MDCAT Physics MCQ's Test

Sr	Questions	Answers Choice
1	When a silicon crystal is doped with a trivalent element, then the atom of the trivalent element is known as	A. acceptor B. donor C. either of them D. none of them
2	Upon applying some unbalanced external stress the deformation may be observed in	A. Length B. Surface area C. Volume D. All of these
3	A count rate 240 per minute reduces to 30 counts per min in 1 hour. The half-life of source is:	A. 20min B. 60min C. 80min D. 90min
4	The optical fibre is covered for protection with	A. rubber jacket B. plastic jacket C. steel jacket D. copper jacket
5	The minimum energy required to remove an electron is called:	A. Stopping potential B. Work function C. Kinetic energy D. None of these
6	Which of the following quantities /quantity becomes zero at any moment during oscillation.	A. Speed B. Acceleration C. Momentum D. All of these
7	Monochromatic light of wavelength 300 nm is incident normally on a surface of area 4 cm2. If the intensity of light is 150 mW/m2; the rate at which photon strike the surface:	A. 2.53 × 1019 B. 7.5 × 1019 C. 9.1 × 1013 D. 2.53 × 1013
8	Which quantity has different dimension.	A. work B. Pressure C. Energy D. Torque
9	Diffraction is concerned with the superposition of	A. very large number of secondary wavelets B. a few secondary wavelets C. two secondary wavelets D. no secondary
10	Fringe spacing in YDS experiment will be maximum if we use	A. Red light B. Green light C. Violet light D. Blue light
11	When a radioactive nucleus emits a □ −paritcles, the mass number of the atom:	A. Increases by one B. Decreases by one C. Remains the same D. Decreases by four
12	The function of colimator is	A. To converge the incoming rays B. To make the parallel rays from source C. In which the source of light is kept D. None of these
13	Polymers are the physical combinations of carbon with:	A. Oxygen only B. Hydrogen C. Nitrogen D. All of these E. None of these
14	Newton's rings are formed due to	A. Refraction of light B. Diffraction of light C. Interference of light D. None of these
		A. modulus

15	The ratio of volume stress/volume strain is called as	B. Bulk modulus C. shear modulus D. Young's modulus
16	Who proposed wave theory of light	A. Huygens B. Galileo C. Einstein D. Newton
17	The uranium Nucleus □□□ □ undergoes successive decays, emitting respectively □ − □□□,□ − □□□ □□□ − □□□□. What is the atomic number and atomic mass of the resulting nucleus:	A. 90, 238 B. 91, 234 C. 92, 236 D. 92, 238
18	Which is having minimum wavelength?	A. X-rays B. Ultra-violet rays C. Y-rays D. Cosmic rays
19	Which of the following is not true?	A. The Lyman series is a continuous spectrum B. The Ballmer series is a line spectrum in the visible region C. The Paschen series is a line spectrum in the infrared region D. The spectral series formula can be derived from Rutherford's model of the hydrogen atom 18. The photoelectric effect is the ejection of
20	Bats navigate and find food by:	A. Ultrasonic B. Echolocation C. Refraction