

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	An induced current can be produced by:	A. Constant magnetic field B. Changing magnetic field C. Varying magnetic field D. Constant electric field E. None of these
2	Albert Einstein got the Nobel prize in physics for his explanation of photoelectric effect in	A. 1916 B. 1919 C. 1921 D. 1923
3	Charge to mass ratio (e/m) of an electron is given by the relation	A. $e/m = 2V/B^2$ B. $e/m = 2V/B^2 r$ C. $e/m = 2V/B^2 r^2$ D. $e/m = V/2B^2 r^2$
4	At constant temperature, on increasing the pressure of a gas by 5%, its volume. The final temperature of the gas will be	A. 81 K B. 355 K C. 627 K D. 627°C
5	The vector in space has:	A. One component B. Two components C. Three components D. None of these
6	The path described by a projectile is called its	A. orbit B. trajectory C. range D. distance
7	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
8	The mass of a body measured by a physical balance in a lift at rest is found to be m, if the lift is going up with an acceleration a, its mass will be measured as	A. $m(1 - a/g)$ B. $m(1 + a/g)$ C. m D. Zero
9	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	A. $1T = 10^{-4} G$ B. $1T = 10^5 G$ C. $1T = 10^3 G$ D. $1T = 10^4 G$
10	The photon of radio-waves has energy of about	A. 1 Me V B. 1 Ke v C. $10^{-10} e v$ D. $10^{10} e v$
11	To and fro motion of a body about its mean position is known as:	A. Translatory motion B. Vibratory motion C. Rotatory motion D. None of these
12	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
13	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC generator D. Both (A) and (C) E. Both (A) and (B)

14	Magnetic flux passing through a element whose vector area makes an angle 0° with lines of magnetic force is:	<p>font-size: 12pt; text-align: justify;">Cosθ</p> <p>class="MsoNormal" style="text-align: justify;"><math>\cos \theta</math></p> <p>B. Zero</p> <p>C. BA</p> <p>D. BA sin</p> <p>size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"; mso-fareast-font-family: Calibri; mso-fareast-theme-font: minor-latin; mso-ansi-language: EN-US; mso-fareast-language: EN-US; mso-bidi-language: AR-SA">θ</p> <p>E. None of these</p> </p>
15	Which branch of physics deals with the structure and properties of solids	<p>A. Atomic Physics</p> <p>B. Plasma Physics</p> <p>C. Molecular Physics</p> <p>D. Solid state physics</p>
16	The SI unit of permittivity is	<p>A. Nm²C²</p> <p>B. N⁻¹m⁻²C²</p> <p>C. NmC²</p> <p>D. Nm²C⁻¹</p>
17	An aircraft is moving with a velocity of 300 ms ⁻¹ . If all the forces acting on it are balanced, then	<p>A. It still moves with the same velocity</p> <p>B. It will be just floating at the same point in space</p> <p>C. It will be fall down instantaneously</p> <p>D. It will lose its velocity gradually</p>
18	Rate of diffusion is	<p>A. Faster in solids than in liquids and gases</p> <p>B. Faster in liquids than in solids and gases</p> <p>C. Equal to solids, liquids and gases</p> <p>D. Faster in gases than in liquids and solids</p>
19	Force acting upon a charged particle kept between the plates of a charged condenser if F. IF one of the plates of the condenser is removed, force acting on the same will become	<p>A. Zero</p> <p>B. F/2</p> <p>C. F</p> <p>D. 2F</p>
20	In an experiment the uncertainty in the value of a resistor is 2% furthermore, the uncertainty in the potential difference across the same resistor is 1% . The uncertainty in the power loss in the resistor is.	<p>A. Approximately 3%</p> <p>B. Approximately 5%</p> <p>C. Approximately 4%</p> <p>D. Approximately 6%</p>