

## Physics ICS Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	In matter, the Atoms are in a state of never ending	A. Motion B. Rest C. Change D. State of decline
2	The motion and rest are	A. Absolute B. Relative C. Mutual D. All of these
3	The shortest distance between two points is called	A. Distance B. Amplitude C. Displacement D. Is a number
4	Rate of change of velocity is called	A. Speed B. Acceleration C. Displacement D. Torque
5	Rate of change of displacement is called	A. Speed B. Velocity C. Kinetic energy D. None of these
6	Average acceleration is a	A. Scalar quantity B. Vector quantity C. <div>(-) ve quantity</div> D. None of these
7	When the car moves with an increasing acceleration then its velocity time graph is always	A. Constant B. Variable C. A straight line D. A curve
8	The equations of motion hold good for	A. Variable acceleration B. Uniform acceleration C. Centripetal acceleration D. All of these
9	In the absence of air resistance the acceleration of a body will be	A. Uniform B. Variable C. Instantaneous D. None of these
10	Newton's laws of motion were published in	A. 1587 B. 1687 C. 1787 D. 1887
11	The mass of a body is quantitative measure of its	A. Motion B. Inertia C. Weight D. All of these
12	A frame of reference stationed at the earth is an	A. Inertial frame B. None internal frame C. Accelerated frame D. Laboratory frame
13	A force applied on a body produces acceleration in	A. Opposite direction B. perpendicular direction C. Its own direction D. In any direction
14	The action and reaction never act on	A. Same body B. Two bodies C. many bodies D. All of these
15	The time rate of change of momentum equals	A. Weight B. Applied force C. Impulse D. Mass

16	Total change in momentum of an isolated system is	A. Always (+) ve B. Always (-) ve C. Has maximum value D. Zero
17	A collision in which K.E. of the system is not conserved is	A. Elastic collision B. Inelastic collision C. 3rd law of motion D. None of these
18	the shortest distance between two points is called.	A. Speed B. Acceleration C. Distance D. Displacement
19	When average velocity becomes equal to instantaneous than body is called moving with.	A. Instantaneous acceleration B. Constant acceleration C. Constant velocity D. Variable velocity
20	when a ball is thrown straight up, the acceleration at its highest point is.	A. Upward B. Downward C. Zero D. Horizontal
21	Unit of acceleration is	A. ms <sup>-1</sup> B. ms C. ms <sup>-2</sup> D. m2s
22	If a mass of a body is doubled, then acceleration becomes.	A. Double B. Half C. One fourth D. Constant
23	A paratrooper moves downward with	A. Zero acceleration B. Constant acceleration C. Positive acceleration D. Negative acceleration
24	A body covers a distance of 10 m in 1 sec with a constant velocity of 10 ms <sup>-1</sup> , Acceleration produced by the body is.	A. 0 ms <sup>-2</sup> B. 2 ms <sup>-2</sup> C. 5 ms <sup>-2</sup> D. 10 ms <sup>-2</sup>
25	10 N and 20 N are acting on a body of mass 2 kg the minimum acceleration will be.	A. 10 ms <sup>-2</sup> B. 20 ms <sup>-2</sup> C. 60 ms <sup>-2</sup> D. 5 ms <sup>-2</sup>
26	Slope of velocity time graph describes a physical quantity called.	A. Displacement B. Average velocity C. Average acceleration D. Momentum
27	The slope of velocity time graph shows	A. Total distance covered B. Average acceleration C. Instantaneous acceleration D. Torque
28	If the slope of a velocity time graph gradually decreases then body is said to be moving with	A. Positive acceleration B. Negative acceleration C. Uniform velocity D. None
29	When the body moves with constant acceleration the velocity time graph is	A. Parabola B. Hyperbola C. Straight line D. Curve
30	The area between velocity time graph and the time axis is numerically equal to.	A. ?Speed of object B. Distance covered by the object C. Average velocity of the object D. Acceleration of the object.
31	If velocity time graph is parallel to time axis, then acceleration of moving body will be.	A. Maximum B. Positive C. Zero D. Negative
32	If the slope of the velocity time graph remains constant then body is moving with.	A. Uniform velocity B. Negative variable acceleration C. Variable acceleration D. Uniform acceleration
33	When velocity time graph is a straight line parallel to time axis then	A. Velocity is zero B. Acceleration is constant C. Acceleration is zero

		<p>C. Acceleration is zero</p> <p>D. Velocity is variable</p>
34	A bullet shot straight up, return to its starting point in 10 sec. Its initial speed was	<p>A. 9.8 ms<sup>-1</sup></p> <p>B. 24.5 ms<sup>-1</sup></p> <p>C. 49 ms<sup>-1</sup></p> <p>D. 98 ms<sup>-1</sup></p>
35	Distance covered by a freely falling body in 2 seconds will be	<p>A. 9.8 m</p> <p>B. 19.6 m</p> <p>C. 44.4 m</p> <p>D. 49 m</p>
36	A ball is thrown up vertically, it takes 3 sec to reach maximum height. Its initial velocity is.	<p>A. 10 ms<sup>-1</sup></p> <p>B. 12.2 ms<sup>-1</sup></p> <p>C. 15 ms<sup>-1</sup></p> <p>D. 29.4 ms<sup>-1</sup></p>
37	A mass of 1 kg is freely falling. The force of gravity is.	<p>A. 1 N</p> <p>B. 9.8 N</p> <p>C. 0.5 N</p> <p>D. Zero</p>
38	The mass of an object is quantitative measure of its	<p>A. Momentum</p> <p>B. Acceleration</p> <p>C. Inertia</p> <p>D. Energy</p>
39	An object of mass 1 kg moving with acceleration 0.1 ms <sup>-2</sup> will experience a force of.	<p>A. 10<sup>-2</sup> N</p> <p>B. 10<sup>-3</sup> N</p> <p>C. 1 N</p> <p>D. 1 dyne</p>
40	The velocity of a free falling body just before hitting the ground is 9.8 ms <sup>-1</sup> , the height through which it falls is	<p>A. 98 m</p> <p>B. 19.6 m</p> <p>C. 4.9 m</p> <p>D. 9.8 m</p>
41	Inertia may be expressed in	<p>A. Kg</p> <p>B. Newton</p> <p>C. Watt</p> <p>D. Joule</p>
42	No body begins to move or comes to rest of itself was given by	<p>A. Newton</p> <p>B. Pascal</p> <p>C. Bernoulli</p> <p>D. Bu Ali Sina</p>
43	A man of 5000 kg moves with an acceleration of 1 ms <sup>-2</sup> force acting on it is.	<p>A. 5 N</p> <p>B. 500 N</p> <p>C. 50 N</p> <p>D. 5000 N</p>
44	Kg ms <sup>-1</sup> can also be written as	<p>A. Nm</p> <p>B. Ns</p> <p>C. Ns<sup>-1</sup></p> <p>D. Js</p>
45	The rate of change of momentum is equal to	<p>A. Impulse</p> <p>B. Torque</p> <p>C. Velocity</p> <p>D. Force</p>
46	Change of momentum is equal to	<p>A. Force</p> <p>B. Tension</p> <p>C. Impulse</p> <p>D. Pressure</p>
47	The dimensional unit of impulse is.	<p>A. [MLT]</p> <p>B. [MLT<sup>-1</sup>]</p> <p>C. [ML<sup>-1</sup>T<sup>-1</sup>]</p> <p>D. [M<sup>-1</sup>L<sup>-1</sup>T<sup>-1</sup>]</p>
48	Unit of impulse is equivalent to that of.	<p>A. Force</p> <p>B. Momentum</p> <p>C. Acceleration</p> <p>D. Velocity</p>
49	At what speed the momentum and kinetic energy of a body having the same.	<p>A. 1 ms<sup>-1</sup></p> <p>B. 2 ms<sup>-1</sup></p> <p>C. 4 ms<sup>-1</sup></p> <p>D. 8 ms<sup>-1</sup></p>
50	In the absence of external force, the change in momentum is.	<p>A. Zero</p> <p>B. Constant</p> <p>C. Decreasing</p> <p>D. Increasing</p>
		<p>A. K.E. is doubled</p> <p>B. P.E. is doubled</p>

51	When speed of a body is doubled then its	B. P.E. is doubled C. Acceleration of doubled D. Momentum is doubled
52	A force of 10 N acts on a body of mass 5 kg in one second. The change in its momentum will be.	A. 10 kgms-1 B. 50 kg ms-1 C. 2 kg ms-1 D. 20 kg ms-1
53	A force of 20 N acts along x axis, tis component is.	A. 0 N B. 10 N C. 20 N D. 30 N
54	Before the launch of a rocket the mass of fuel of the rocket is approximately consists of.	A. 60% B. 50% C. 80% D. 100%
55	A typical rocket consumes fuel about	A. 40000 Kgs-1 B. 30000 Kgs-1 C. 20000 Kg s-1 D. 10000 Kgs-1
56	For a rocket , the change in momentum per second of the ejecting gases is equal.	A. Acceleration of the rocket B. Momentum of rocket C. Velocity of rocket D. Thrust acting on rocket
57	Motion of projective is	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional
58	When the projectile reaches the highest point of trajectory, the vertical component of velocity becomes.	A. Small B. Zero C. Maximum D. $V_i \cos$
59	The velocity of a projectile is maximum	A. At the highest point B. At point of launching and just before striking the ground C. At half of the height D. After striking the ground
60	Horizontal range is maximum when the angle of projectile is.	A. 0 o B. 30 o C. 45 o D. 60 o
61	An athlete runs with a speed of 12 ms-1. Determine the longest jump he can undertake.	A. 12 m B. 14.4 m C. 24 m D. 16.2 m
62	The horizontal component of velocity of projectile	A. Increases B. Decreases C. Remain same D. Decreases and then increases
63	The ballistic missiles are used only for	A. Long range B. Short range C. Medium range D. Constant range
64	The angle of projection for which its maximum height and horizontal range are equal	A. $46^\circ$ B. $56^\circ$ C. $66^\circ$ D. $76^\circ$
65	The trajectory of a projectile is.	A. Circle B. Parabola C. Hyperbola D. Straight line
66	The shape of trajectory of short range projectile is	A. Straight line B. Circle C. Elliptical D. Parabolic
67	The path followed by a projectile in known as its	A. Range B. Trajectory C. Cycle D. Height
68	For maximum range the angle of projection must be	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$

69	A ball is thrown up with $20 \text{ ms}^{-1}$ at an angle of $60^\circ$ with x-axis, the velocity of the ball at the top position is.	A. $0 \text{ ms}^{-1}$ B. $10 \text{ ms}^{-1}$ C. $20 \text{ ms}^{-1}$ D. $16 \text{ ms}^{-1}$
70	Height of projectile is maximum at an angle of.	A. $45^\circ$ B. $60^\circ$ C. $30^\circ$ D. $90^\circ$
71	The horizontal range of a projectile of $30^\circ$ with horizontal is same at an angle.	A. $40^\circ$ B. $45^\circ$ C. $90^\circ$ D. $60^\circ$
72	The acceleration of a projectile along x axis is.	A. Zero B. Increase C. Decrease D. Equal to 'g'
73	the acceleration along x -axis direction in case of projectile is.	A. Zero B. Equal to gravity C. Maximum D. Constant
74	The maximum range of projectile is 100 km, Take $g = 10 \text{ ms}^{-2}$ , the initial velocity of the projectile will be.	A. $1000 \text{ kms}^{-1}$ B. $1 \text{ kms}^{-1}$ C. $10 \text{ kms}^{-1}$ D. $100 \text{ kms}^{-1}$
75	If the initial velocity of a projectile becomes doubled, the time of flight will be.	A. Same B. 4 times C. Double D. 3 times
76	An immediate source of energy for our body is:	A. mango B. <span style="color: rgb(32, 33, 36); font-family: arial, sans-serif; font-size: 32px;">Glucose</span> C. mushroom D. meat
77	Food rich in proteins is:	A. potato B. grapes C. vegetables D. bread