

MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	A convex lens acts as diverging lens when the object is placed	A. Between F and 2F B. At 2F C. Within the focal length D. Beyond 2F
2	Two 8 N forces act on each end of the beam of length 0.60m. Two forces are parallel and acting opposite to each other, the angle between the force and beam is 60° , what is the torque of the couple exerted on the beam:	A. 2.4 Nm B. 4.2 Nm C. 4.8 Nm D. 9.6 Nm
3	To get p-type semiconductor we add impurity from	A. 3 rd group B. 4 th group C. 5 th group D. 6 th group
4	The law of thermodynamics which discusses the condition under which heat energy is converted into an equivalent amount of work is:	A. 1st B. 2nd C. 3rd D. None of these
5	According to Young's experiment if frequency of light used is halved then fringe width becomes	A. 2/3 B. Double C. Remains constant D. Fringe
6	Photo phone was invented by	A. Edison B. Graham Bell C. Bardeen D. None of these
7	The ratio of kinetic energy to potential energy for solids is	
8	The frequency of an open pipe is f. if one end is closed then its fundamental frequency will be:	A. $f/2$ B. $3f/4$ C. f D. 2f
9	In a spectrometer experiment monochromatic light is incident normally on a diffraction grating having 4.5×10^5 lines per meter. The second order line is seen at an angle of 30° to the normal what is the wavelength of the light?	A. 200 nm B. 430 nm C. 500 nm D. 556 nm
10	Identify practical use of superconductor	A. MRI B. Super computer C. Magnetic levitation train D. All above
11	Focal length of convex lens is maximum for	A. Blue light B. Yellow light C. Green light D. Red light
12	In a soft iron, domains are	A. easily oriented along external field and do not return to original random positions B. easily oriented along external field and readily returns to originally random positions C. do not oriented along external field and also do not return to original random position D. none of them
13	When a person lifts a body from ground work done by lifting force is?	A. Positive B. Negative C. Zero D. Half of positive maximum
14	Steel is preferred for making permanent magnets because it has	A. Large retentivity and large coercivity B. Small retentivity and small coercivity C. Large retentivity and small coercivity D. Small retentivity and large coercivity

		D. Small retentively and large coactivity
15	When the radioactive nucleus emits a beta particle, the proton neutron ration:	A. increases by one B. Remains same C. Decreases by one D. Decreases by four
16	Shear modulus for steel is	A. 20 B. 84 C. 95 D. 202
17	The light form Sun reaches earth in the form of	A. plane wavefront B. circular wavefront C. spherical wavefront D. elliptical wavefront
18	A certain force F increases the length of a wire by 1 mm. The force required to increase its length by 2mm is	A. 2 F B. 4 F C. 8 F D. 16 F
19	Capacitance of a capacitor does not depend upon	A. Separation between plates B. Thickness of the plates C. Area of the plates D. Medium between the plates
20	One cannot see through fog because	A. Fog absorbs light B. The refractive index of fog is infinity C. Light suffers total reflection at the droplet in a fog D. Light is scattered by the droplets in fog