MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	The path difference and phase difference are related to each other as	A. Phase difference = (2π) x path difference B. Phase difference = (2π/λ) x path difference C. Phase difference = (λ/2) x path difference D. Phase difference = (2λ/π) x path difference
2	Which one light source can travel faster through optical fibre is	A. Infra red B. Visible C. Ultra violet D. All of these
3	The ratio of fringes with for bright and dark fringes is	A. 1 : 2 B. 2 : 1 C. 1 : 4 D. 1 : 1
4	The dimension of modulus of elasticity is:	A. Different from that of coefficient of viscosity B. The same as that of pressure C. the same as that of coefficient of viscosity D. Both A and B E. Both A and C
5	Which of the following theories of light are explained by the Young's double slit experiment?	A. wave theory of light B. particle nature of light C. dual nature of light D. corpuscular nature of light
6	The apparent size of an object depends on the angle subtended but it at the eye. As the angle increases the size of the object	A. Smaller B. Larger C. Very large D. None of these
7	Shear modulus for diamond is	A. 156 B. 353 C. 450 D. 477
8	When a person lifts a body from ground work done by lifting force is?	A. Positive B. Negative C. Zero D. Half of positive maximum
		A. 1 to 10³

9	Doping is the process in which the small amount of impurity is added into pure semiconductor lattice in the ratio	B. 1 to 10⁴ C. 1 to 10⁵ D. 1 to 10⁶
10	If both the length and radius of the wire are doubled,how does the modulus of elasticity change?	A. Becomes one fourth B. Halved C. Doubled D. Remains unchanged
11	For a body moving with constant speed in a horizontal circle, which of the following remains constant?	A. Velocity B. Centripetal force C. Acceleration D. Kinetic energy
12	The valency of electron in the valence band is known as	A. Atom B. Molecule C. Hole D. None of these
13	Time period of a simple pendulum at certain placed depends upon:	A. Mass of the bob B. Amplitude C. Material of the bob D. None of these
14	A bullet train move with the velocity of	A. 400 Kmh⁻¹ B. 460 Kmh⁻¹ C. 500 Kmh⁻¹ D. 510 Kmh⁻¹
15	A rubber cord 100 cm long is elongated 1 cm by a stretching force of 0.2 N. The cross-sectional area of the cord is 0.04 cm^2. Find the Young's modulus for that rubber.	A. 0.5 N cm⁻² B. 0.05 N cm⁻² C. 50 N cm⁻² D. 500 N cm⁻²
16	Vertical component of velocity of the projectile at any instant ‘t’ from the ground is given by:	A. □□□□□□ B. □□□□□□ − □t C. □□□□□□ − □t D. □□□□□□ + □t
17	The unit of work function is	A. eV B. Volt C. Farad D. Herdz
18	If the momentum of a body is increased n times, its kinetic energy increases:	A. n times B. 2 n times C. √□ times D. n 2 time
19	When an image formed by the objective lies at the focus of both the objective and the eye-piece, the telescope is said to be in	A. Final adjustment B. Normal adjustment C. Initial adjustment D. None of these
20	A wave which consists of a single, non-repetitive disturbance is called a	A. Continuous wave B. Longitudinal wave C. Pulse D. Transverse wave