Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A point charge A of charge +4μC and another B of charge -1μC are placed in air at a distance 1 m apart. Then the distance of the point on the line joining the charge B, where the resultant electric field is zero, is (in m)	A. 2 B. 1 C. 0.5 D. 1.5
2	Which one of the following is dimensionless.	A. Acceleration B. Velocity C. Density D. Angle
3	The smallest three dimensional basic structure in a crystalline solid is called	A. lattice point B. crystal lattice C. cubic crystal D. unit cell
4	The strength of magnetic field at certain points around a wire depends upon:	A. Value of current passing<o:p></o:p> B. Distance from the current element<o:p></o:p> C. Color of the material<o:p></o:p> D. Both (A) and (B)<o:p></o:p> E. Both (B) and (C)<o:p></o:p>
5	Truth table of logic function:	A. Summarizes its output values B. Tabulates all its input conditions only C. Display all its input/output possibilites D. Is not based on logic algebra E. None of these
6	In transverse waves, the individual particles of the medium move:	A. In circles B. Perpendicular to the direction of level C. Parallel to the direction of level D. None of these
7	The time required for a radioactive material to decrease in active by one half is called	A. half time B. half life C. disintegration time D. mean life
8	Two electric bulbs of 200 W and 100 W have same voltage. If $R_1$and R_2be their resistance respectively then	A. R₁= 2R₂ B. R₂= 2R₁ C. R₂=4R₁ D. R₁= 4R₂
9	For a parallel resonant circuit at resonance, current from supply is	A. minimum B. maximum C. zero D. none of these
		A. two distinct ways

10	Electromagnetic radiation or photons interact with matter in	B. three distinct ways C. four distinct ways D. five distinct ways
11	If the length of the conductor is double and its cross sectional area is halved, its conductance will	A. Increase four fold B. Become one-fourth C. Become one-half D. Remains unchanged
12	One KWh is equal to:	A. 3.6 x 10²J B. 3.6 KJ C. 3.6 x 10¹KJ D. 3.6 MJ
13	A rotating body tends to be slower, when its angular acceleration is:	A. Positive B. Negative C. Zero D. Infinity
14	If the object and its image are located at a distance of 5 cm from the focus of a convex lens, the focus length of the lens will be:	A. 5 cm B. 10 cm C. 20 cm D. 25 cm
15	The range of particle depends upon the factor	A. charge, mass and energy of particle B. density of medium C. ionization potential of the atoms D. all the above
16	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
17	Any superconductor with critical temperature above 77 K, is referred as	A. low temperature superconductor B. high temperature superconductor C. very low temperature superconductor D. none of them
18	Maximum height of a bullet when fixed at 30 with horizontal is 11 m. Then height when it is fired at 60° is	A. 22 m B. 6 m C. 33 m D. 7.8 m
19	Which of the following does not have the same units:	A. Work B. Heat C. Kinetic energy D. Power
20	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these