MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	Which of the following phenomenon cannot take place if we consider light as longitudinal wave?	A. diffraction B. interference C. polarization D. reflection
2	When the deformation produced in the material becomes permanent, this type of behaviour is called	A. proportionality B. elasticity C. plasticity D. none of them
3	No of spark plugs needed in diesel engine is:	A. Four B. Five C. Six D. None of these
4	The electron is a cathode-ray tube are accelerated from cathode to anode by a potential differenceof 2000 V. If this p.d is increased to 8000 V, the electrons will arrive at the anode with:	A. Twice the kinetic energy and four times the velocity B. Four times the kinetic energy and twice the velocity C. Four times the kinetic energy and sixteen times the velocity D. Sixteen times the kinetic energy and four times the velocity
5	The angle of incidence at which angle of refraction becomes 90^0 is called	A. Incident angle B. Angle of refraction C. Critical angle D. Phase angle
6	The concentration in solution can be determined by the property known as	A. Solubility B. Insolubility C. Optical activity D. None of these
7	To observe interference of light the condition which must be met with is that the sources must be:	A. Monochromatic B. Phase coherent C. Both of above D. None of above
8	An object in SHM will have maximum speed when its displacement from equilibrium position is :	A. Infinity B. Maximum C. Zero D. Minimum
9	When two light waves travelling in the same direction are out of phase at any point, their resultant amplitude	A. increases B. decreases C. remains unchanged D. increases rapidly
10	A single step index fibre can carry more than	A. 14 TV channels B. 14,000 phone calls C. 16 TV channels D. a and b
11	Young's modulus for bone is	A. 10 B. 15 C. 20 D. 25
12	Multimode step index fibre has diameter as	A. 40 μm B. 50 μm C. 60 μm D. None of these
13	The same retarding force is applied to stop a train. The train stops after 80 m. If the speed is doubled, then the Stopping distance will be:	A. The same B. Doubled C. Halved D. Four times
14	A radioactive substance has a half-life of 4 months. Three-fourths of the substance will decay in:	A. 5months B. 6months C. 8months D. 7months

15	If the incident light contains different wavelengths the images of each wavelength for a certain value is diffracted in the	A. Same directions B. Different direction C. Opposite direction D. None of these
16	A thorium nucleus is formed when a uranium nucleus emits an □ −particles. Atomic number of thorium is :	A. 23 B. 60 C. 90 D. 70
17	In an optical fibre the speed of light is	A. Directly proportional to its refractive B. Inversely proportional to its refractive inedex C. Independent of refractive index D. Directly proportional to square of refractive index
18	Two satellites are going around the earth at a height of 250 km and 450 km respectively. If angular speed for both is same, then centripetal acceleration will be.	A. more for first B. more for second C. same for both D. nothing can be decided
19	The magnifying power of an instrument is expressed in	A. Radians B. Degrees C. No units D. None of these
20	If we know the refractive index of glass, speed v of light in the glass can be found by	A. v = c n B. v = c/n C. v = n/c D. None of these