MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	A machine gun fires 'n' bullets per second and the mass of each bullet is m. If v is the speed of each bullet then the force exerted on the machine gun is:	A. *mng* B. *mnv* C. *mnvg* D. *mnv/g*
2	In conductors, the valence band and conduction bands are	A. Touch each other B. Overlapped each other C. Largely overlapped D. None of these
3	For the monochromatic beam of X-rays, the crystal planes in a lattice act like a	A. perfect absorbers B. boundary C. mirror D. none of them
4	If tube length of astronomical telescope is 105 cm and magnifying power is 20 for normal setting calculate the focal length of objective	A. 100 cm B. 10 cm C. 20 cm D. 25 cm
5	Swimming is possible on account of	A. 1st law of motion B. 2nd law of motion C. 3rd law of motion D. Newton's law of Gravitation
6	In compound microscope image formed is	A. Real erect and diminished B. Virtual inverted magnitude C. Real inverted and magnified D. Virtual inverted and magnified
7	Joule-second is the unit of:	A. Energy B. Heat C. Planck's constant D. None of these
8	If N is the number of rulings on the grating, then the resolving power in the mth order diffraction equals to	A. $R = N \times m$ B. $R = N/m$ C. $R = m/N$ D. $R = N \times m^2$
9	If the wavelength of light used in Michelsion's interferometer is 400 nm and the moveable mirror only moved through $\lambda/4$, then the length moved will be	A. 10 nm B. 10^{-2} mm C. 1 nm D. 10^{-4} mm
10	When resistances are connected in Parallel, the effective resistance will be	A. Product of the reciprocals of the individual resistances B. Product of the individual resistances C. Sum of the reciprocals of the individual resistances D. Sum of the individual resistances
11	A boy is travelling from Lahore to Karachi with uniform velocity . Its	A. Speed changes B. Acceleration changes C. Direction of motion changes D. Displacement from origin changes
12	An object is placed at a distance of 200 cm from a convex lens of focal length 10 cm the linear magnification is	A. 1/3 B. 2/3 C. 3/4 D. None
13	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
14	A PN junction diode cannot be use:	A. As rectifier B. For converting light energy to electrical energy C. For getting light radiation D. For increasing the amplitude of an ac signal

15	Two charges of equal magnitudes and at a distance r exert a force F on each other. If the charges are halved and distance between them is doubled, then the new force acting on each charge is:	A. F/8 B. F/4 C. F/16 D. 4F
16	Intensity of light from a point source at the edge of unit sphere will be:	A. ▢ B. ▢ C. P(4π) D. 4▢
17	The ratio of size of the image to the size of the object is called	A. Resolving power B. Magnification C. Power D. None of these
18	The unpolarized light is	A. An ordinary incandescent bulb B. Sun C. Moon D. All of these
19	In the stress-strain graph stress is increased linearly with strain until a point is reached this point is known as	A. Plastic limit B. Plastic deformation C. Proportional limit D. Elastic behaviour
20	The time period of a simple pendulum does not depend upon.	A. Amplitude B. Mass C. Length D. Both A and B