Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The angle which specifies the instantaneous value of the alternating voltage or current is called	A. phase B. critical angle C. angle of incidence D. all of these
2	When a body moves along a circular path with constant speed, it has an acceleration, which is always directed	A. Along the tangent B. Towards the centre C. Away from the centre D. None of them
3	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Brogile D. Max well
4	A process which can be retraced in exactly reverse order, without producing any change in the surroundings is called	A. reversible process B. irreversible process C. any one of them D. none of them
5	The whole shape of the black body spectrum for all wavelengths was explained by the formula proposed by	A. Max plank B. Newton C. Einstein D. J.J. Thomson
6	Lens's law deals with the	A. Magnitude of induced current B. Magnitude of induced e.m.f C. Direction of induced e.m.f D. Direction of induced current
7	In gases, the charge carriers are:	A. Electrons B. Positive ions C. Negative ions D. Both A and C E. Both A and B
8	A uniform resistance wire of Length L and diameter d has a resistance R. Another wire of same material has length, 4L and diameter 2d, the resistance will be	A. 2 R B. R C. R/2 D. R/4
9	Two samples A and B of a gas initially of the same temperature and pressure are compressed from a volume V to a volume V/2 such that A is compressed isothermally and B adiabatically. The final pressure	A. A greater than than of B B. A is equal to that of B C. A is less than that of B D. A is twice the pressure of B
10	The value of output resistance of OP-AMOP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several mega ohms
11	For a moving body, at any instant of time	A. If the body is not moving the acceleration is necessarily zero B. If the body is slowing, the retardation is negative C. If the body is slowing, the distance is negative D. If displacement, velocity and acceleration at that instant are known, we can find the displacement at any given time in future
12	Tick the series which lie/s in. the infra-red region.	A. Pfund series B. Brackett series C. Paschen series D. All of these E. None of these
13	The electric flux is linked with a surface will be maximum when	A. The surface is held parallel to the electric field B. The surface is held perpendicular to the electric field C. The surface makes an angle of 45<span style="color: rgb(84, 84, 84); font-family: arial, sans-serif;

		font-size: small;">˘ with the electric field D. All of the above
14	A particle is moving along a circular path with uniform speed. Its projection will execute ___along the _____ of the circle:	A. Circular motion, circumference B. Vibratory, chord C. SHM, diameter D. SHM, circumference
15	The mechanics, which deals with the objects moving with velocities approaching that of light is called	A. Relativistic mechanics B. Wave mechanics C. Quantum mechanics D. Statics
16	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
17	If 250V is the RMS value of alternative voltage, then its peak value $V_o$will be:	A. 353.5V B. 250V C. 175V D. zero E. 400V
18	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
19	The heat required to raise the temperature of one mole of the gas through 1 K at constant volume is called	A. heat capacity B. specific heat capacity C. molar specific heat D. molar specific heat at constant volume
20	The measure of the deformation in a solid when stress is applied to its is called	A. elastic constant B. young's modulus C. strain D. elasticity