

## Physics ICS Part 1 Chapter 2 Online Test

Sr	Questions	Answers Choice
1	The angle at which dot product becomes equal to cross product.	<p>A. <math>45^\circ</math></p> <p>B. <math>65^\circ</math></p> <p>C. <math>75^\circ</math></p> <p>D. <math>35^\circ</math></p>
2	The velocity of the projectile is maximum.	<p>A. At half of height</p> <p>B. At highest point</p> <p>C. Just before striking the ground and at the point of projection</p> <p>D. At one fourth of maximum height</p>
3	The trajectory of projectile is.	<p>A. Straight line</p> <p>B. Parabola</p> <p>C. Hyperbola</p> <p>D. Circle</p>
4	The range of projectile is same for two angles which are mutually.	<p>A. Perpendicular</p> <p>B. Complementary</p> <p>C. Supplementary</p> <p>D. <math>270^\circ</math></p>
5	Maximum number of rectangular components of a vector in 2- dimension may be	<p>A. One</p> <p>B. Two</p> <p>C. Three</p> <p>D. Infinite</p>
6	Name the quantity which is a vector	<p>A. Power</p> <p>B. Density</p> <p>C. Impulse</p> <p>D. Charge</p>
7	Before launch of any rocket the mass of fuel of the rocket is about	<p>A. 60% of rocket mass</p> <p>B. 50% of rocket mass</p> <p>C. 40% of rocket mass</p> <p>D. 80 % of rocket mass</p>
8	SI Unit of impulse in.	<p>A. <math>\text{kg m s}^{-2}</math></p> <p>B. <math>\text{Ns}</math></p> <p>C. <math>\text{N m}</math></p> <p>D. <math>\text{N m}^2</math></p>
9	The magnitude of cross-product and dot product of two vectors are equal, the angle between the vectors is.	<p>A. <math>45^\circ</math></p> <p>B. Zero</p> <p>C. <math>180^\circ</math></p> <p>D. <math>90^\circ</math></p>
10	If a force of 10 N makes an angle of $30^\circ$ with x-axis its y-component is given by	<p>A. 8.66 N</p> <p>B. 0 N</p> <p>C. 0.776 N</p> <p>D. 5 N</p>
11	The rate of change of momentum is	<p>A. Force</p> <p>B. Impulse</p> <p>C. Acceleration</p> <p>D. Power</p>
12	Motion of projectile is.	<p>A. One dimensional</p> <p>B. Two dimensional</p> <p>C. Three dimensional</p> <p>D. None of the above</p>
13	Ascalar is a physica quantity which is completely specified by.	<p>A. Number</p> <p>B. Direction only</p> <p>C. Number with proper unit</p> <p>D. Number with direction</p>
14	If $\mathbf{A} \times \mathbf{B} = 0$ then it is concluded that.	<p>A. A and B are to each other</p> <p>B. A and B are parallel to each other</p> <p>C. A and B are position vectors</p>

		D. $\neq$ ; A and B are unit vectors
15	If $A \cdot B = 0$ when vector A and B are parallel or anti parallel, then either A or B is a	A. $=$ B. Null Vector C. Perpendicular D. Not Zero
16	The projectile gains its maximum height at an angle of $\theta$	A. $0^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
17	The motion of the rocket is in accordance with law of conservation of	A. Linear momentum B. Energy C. Mass D. Angular momentum
18	The scalar product of two vectors A and B is zero when	A. They are perpendicular to each other B. They are equal vectors C. They are in same direction D. They are in opposite direction
19	During the projectile motion the horizontal component of velocity	A. Changes with time B. Becomes zero C. Does not change D. Increases with time
20	The resultant of two forces 3 N and 4 N acting parallel to each other is.	A. 4 N B. 7 N C. 1 N D. 6 N