

## NAT II Physical Science Physics

Sr	Questions	Answers Choice
1	In which of the following states does the incandescent substance give continuous spectrum?	A. Vapours in atomic state     B. Vapours in molecular state     C. Solid or fluid in bulk state     D. Solid or fluid in plasma state
2	Which of the following lists of physical quantities consists only of vectors:	A. Time, temperature, velocity B. Force, volume, momentum C. Velocity, acceleration, mass D. Force, acceleration, velocity
3	In an L-R circuit, time constant is that time in which current grows from zero to the value	A. 0.63   <sub>o</sub> B. 0.50   <sub>o</sub> C. 0.37   <sub>o</sub> D.   <sub>o</sub>
4	A ten-ohm electric heater operates on a 110 V line. Calculate the rate at which it develops heat in watts:	A. 1310 W B. 670 W C. 810 W D. 1210 W
5	A motorist travels A to B at a speed at 40 km/h and returns at speed of 60 km/h. His average speed will be	A. 40 km/h B. 48 km/h C. 50 km/h D. 60 km/h
6	A body moves a distance of 10 m along a straight line under the action of a force of 5 Newton's. If the work done is 25 joules, the angle which the force takes with the direction of motion of the body is:	A. 0 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°</b> B. 30 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°</b> C. 60 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°</b> D. 90 <b style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">°</b>
7	If a diamagnetic substance is brought near north or south pole of a bar magnet it is	A. Attracted by the poles B. Repelled by the poles C. Repelled by north pole and attracted by the south pole D. Attracted by the north pole and repelled by the south pole
8	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
9	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
10	The volt/metre is the unit of:	A. Potential B. Work C. Force D. Electric field intensity
11	Which of the following is a scalar quantity?	A. Density B. Displacement C. Torque D. Weight
12	One cannot see fog because	A. Fog absorbs light B. The refractive index of fog is infinity C. Light suffers total reflection at the droplet in a fog D. Light is scattered by the droplet in fog
13	Shunt required in an ammeter of resistance R to decrease its deflection from 30 ampere to	A. R/4 B. R/3

	10 ampere is	C. R/2 D. R
14	For obtaining appreciable extension, the wire should be	A. Short and thin B. Long and thin C. Short and thick D. Long and thick
15	Quantity that remains unchanged in a transformer is	A. Voltage B. Current C. Frequency D. None of these
16	Light appears to travel in straight lines since	A. It is not absorbed by the atmosphere B. It is reflected by the atmosphere C. Its wavelength is very small D. Its velocity is very large
17	Ultra-violet radiation of 6.2 eV falls on an aluminium surface. K.E. of fastest electron emitted is (Work function = 4.2 eV)	A. 3.2 x 10-21 J B. 3.2 x 10-19 J C. 7 x 10-25 J D. 9 x 10-32 J
18	A particle moving in a magnetic field has increase in its velocity, then its radius of the circle	A. Decreases B. Increases C. Remains the same D. Becomes half
19	Surface tension of water is due to	A. Inter molecular attractions     B. Intermolecular spaces     C. Inter molecular repulsion     D. None of above
20	Band spectrum is produced by	A. H B. He C. H <sub>2</sub> D. Na