PHYSICS PAPER-I (NEW SCHEME)   TIME ALLOWED: 20 Minutes

GROUP-II   **OBJECTIVE**   MAXIMUM MARKS: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) The path difference for constructive interference should be:-

(A) $\dfrac{\lambda}{2}$ (B) $\dfrac{5\lambda}{2}$ (C) $m\lambda$ (D) $\dfrac{3\lambda}{2}$

(2) If a convex lens of focal length 5 cm is used as Simple microscope then its magnifying power will be:-

(A) 5   (B) 6   (C) 10   (D) 25

(3) Value of Triple Point of water is given as:-

(A) Zero K   (B) 100 K   (C) 273.16 K   (D) 373.16 K

(4) First Law of Thermodynamics for an Adiabatic Process will be written as:-

(A) $Q = W$ (B) $Q = -W$ (C) $W = -\Delta U$ (D) $W = \Delta U$

(5) Light year is a unit of:-

(A) Light   (B) Time   (C) Velocity   (D) Distance

(6) The resultant of two forces 30 N and 40 N acting parallel to each other is:-

(A) 30 N   (B) 40 N   (C) 70 N   (D) 10 N

(7) A ball is allowed to fall freely from certain height. It covers a distance in first second equal to:-

(A) $2g$ (B) g (C) $\dfrac{g}{2}$ (D) gt^2

(8) $Kg\,ms^{-1}$ can also be written as:-

(A) Nm (B) NS (C) NS^{-1} (D) JS

(9) 3 joules of work is done in 3 seconds, then power is:-

(A) 6 watt   (B) 3 watt   (C) 18 watt   (D) 1 watt

(10) Moment of Inertia is measured in:-

(A) $Kg\,m^2$ (B) $Kg\,m^{-2}$ (C) $rad\,s^{-1}$ (D) Joule second

(11) The dimensions of angular velocity are:-

(A) $\left[T^{-1} \right]$ (B) $\left[LT^{-1} \right]$ (C) $\left[LT^{-2} \right]$ (D) $\left[L^{-1}T \right]$

(12) The ratio between orbital and escape velocities are:-

(A) 1   (B) $\dfrac{1}{2}$ (C) $\sqrt{\dfrac{1}{2}}$ (D) $\sqrt{2}$

(13) The device used for measurement of liquid flow is:-

(A) Monometer   (B) Barometer   (C) Hydrometer   (D) Venturimeter

(14) The frequency of Second's Pendulum is:-

(A) 0.5 Hz   (B) 1 Hz   (C) 2 Hz   (D) 4 Hz

(15) If the pressure of a gas is doubled, then speed of sound is:-

(A) Doubled   (B) Become half   (C) Not affected   (D) Increases by four times

(16) The distance between two consecutive nodes is:-

(A) $\dfrac{\lambda}{2}$ (B) $\dfrac{\lambda}{4}$ (C) 2λ (D) λ

(17) Sound waves can not be:-

(A) Reflected   (B) Refracted   (C) Polarized   (D) Diffracted