. 0.5 coulomb C. 30 coulombs D. 2 coulombs E. None of these