

SMAPhysics

UNITS AND MEASUREMENTS WORKSHEETS

Chapter Name: Units and Measurement

Class: 11

Topic: Units

Worksheet: 1

1. Light year is a unit of
(a) Time (b) Mass (c) Distance (d) Energy
2. The magnitude of any physical quantity
(a) Depends on the method of measurement
(b) Does not depend on the method of measurement
(c) Is more in SI system than in CGS system
(d) Directly proportional to the fundamental units of mass, length and time
3. Which of the following is not equal to *watt*
(a) *Joule/second* (b) *Ampere* \times *volt*
(c) $(\text{Ampere})^2 \times \text{ohm}$ (d) *Ampere/volt*
4. *Newton-second* is the unit of
(a) Velocity (b) Angular momentum (c) Momentum (d) Energy
5. Which of the following is not represented in correct unit
(a) $\frac{\text{Stress}}{\text{Strain}} = \text{N/m}^2$ (b) Surface tension = N/m
(c) Energy = $\text{kg} - \text{m/sec}$ (d) Pressure = N/m^2
6. One *second* is equal to
(a) 1650763.73 time periods of *Kr* clock
(b) 652189.63 time periods of *Kr* clock
(c) 1650763.73 time periods of *Cs* clock
(d) 9192631770 time periods of *Cs* clock
7. One nanometre is equal to
(a) 10^9mm (b) 10^{-6}cm (c) 10^{-7}cm (d) 10^{-9}cm
8. A *micron* is related to centimetre as
(a) $1 \text{micron} = 10^{-8} \text{cm}$ (b) $1 \text{micron} = 10^{-6} \text{cm}$
(c) $1 \text{micron} = 10^{-5} \text{cm}$ (d) $1 \text{micron} = 10^{-4} \text{cm}$
9. The unit of power is
(a) *Joule* (b) *Joule per second* only
(c) *Joule per second* and *watt* both (d) Only *watt*
10. A suitable unit for gravitational constant is
(a) $\text{kg} - \text{m sec}^{-1}$ (b) $\text{N m}^{-1} \text{sec}$
(c) $\text{Nm}^2 \text{kg}^{-2}$ (d) kgm sec^{-1}