

NAT II Physical Science Physics

Sr	Questions	Answers Choice
Si	Questions	
1	When the length of a microscope tube increases, its magnifying power	A. Decreases B. Increases C. May increases or decreases depending on the observer and the place of observation D. Does not change
2	In a simple harmonic motion the kinetic energy (KE) and the potential energy (PE), are such that throughout the motion	A. KE remains constant B. PE remains constant C. KE/PE is constant D. KE+PE remains constant
3	A fly is sitting on the objective of a telescope pointed towards the moon. What effect is expected on the photography of the moon taken through the telescope?	A. The entire of view blocked B. There is an image of the fly on the photography C. There is no effect at all D. There is a reduction in the intensity of the image
4	The velocity of falling raindrops attains limited value because of	A. Up thrust of air B. Viscous force exerted by air C. Surface tension effect D. Air currents atmosphere
5	In a common base transistor circuit, the current gain is 0.98. On changing the emitter current by 5.00 mA, the change in collector current is	A. 0.916 mA B. 2.45 mA C. 4.9 mA D. 5.1 mA
6	For production of beats the two sources must have	A. Different frequencies and same amplitude B. Different frequencies C. Different frequencies, same amplitude and same phase D. Different frequencies and same phase
7	The fundamental unit which has same power in the dimensional formula of surface tension and viscosity is:	A. Mass B. Length C. Time D. None
8	If the amplitude of sound is doubled and the frequency reduced to one-fourth, the intensity of sound at the same point will be	A. Increasing by a factor of 2 B. Decreasing by a factor of 2 C. Decreasing by a factor of 4 D. Unchanged
9	Two forces of 10N and 15N are acting simultaneously on an object in the same direction. Their resultant is	A. Zero B. 5N C. 25N D. 150N
10	If yellow light emitted by sodium lamp in Young's double slit experiment is replaced by monochromatic blue light of the same intensity	A. Fringe width will decrease B. Fringe width will increase C. The fringe width will remain unchanged D. Fringes will becomes less intense
11	Boyle's law is applicable in	A. Isochoric process B. Isothermal process C. Isobaric process D. Isotonic process
12	Surface tension of water is due to	A. Inter molecular attractions B. Intermolecular spaces C. Inter molecular repulsion D. None of above
13	An ideal choked (used along with fluorescent tube) would be	A. A pure resistor B. A pure capacitor C. A pure inductor D. A combination of an inductor and a capacitor
		A. Energy

,	14	Planck's constant has the dimensions of:	B. Momentum C. Frequency D. Angular momentum
,	15	How does the Young's modulus vary with the increase of temperature?	A. Decrease B. Increases C. Remains constant D. First increases and then decreases
	16	The average binding energy of a nucleus inside an atomic nucleus is about	A. 8 MeV B. 8 eV C. 8 Joules D. 8 ergs
•	17	Band spectrum is produced by	A. H B. He C. H ₂ D. Na
,	18	A charge Q is divided into two parts q and Q - q and separated by a distance R. The force of repulsion between them will be maximum when:	A. q = Q/4 B. q = Q/2 C. q = Q D. None of these
,	19	The angle between rectangular components of a vector is	A. 0 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">° B. 60 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">° C. 90 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">° D. 120 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°
2	20	A force of 10N is acting along y-axis. Its component along x-axis is	A. 10N B. 20N C. 100N D. Zero N