

## Physics ICS Part 1 Chapter 2 Online Test

Sr	Questions	Answers Choice
1	The scalar product of two vectors A and B is zero when	<p>A. They are perpendicular to each other</p> <p>B. They are equal vector</p> <p>C. They are in same direction</p> <p>D. They are in opposite direction</p>
2	Dimensions of impulse are similar to dimensions of.	<p>A. Work</p> <p>B. Torque</p> <p>C. Force</p> <p>D. Momentum</p>
3	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>
4	A body thrown upward making certain angle with the horizontal and moving freely under the action of gravity is called.	<p>A. Rocket</p> <p>B. Satellite</p> <p>C. Projectile</p> <p>D. Space ship</p>
5	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>
6	The scalar product of two vector is maximum if they are.	<p>A. Perpendicular</p> <p>B. Parallel</p> <p>C. At <math>30^\circ</math></p> <p>D. At <math>45^\circ</math></p>
7	SI Unit of impulse is.	<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>
8	If $A \times B$ points along positive z-axis, then vector A and B must lie in.	<p>A. y Z -plane</p> <p>B. X y -plane</p> <p>C. X Z -plane</p> <p>D. x 0 - Plane</p>
9	The horizontal component is velocity of projectile moving with initial velocity of $500 \text{ ms}^{-1}$ at angle of $60^\circ$ with x-axis is equal to	<p>A. <math>250 \text{ ms}^{-1}</math></p> <p>B. Zero</p> <p>C. <math>500 \text{ ms}^{-1}</math></p> <p>D. <math>1000 \text{ ms}^{-1}</math></p>
10	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>
11	The scalar product of two vectors will be maximum if they are.	<p>A. Parallel</p> <p>B. Perpendicular</p> <p>C. Anti Parallel</p> <p>D. All of these</p>
12	Which of the following is a scalar quantity.	<p>A. Torque</p> <p>B. Force</p> <p>C. Energy</p> <p>D. Acceleration</p>
13	The SI unit of momentum is.	<p>A. <math>\text{Kg ms}</math></p> <p>B. <math>\text{Kg ms}^{-2}</math></p> <p>C. <math>\text{kg m}^2 \text{ s}</math></p> <p>D. <math>\text{kg}^2 \text{ m}^{-1}</math></p>
14	The range of projectile is same for two angles which are mutually.	<p>A. Perpendicular</p> <p>B. Complementary</p> <p>C. Supplementary</p>

		D. $270^\circ$
15	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>
16	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>
17	A collision in which both K.E. and momentum are conserved.	<p>A. Elastic collision</p> <p>B. Inelastic collision</p> <p>C. Both elastic and inelastic</p> <p>D. Neither elastic nor inelastic</p>
18	If $A \times B = 0$ then it is concluded that.	<p>A. A and B are perpendicular to each other</p> <p>B. A and B are parallel to each other</p> <p>C. A and B are position vectors</p> <p>D. A and B are unit vectors</p>
19	The acceleration at the top of a trajectory of projectile is.	<p>A. <math>g</math></p> <p>B. zero</p> <p>C. Maximum</p> <p>D. Minimum</p>
20	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>