MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	When refractive index of core is 1.50 and of 1.48 of cadding then find the angle of entry for an optical fibre is	A. 11.2^o B. 14.2^o C. 15.4^o D. 13.6^o
2	The average time the Earth takes to make exactly one rotation about its axis is defined as:	A. A solar hour B. A solar day C. A light year D. A solar month
3	Where in standing wave, do the vibrations of the medium occur?	A. Only at the nodes B. Only at the antinodes C. At all points between the nodes D. At all points between the antinodes
4	_____ is a pattern which has got one more atom at the centre of a simple cube.	A. Simple cube B. Face centered cube C. Body centered cube D. None of these
5	The young s modulus for a perfect rigid body is	A. Zero B. 1 C. Infinite D. None of these
6	A piece of Aluminium (Al) and a piece of Germanium (Ge) are cooled T1 K to T2 K. The resistance of:	A. Each of them increases B. Each of them decreases C. Al increases and Ge decreases D. Al decreases and that of Ge increases
7	In deformation of the material, the potential energy of the molecules due to displacement from their mean positions is	A. Lost B. Gained C. No lost no gain D. None of these
8	Insulators are those material in which energy gap is	A. very large (several eV) B. very narrow (= 1ev) C. either of them D. none of them
9	The law of thermodynamics which discusses the condition under which heat energy is converted into and equivalent amount of work is:	A. 1st B. 2nd C. 3rd D. None of these
10	In electron microscope, we use high speed electrons because them	A. Penetration power is higher B. Wavelength is smaller C. Frequency is smaller D. K.E is smaller
11	An elevator's motor produces 3000 W power. The speed With Which it can lift a 1000 kg load is:	A. 30.6ms⁻¹ B. 0.306ms⁻¹ C. 3.06ms⁻¹ D. 300.3ms⁻¹
12	Young's modulus for concrete is	A. 10 B. 15 C. 25 D. 30
13	The band above the valence band is	A. Completely filled band B. Conduction band C. Forbidden energy band D. None of these
14	The wavelength of light is 6000°A, the number of waves continued in 0.01 m distance will be	A. 1.6 x 10⁴ B. 3 x 10³ C. 2 x 10⁶ D. 4 x 10⁸
15	Experiments revealed that the ratio of the stress to the strain is a constant value for	A. different material B. all material C. a given material

		D. all of them
16	Photo phone was invented by	A. Edison B. Graham Bell C. Bardeen D. None of these
17	de-Broglie wavelength associated with an electron moving at a speed of 1x106 ms-1 is	A. 4x10-10 ms-1 B. 5x10-10 m C. 6x10-10 m D. 7x10-10 m
18	Which of the given elements is a diamagnetic material	A. Antimony B. Bismuth C. Copper D. All of these
19	A long solenoid has 20 turns/ cm. The current necessary to produce a magnetic field of 20 mellites inside the solenoid is approximately:	A. 1A B. 2A C. 4A D. 8A
20	The young modulus of steel is greater than that of aluminium. Keeping the statement above in mind state which of the following is true	A. Steel requires a larger stress on it for a given strain than does aluminium B. Aluminium requires more force than steel does to get a similar extension as steel C. Steel requires less force than aluminium does to get a similar extension as aluminium D. Steel requires a larger strain on it for a given stress than does aluminium