MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	Examples of polymers are	A. Polythene B. Polystyrene C. Nylon D. All of them
2	The energy of photon of wavelength 620 nm is:	A. 0.5 eV B. 1.0 eV C. 1.5 eV D. 2.0 eV
3	A thin film is a transparent medium whose thickness is comparable with the wavelength of	A. light B. sound C. any one of them D. none of them
4	A simple astronomical telescope consists of	A. Two convex lenses B. Three convex and one cocave C. Two concave lens D. None of these
5	In superconductors, the resistance of a material drops to zero and no	A. Power is dissipated B. Energy is dissipated C. Current is dissipated D. None of these
6	The spacing between the parallel lines are served as	A. slits B. source of light C. opaque lines D. fringes
7	Glare produces when light reflects from water snow and rough road surfaces when their angle of incidence is	A. Small B. Large C. Very large D. None of these
8	In a photocell, sodium and potassium emit electrons for:	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
9	Which of the material have largest value of young's modulus	A. Copper B. Diamond C. Aluminum D. Iron
10	Single mode step index fibre has feature/s like	A. Very thin core B. 5 (μm) miameter C. Relatively large cladding D. All of these
11	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
12	Charge on a capacitor is 50C. if voltage applied across its plates is 10V then its capacitance:	A. 5F B. 0.02F C. 500F D. 0.2F
13	A man weighing 500 N carries a load of 10 kg to the top of a building in 4 minutes. The work done by the man is 6 × □□^{4} J. If he carries the same load in 8 minutes, the work done by the man will be:	A. 3 × 10⁴ J B. 6 × 10⁴J C. 9 × 10⁴J D. 12× 10⁴ J
14	Photoelectric effect and Compton effect prove the:	A. Wave nature of light B. Particle nature of light C. Dual nature of light D. Dual nature of light
15	A 4 m long string fixed at its ends resonate in 4 segments. The wavelength of the waveis:	A. 4m B. 0.5m C. 2m D. 0.25 m

16	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
17	Identify the incorrect statement	A. The distance between the objective and eye-piece is 16.02 cm B. The angular magnification of the planet is 800 C. The image of the planet is inverted D. The objective is larger than the eye-piece
18	de-Broglie wavelength associated with an electron moving at a speed of 1x106 ms-1 is	A. 4x10-10 ms-1 B. 5x10-10 m C. 6x10-10 m D. 7x10-10 m
19	. A force "F1" acts on a body through distance "S1" in the direction of motion and does work "W1". Similarly another force "F2" act on same body through distance "S2" but in opposite to the direction of motion and does work "W2". Now if F1 = F2 and S1 = S2 then which statement is correct.	A. W1 = W2 B. W2< W2 C. W1 > W2 D. W1 = W2= 0
20	The speed of light in vacuum is 3 x 10^8 ms^{-1}.Its speed in a medium of refractive index 1.5 will be	A. 6.5 x 10⁸ B. 2 x 10⁸ ms⁻¹ C. 4.5 x 10⁸ cm D. 5.5 x 10⁸