MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	In digital modulation, the LED or laser flashed on and off at a	A. Fast rate B. Very fast rate C. Extremely fast rate D. None of these
2	A person weighing 20 mg walks on a level platform with a speed of 2 ms-1 . The work by the person against the force of gravity is:	A. Zero B. 2J C. 60J D. 600J
3	During a negative β-decay	A. An atomic electron is ejected B. A neutron in the nucleus decays emitting an electron C. An electron which already present within the nucleus is ejected D. A part of binding energy of nuclei is converted into electron
4	If a mass of 10 gm is suspended from a spring of k= 9.8 Nm^{-1}, then the extension will be	A. 1 cm B. 1 m C. 10 mm D. None of these
5	Which statement about geostationary orbit is false?	A. A geostationary orbit must be directly above the equator B. All satellite in a geostationary orbit must have the same masses C. The period of geostationary orbit must be 24 hours D. There is only one possible radius for a geostationary
6	Successive dark and bright fringes are formed each time the moveable mirror in Michelsion's interferometer is moved a distance	A. λ/2 B. λ/4 C. λ D. 3/2λ
7	The total magnification of a combination of two lenses having individual magnification M1 and M2 is	A. M₁+ M₂ B. M₁M₂ C. M₁- M₂ D. M₁/ M₂
8	A body of mass m kg is lifted by a man to a height of one meter in 30 sec. Another man lifts the same mass to the same height in 60 sec. The work done by them are in the ratio	A. 1: 2 B. 1: 1 C. 2: 1 D. 4: 1
9	Rainbow is formed due to combination of	A. Dispersion and total internal reflection B. Reflection and refraction C. Dispersion and focusing D. Refection and scattering
10	X-rays is a type of electron magnetic radiations of much shorter wavelengths of the order of	A. 10⁻⁸ m B. 10⁻⁹ m C. 10⁻¹⁰ m D. 10⁻¹² m
		A. Water to glass

11	The critical angle for a ray of light suffering total internal reflection will be smallest for the ray traveling from	B. Water to air C. Glass to air D. Glass to water
12	Polaroid glass is used in sun glasses because	A. It is fashionable B. It has good color C. It is cheaper D. It reduces the light intensity to half on account of polarization
13	A polarizer is used to	A. Reduced intensity of light B. Produce polarized light C. Increase intensity of light D. Produce unpolarised light
14	Plane polarized light can be produced by:	A. Simple reflection B. Refraction C. Selective absorption D. All of these
15	The splitting of white light into several colors on passing through a glass prism is due to	A. Refraction B. Reflection C. Interference D. Diffraction
16	A mode of propagation of light through optical fibre in which the light within the fibre is	A. Reflected B. Refracted C. Continuously refracted D. None of these
17	Angle subtended by any side of the eight-sided mirror at the center is	A. π/8 B. π/4 C. 2π/8 D. 2π/4
18	The resolving power of human eye is	A. 1° B. 2° C. 3° D. 6°
19	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
20	Television signal are converted into light signals by	A. Decoder B. Transistor C. Photodiode D. Optical fibre