

## MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	In Michelson's interferometer, if a dark fringe is seen in the beginning, the next dark fringe will appear by moving the moveable mirror through a distance	<p>A. <math>\frac{\lambda}{2}</math></p> <p>B. <math>\frac{\lambda}{4}</math></p> <p>C. <math>\frac{\lambda}{8}</math></p> <p>D. <math>2\lambda</math></p>
2	Which of the following does not have the same units:	<p>A. Work</p> <p>B. Heat</p> <p>C. Kinetic energy</p> <p>D. Power</p>
3	At the highest point on the trajectory of a projectile, its	<p>A. Potential energy is minimum</p> <p>B. Kinetic energy is maximum</p> <p>C. Total energy is maximum</p> <p>D. Kinetic energy is minimum</p>
4	SI unit of kinetic energy of rotation is	<p>A. joule second</p> <p>B. joule</p> <p>C. joule second</p> <p>D. joule meter</p>
5	The idea that all magnetic effects may be due to circulating currents (i.e moving charges) Was first held by	<p>A. Ampere</p> <p>B. Faraday</p> <p>C. Lenz</p> <p>D. Gauss</p>
6	Which mode can carry more than 14 TV channels or 14000 phone cells?	<p>A. single mod step index</p> <p>B. multimode step index</p> <p>C. multimode graded index</p> <p>D. all of them</p>
7	If focal length of objective is increased	<p>A. Magnifying power of compound microscope decreased</p> <p>B. Magnifying power of astronomical telescope increases</p> <p>C. The diameter of the objective lens</p> <p>D. None of these</p>
8	The modulus of elasticity of material does not depend upon	<p>A. Shape</p> <p>B. Temperature</p> <p>C. Nature of material</p> <p>D. Impurities mixed</p>
9	Newton's rings are formed due to	<p>A. Refraction of light</p> <p>B. Diffraction of light</p> <p>C. Interference of light</p> <p>D. None of these</p>
10	If the range of a projectile is R, the potential energy will be maximum after the projectile has covered (from start) distance equal to:	<p>A. <math>\frac{R}{2}</math></p> <p>B. <math>\frac{R}{4}</math></p> <p>C. <math>R</math></p> <p>D. <math>\frac{R}{9}</math></p>
11	All of the following have been expressed in proper units except:	<p>A. Energy = kg m sec<sup>-2</sup></p> <p>B. Pressure = N - m<sup>2</sup></p> <p>C. Area = m<sup>2</sup></p> <p>D. density = kg - m<sup>3</sup></p>
12	The domains are of macroscopic size of the order of	<p>A. centimetres</p> <p>B. metres</p> <p>C. millimetres</p> <p>D. nanometres</p>

		C. millimetres D. nanometres
13	When the light waves of the same frequency and amplitude travelling in the same direction superimpose each other , they give rise to	A. interference B. diffraction C. dispersion D. polarization
14	Propagation of light in an optical fiber requires that light should be	A. Refracted from air to fiber B. Continuously refraction C. Totally reflected within the fiber D. Both B and C
15	On slightly disturbing a body which is an unstable equilibrium, its center of gravity	A. rises B. falls C. remains constant D. first rises then falls
16	The metals become electrically conducting due to their	A. Ductility B. Hardness C. Structure D. All of them
17	In Multimode step index fibre the refractive index from its centre to the boundary is	A. 1 B. 1.55 C. 1.52 D. 1.43
18	A geometric shape of a solid obtained by regular, respective, three-dimensional arrangements of its molecules,atoms or ions is called a:	A. Crystal B. Crystal Lattice C. Crystal plane D. None of these
19	Phenomenon of interference and diffraction support the:	A. Quantum nature of light B. Tranverse nature of light C. Wave nature of light D. Complex nature of light
20	The electrons in the outermost shell are called	A. Super electrons B. Valance electrons C. Full valance D. Upper deep up