

Time: 20 Minutes**OBJECTIVE - - - - - Code : 6476****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.

1. 1 - Carnot engine is a _____.
 (A) real (B) ideal (C) both (A) & (B) (D) none of these
- 2 - The slope at any point on the velocity-time graph gives _____.
 (A) distance (B) acceleration (C) average velocity (D) average speed
- 3 - If the initial phase is $\frac{\pi}{2}$, the displacement of SHM is _____.
 (A) $x = x_0^2 \sin \omega t$ (B) $x = \sin \omega t$ (C) $x = x_0 \cos \omega t$ (D) zero
- 4 - Radius of Geo-stationary satellite is _____.
 (A) 4.23×10^4 m (B) 4.23×10^4 km (C) 4.23×10^7 m (D) 4.23×10^3 m
- 5 - The speed of light in different medium is always _____.
 (A) equal to 'c' (B) different (C) greater than c (D) becomes zero
- 6 - Intensity of light depends upon _____.
 (A) wavelength (B) amplitude (C) velocity (D) frequency
- 7 - The value of 'g' at the centre of the earth is _____.
 (A) infinite (B) 2 g (C) 3 g (D) zero
- 8 - Dimensions of $\sqrt{\frac{F \times \ell}{m}}$ are _____.
 (A) $[M^0 L T^{-1}]$ (B) $[M L^{-1} T]$ (C) $[M L^2 T^{-3}]$ (D) $[M L^{-1} T^{-1}]$
- 9 - SI unit of molar specific heat are _____.
 (A) $J \text{ mol}^{-1} \text{ K}^{-1}$ (B) $J \text{ mol K}^{-1}$ (C) $J \text{ mol K}$ (D) $J \text{ mol}^{-1}$
- 10 - The ballistic missiles are only for _____.
 (A) short range (B) long range (C) zero range (D) none of these
- 11 - The value of constant 'γ' for mono-atomic gas is _____.
 (A) 1.67 (B) 1.40 (C) 1.0 (D) 1.2
- 12 - If least count is 10 kg then 8.00×10^3 has significant digit _____.
 (A) 1 (B) 2 (C) 3 (D) 4
- 13 - The angle between rectangular components is _____.
 (A) 60° (B) 90° (C) 180° (D) Zero
- 14 - Projection of $\vec{B}$ on $\vec{A}$ is _____.
 (A) $A \cos \theta$ (B) $B \cos \theta$ (C) $A \sin \theta$ (D) $B \sin \theta$
- 15 - Gravity performs no work, if the body moves _____.
 (A) vertically (B) horizontally (C) 60° vertical (D) none of these
- 16 - The droplet of water has terminal velocity the acceleration is _____.
 (A) maximum (B) minimum (C) zero (D) changed
- 17 - Speed of sound in copper is _____.
 (A) 38000 m s^{-1} (B) 3600 m s^{-1} (C) 3500 m s^{-1} (D) 3400 m s^{-1}