

Multiple Choice Questions (M.C.Qs)

Q.No.1. Choose the correct answer for each from the given options.

1. Al-Shifa an encyclopedia of philosophy was written by -----
(a) Al-eruni (b) Ibn-e-Sina (c) Ibn-ul-Haitham (d) Al-Razi
2. Pound is the unit of:
(a) Mass (b) Energy (c) Weight (d) Torque
3. The dot product between two identical unit vectors is equal to -----.
(a) i (b) Zero (c) One (d) 2i
4. The components of a vector are such as x is +ve and y is -e then vector lies in ----- quadrant.
(a) 1st (b) 2nd (c) 3rd (d) 4th
5. The dimensions of angular velocity, frequency is:
(a) $M^0 L^1 T^1$ (b) $M^1 L^1 T^1$ (c) $M^0 L^0 T^{-1}$ (d) $M^1 L^1 T^2$
6. ----- of the following is one dimensional motion.
(a) The wheels of a moving train (b) The earth revolving round the sun
(c) A train running on a straight track (d) Electron moving around the nucleus
7. The speed of projectile v at any instant is equal to -----.
(a) $(v_x^2 + v_y^2)$ (b) $(v_x^2 + v_y^2)^2$ (c) $(v_x^2 + v_y^2)^{\frac{1}{2}}$ (d) $(v_x + v_y)^2$
8. It is assumed that in projectile motion the acceleration along vertical direction will -----
(a) Decrease (b) Increase
(c) Remain the same (d) None of these
9. The time period of rotating body is given by:
(a) $T = 2\pi\omega$ (b) $T = 4\pi^2\omega$ (c) $T = 4\pi^2\omega^2$ (d) $T = \frac{2\pi}{\omega}$
10. A person whose weight is 150 pound on the earth, on the moon his weight will be approximately -----.
(a) 20 pounds (b) 30 pounds (c) 120 pounds (d) 150 pounds
11. The term torque is synonymous with -----.
(a) Moment of force (b) Moment of inertia
(c) Angular momentum (d) Linear momentum
12. The moon complete one revolution around the earth in -----.
(a) 365.3 days (b) 29.5 days (c) 27.3 days (d) 30 days
13. The KWh is the unit of -----
(a) Work (b) Power (c) Pressure (d) None of these
14. When the length of pendulum doubled, its time period becomes -----.
(a) Halved (b) 1.41 times (c) Doubled (d) Remain same
15. A form of energy that produced sensation in our auditory system is known as -----.
(a) Phase (b) Wave front
(c) Sound (d) Sensational energy
16. E-rays are not diffracted though grating because X-rays having -----.
(a) Very short frequency (b) Very short wavelength
(c) Large Amplitude (d) None of these
17. The erect image by convex lens is possible when distance of object is ----.
(a) Less than focal length (b) Equal to focal length
(c) Greater than focal length (d) Equal to double the focal length
18. The author of Kitab-ul-Masoodi was -----
(a) Al-Beruni (b) Ibn-e-Sina (c) Ibn-ul-Haitham (d) Al-Razi
19. Light year is the unit of -----.
(a) Light (b) Distance (c) Time (d) None of these
20. The division of a vector \vec{A} by a positive number n is given by $\vec{B} = \frac{1}{n}\vec{A}$ where $m = 1/n$ the direction of \vec{B} is -----
(a) Same as \vec{A} (b) Opposite to \vec{A}
(c) Perpendicular to itself (d) None of these
21. If resultant of two forces having magnitudes 13N and 13N acting on a point is 13N, then angle between two forces is ----
(a) 0° (b) 60° (c) 90° (d) 120°
22. If 1 kg and 1 gm Massive bodies are dropped from the same height simultaneously then ----- (Assume friction is zero).
(a) 1kg will reach the ground earlier (b) 1gm will reach the ground earlier
(c) Both will reach the ground at the same time
(d) Depends upon nature of the mass
23. The property of matter by virtue of which it remains or tries to remain in its original state is known as -----
(a) Force (b) Inertia (c) Friction (d) Viscosity
24. The velocity of projectile is maximum at -----.
(a) Target (b) Point of projection
(c) Both (a) & (b) (d) Highest point
25. Centripetal force and centrifugal force are always -----.
(a) Parallel to each other (b) Anti parallel to each other
(c) Perpendicular to each other (d) None of these
26. The S.I unit of Angular momentum is -----.
(a) N.S (b) J.S (c) J.m (d) N.m
27. The dimensions of gravitational constant are -----.
(a) $L^3 M^{-1} T^{-2}$ (b) $L^2 M^2 T^{-1}$ (c) $L^1 M^1 T^{-1}$ (d) $L^1 M^2 T^{-3}$
28. If the velocity of body "A" is double than body "B" both having same mass then the ratio of K.E of both is -----.
(a) 1 : 2 (b) 2 : 1 (c) 4 : 1 (d) 1 : 4
29. A body executes S.H.M having maximum velocity -----.
(a) $v_0 = x_0 \sqrt{\frac{k}{m}}$ (b) $v_0 = x_0 \omega$ (c) $v_0 = x_0 \frac{v_x}{x} = \frac{x^2}{x_0^2}$ (d) All of these