MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	A light and a heavy body have equal momenta. Which one has greater K.E?	A. The light body B. The heavy body C. The K.E are equa D. Data is incomplete
2	The domains are the small regions of the order of	A. Millimeter B. Micrometer C. Micron D. None of these
3	The young s modulus for a perfectly rigid body is	A. Zero B. 1 C. Infinite D. None of these
4	One degree of thermodynamics scale of temperature is called:	A. Celsius B. Fahrenheit C. Kelvin D. Radian
5	The energy of photon of wavelength 1240 nm is:	A. 0.5 eV B. 1.0 eV C. 1.5 eV D. 2.0 eV
6	A closed organ pipe and an open organ pipe have their first overtone identical infrequency. Their lengths are in ratio	A. 3:4 B. 1:2 C. 2:3 D. 3:5
7	Refractive index of material depends upon	A. Nature of material B. Wave length C. Temperature D. All of these
8	A material having high refractive index has	A. Low density B. High density C. Zero density D. None of these
9	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
10	Which electromagnetic wave would cause the most significant diffraction effect for an atomic lattice of spacing around 10^{-10}m?	A. microwave B. infrared C. ultraviolet D. X-ray
11	Which of the following types of optical fibre has a core which rages in diameter from 50 to 1000μm?	A. single mode step fibre B. multi-mode step index fibre C. multi-mode graded index fibre D. none of them
12	An electric motor exerts a force of 40 N on a cable and pulls it by a distance of 30 m in one minute. The power supplied by the motor in watts is	A. 20 B. 200 C. 2 D. 10
13	Shear modulus for tungsten is	A. 50 B. 100 C. 150 D. 200
14	If a wire is stretched to double of its length then the strain will be	A. 1 B. 0.5 C. 2 D. 0
15	The length of the standard metre measured by Michelsion's interferometer comes out to be	A. 1,553, 163.5 wavelength B. 1553.5 wavelength C. 155316.5 wavelength D. none of them

16	A man weighing 500 N carries a load of 10 kg to the top of a building in 4 minutes. The work done by the man is 6 × □□^{4} J. If he carries the same load in 8 minutes, the work done by the man will be:	A. 3 × 10⁴ J B. 6 × 10⁴J C. 9 × 10⁴J D. 12× 10⁴ J
17	A material with high retentively and large corcivety most useful to make	A. Electromagnet B. Permanent magnet C. Choke D. None of these
18	In young s interference experiment one slit is covered with a cellophane paper which absorbs half the intensity then	A. No fringes are observed B. All fringes will be darks C. bright fringes will be less bright and dark will be less dark D. Bright fringes will be brighter and dark fringes will be darks
19	Optical fibres function on the principle of	A. reflection B. refraction C. total internal reflection D. total internal refraction
20	A cell of negligible resistance and e.m.f 2 V is connected across a series combination of 2,3 and 5 ohms. The p.d. across the 3 Ω resistor is	A. 0.6 V B. 1/3 V C. 2/3 V D. 4/3 V