

## NAT II Physical Science Physics

Sr	Questions	Answers Choice
1	A man pushes a wall but fails to displace it. He does:	A. Negative work B. Maximum positive work C. Positive work but not maximum D. No work
2	Velocity of sound in a diatomic as is 300 m/sec, what is its rms velocity?	A. 400 m/sec B. 40 m/sec C. 430 m/sec D. 300 m/sec
3	A wire of radius r has resistance R, It it is stretched to a wire of r/2 radius, then the resistance becomes	A. 2R B. 4R C. 16R D. Zero
4	A p-n junction has a thickness of the order of:	A. 1 cm B. 1 mm C. 10 <sup>-6</sup> cm D. 10 <sup>-12</sup> cm
5	Bernoulli's equation is based upon law of conservation	A. Mass B. Momentum C. Energy D. None of these
6	The unit of inductance is equivalent to	A. V x s/A B. V x A/s C. A x s/v D. V/A x s
7	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in the form of heat will be	A. 0.1 watt B. 1 watt C. 10 watt D. 100 watt
8	The percentage errors in the measurements of mass and speed are 2% and 3% respectively. How much will be the maximum error in the estimate of the kinetic energy obtained by measuring mass and speed	A. 11% B. 8% C. 5% D. 1%
9	The temperature at which the speed of sound becomes double as was at 27°C is	A. 273 b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°C B. 0 b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°C C. 927 b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°C D. 1027 b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°C D. 1027 b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°C
10	The initial velocity of a body moving along a straight line in 7 m/s. It has a uniform acceleration of 4 m/s <sup>2</sup> . The distance covered by the body in the 5th second of its motion is	A. 25 m B. 35 m C. 50 m D. 85 m
11	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
12	Ball pen function on the principle of	A. Viscosity B. Boyle's law C. Gravitational force D. Surface tension
13	Radio waves of constant amplitude can be generated with	A. Rectifier B. Filter C. FET D. oscillator
		A. Enthalpy

A Decreases   B. Increases   B. Increases   C. Does not Change   D. May increase or decrease depending on the observer and the place of observation of the observer and the place of observation of the observer and the place of observation of the observer and the place of observation and the place of observation of the observer and the place of observation of the observer and the place of observation and the place of observation of the observer and the place of observation and the place observation and the place of observation and the place of observation and the place of observation and the place observation	14	Which of the following is not thermo dynamical function?	B. Work done C. Gibb's energy D. Internal energy
8. A body can have a constant velocity and still have a varying speed  C. A body can have a constant velocity and still have a varying speed and still have a varying velocity D. The direction of the velocity of a body can change when its acceleration is constant  A particle moves along a circular path under the action of a force. The work done by the force is  A particle moves along a circular path under the action of a force. The work done by the force is  The contrast in the fringes in any interference pattern depends on  A Fringe width B. Intensity ratio of the sources C. Distance between the silts D. Wavelength  A Phase of different colors is different B. Amplitude of different colors is different C. Energy of different colors is different of the lens is covered by an opaque screen  A converging lens is used to form an image on a screen. When the upper half of the lens is C. Intensity of image will increase D. Intensity of the image will	15	When the length of a microscope tube increase, its magnifying power	B. Increases C. Does not Change D. May increase or decrease depending on the observer and the
A particle moves along a circular path under the action of a force. The work done by the force is  B. Positive and non-zero C. Negative and non zero D. None of the above  A. Fringe width B. Intensity ratio of the sources C. Distance between the slits D. Wavelength  A. Phase of different colors is different B. Amplitude of different colors is different C. Energy of different colors is different D. Velocity of different colors is different C. Energy of different colors is different D. Velocity of different colors is different C. Energy of different colors is different D. Velocity of different colors is different colors is different D. Velocity of different colors is different colors is different to the image will disappear B. No change either in size or in intensity of image will increase D. Intensity of the image will	16	Which of the following four statement is false?	still be accelerated B. A body can have a constant velocity and still have a varying speed C. A body can have a constant speed and still have a varying velocity D. The direction of the velocity of a body can change when its
The contrast in the fringes in any interference pattern depends on  B. Intensity ratio of the sources C. Distance between the slits D. Wavelength  A. Phase of different colors is different B. Amplitude of different colors is different C. Energy of different colors is different D. Velocity of different colors is different D. Intensity of the image will disappear D. Intensity of image will increase D. Intensity of the image will	17		<ul><li>B. Positive and non-zero</li><li>C. Negative and non zero</li></ul>
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	20		B. No change either in size or in intensity     C. Intensity of image will increase     D. Intensity of the image will