

**CHAPTER # 1: MEASUREMENTS**

- 1) Which one of the following is not a unit of length  
(a) Angstrom  
(b) Micron  
(c) Radian  
(d) Light year
- 2) Which one of the following is not regarded as a fundamental quantity in Physics?  
(a) Length  
(b) Mass  
(c) Time  
(d) Weight
- 3) Zero is not significant only if it  
(a) Lies to the left of a significant digit  
(b) is between two digits  
(c) is to the right of a significant digit  
(d) is before the decimal point
- 4) The dimension of the following pair is not the same  
(a) work & energy  
(b) work and torque  
(c) Momentum & impulse  
(d) Mass & moment of inertia
- 5) The error in measurement may occur due to  
(a) inexperience of a person  
(b) The faulty apparatus  
(c) Inappropriate method  
(d) Due to all reasons in a, b and c
- 6) In any measurement the significant figures are  
(a) all accurately known and all doubtful digits  
(b) only accurately known digits  
(c) only doubtful digits  
(d) all accurately know digits and the first doubtful digit
- 7) Which one is the highest power multiple?  
(a) giga  
(b) beta  
(c) mega  
(d) deca
- 8) Unit of G is ?  
(a)  $\text{Nm}^2 \text{kg}^2$   
(b)  $\text{N m}^2 \text{kg}$   
(c)  $\text{N m}^2 \text{kg}^{-2}$   
(d) none
- 9) The unit of force is \_\_\_\_\_ and its symbol is \_\_\_\_\_ which is the correct pair?  
(a) Newton, n  
(b) Newton, N  
(c) newton, n  
(d) newton, N
- 10) Which one is the correct representation of the unit of pressure?  
(a) Newton/Meter<sup>2</sup>  
(b) newton/meter<sup>2</sup>  
(c) Newton/meter<sup>2</sup>  
(d) Newton/Meter<sup>2</sup>
- 11) 1024 can be written in scientific notation as  
(a)  $1.024 \times 10^3$   
(b)  $2^{10}$   
(c) 0.000976  
(d) 1/0300097
- 12) Number of significant figures in 0.0173 are  
(a) Three  
(b) four  
(c) five  
(d) two
- 13) The dimension of force is  
(a)  $\text{MLT}^{-1}$   
(b)  $\text{MLT}^{-2}$   
(c)  $\text{ML}^{-1}\text{T}$   
(d)  $\text{ML}^{-1}\text{T}^2$
- 14)  $\text{ML}^{-1}\text{T}^{-2}$  is the dimension of  
(a) Force  
(b) Pressure  
(c) Momentum  
(d) Energy

- 15) Which equation is not dimensionally correct?
- $E = mc^2$
  - $V_f = V_i + at$
  - $S = Vt^2$
  - $S = 1/2at^2$
- 16) Which of the following is SI base unit?
- gram
  - slug
  - Newton
  - kilogram
- 17) The dimensions of stain are
- $[MLT^2]$
  - $[ML^{-2}T]$
  - $[M^0 L^0 T^0]$
  - $[M^{-1}L^{-1}T^{-1}]$
- 18) The SI unit of intensity of light is:
- Mole
  - Kelvin
  - Candela
  - Ampere
- 19) 0.0023 can be expressed in scientific notation as:
- $23 \times 10^{-4}$
  - $0.23 \times 10^{-2}$
  - $2.3 \times 10^{-3}$
  - None
- 20) How many years in one second?
- $3.1 \times 10^6$  years
  - $3.1 \times 10^{-7}$  years
  - $3.1 \times 10^{-8}$  years
  - $3.1 \times 10^{-9}$  years
- 21) If the reading is taken with measuring scale whose minimum division is 1mm, then the correct reading is:
- 0.2145 m
  - 0.21 m
  - 0.214 m
  - None
- 22) 75.560 is round off as:
- 75.6
  - 75.7
  - 76.00
  - None
- 23) Steradian is the angel which lies in:
- One dimension
  - Two dimensions
  - Three dimensions
  - None
- 24) Error occur due to negligence and inexperience of a person is:
- Systematic Error
  - Random Error
  - None
- 25) Zero to the right of non-zero digits are:
- Significant
  - Not significant
  - May or may not be significant
  - None
- 26) Absolute uncertainties are added in following operations:
- Multiplication
  - Division
  - Subtraction
  - None
- 27) Silicon is abundantly obtained from:
- Water
  - Metal
  - Sand
  - Stones

