

PHYSICS Part-I (New)

Time: 20 Minutes

Marks: 18

Paper Code

Roll No. of the Student

Multiple Choice Questions
01 Mark for each

Serial No. Of the Answer Book

SECTION-A

Note:

- 1) Attempting all MCQs is compulsory. This paper along with the OMR sheet must be returned to the superintendent after due time.
- 2) Fill the circle (A)(B)(C)(D), which one is correct with blue or black ball point in separate OMR Sheet like
- 3) If more than one circle in the OMR sheet is filled then no credit will be given to such answer.

- I.i. Kgms⁻¹ is equivalent to
- A Ns B Ns⁻¹ C N⁻¹s₁ D Ns⁻²
- ii. The angular speed in rad/hr for daily rotation of our earth is ?
- A $\pi/6$ B $\pi/12$ C 2π D 4π
- iii. When $F_x = 3N$ and $F_y = 5N$ then $F = ?$
- A 6N B 4N C 2N D 0N
- iv. At terminal velocity, the acceleration of falling object is
- A $0ms^{-2}$ B $1ms^{-2}$ C $-9.8ms^{-2}$ D $+9.8ms^{-2}$
- v. The slope of x-axis or any line parallel to x-axis is
- A Maximum B Uniform C 0 D ∞ (infinity)
- vi. Two forces of magnitude 20N and 50N act simultaneously on a body. Which one of the following forces cannot be the resultant
- A 20N B 30N C 40N D 70N
- vii. The restoring force of SHM is maximum when particle.
- A Displacement is maximum B Crossing mean position C Half way D At rest
- viii. The net force that acts on a 10N falling object, when it encounters 4N of air resistance is
- A 6N B 4N C 6N D 10N
- ix. Which of the following pair of angles will have the same horizontal range.
- A 30° and 70° B 15° and 75° C 25° and 70° D 30° and 65°
- x. For the constructive interference between two set of waves, the phase difference should be
- A 0 B 2π C 4π D All of these
- xi. The time rate of change of linear momentum is equal to
- A Force B Impulse C Inertia D energy
- xii. Which one of the following properties proves the transverse wave nature of light
- A Interference B Refraction C Polarization D Diffraction
- xiii. Which one is constant for satellite in orbit?
- A Velocity B K.E C P.E D Angular Momentum
- xiv. Triple point of water is
- A $273.16^\circ C$ B $273.16^\circ F$ C 273.16K D 372.16K
- xv. The atmosphere is held to the earth by
- A Winds B Gravity C Clouds D Rotation of earth
- xvi. If the total work done around a closed path is equal to zero, the field is said to be
- A Uniform B Variable C Conservative D None of them
- xvii. The percentage uncertainty in the measurement of $(3.76 \pm 0.25)m$ is
- A 4% B 6.6% C 25% D 376%
- xviii. The angle formed by a complete circumference at the centre of the circle is
- A π B 2π C 3π D 4π