MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	If the incident light contains different wavelengths the images of each wavelength for a certain value is diffracted in the	A. Same directions B. Different direction C. Opposite direction D. None of these
2	In single slit diffraction the condition for second minimum is	A. Sinθ = λ B. d Sinθ =2λ C. d Sinθ =3λ D. d Cosθ =0
3	_____ 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
4	The superposition of the two waves of same frequency and amplitude travelling in the same direction gives rise to an effect called:	A. Diffraction B. Interference C. Polarization D. Dispersion
5	Huygen's principle is used to study the	A. formation of wavefronts B. propagation of wavefronts C. nature of light D. speed of light
6	Energy per unit volume of a stretched wire is	A. (1/2) x load x extension B. Load x stress C. Stress x strain D. (1/2) x stress x strain
7	The minimum distance between an object and its image in a convex lens is	A. 2 f B. 2.5 f C. 3 f D. 3.5 f
8	High temperature superconductors have temperature	A. Above 77 K B. Below 77 K C. At 77 K D. None of these
9	The re conversion of light signals into electrical signals takes place due to	A. Transmitter B. Receiver C. Generator D. None of these
10	The regular array of atoms in a crystal has spacing of the order of	A. 10⁻¹⁶m B. 10⁻¹⁴m C. 10⁻¹⁰m D. 10⁻⁶m
11	In a astronomical telescope the final image for normal vision is formed at	A. The focal of the eye piece B. The least distance of the distinct vision C. The focus of the objective lens D. Infinity
12	A spectrometer is used to find	A. Wavelength of light B. Refractive index of the prism C. Angle of minimum deviation of prism D. All of these
13	Two sources are said to be coherent if they have:	A. Same amplitude B. Same wavelength C. Definite phase relation with each other D. None of them
14	A particle executing one dimensional motion, finally comes to rest, what will be the angle between acceleration and displacement during motion:	A. 0 B. π C. □/2 D. □/4
		A. Equal to unity

15	A lens behaves as a converging lens in air and a diverging lens in water the refractive index of the material is	A. Equal to unity B. Equal to 1.33 C. Between unity and 1.33 D. Greater than 1.33
16	The saturation of the material reached when magnetic flux density changes from	A. Zero to minimum value B. Zero to maximum value C. Maximum to zero value D. Minimum to negative value
17	A ray of light always points	A. Anti parallel to wave front B. Perpendicular to wave front C. Parallel to wave lets D. None
18	Spectrum of sun consists of	A. Bright lines B. Dark lines C. Bright bands D. Dark bands
19	What will be the number of photons emitted per second by 25 W source of monochromatic light of wavelength 600 nm:	A. 7.5 × 1017 B. 7.5 × 1019 C. 5.5 × 1019 D. 5.5 × 1017
20	A microscope has an objective lens of 10 mm focal length and an eye piece of 25.0 mm focal length what is the distance between the lenses	A. ≈ 200 mm B. ≈ 210 mm C. ≈ 213 mm D. ≈ 233 mm