

## Physics Fsc Part 1 Chapter 2 Online Test

Sr	Questions	Answers Choice
1	The range of projectile is same for two angles which are mutually.	A. <p>Perpendicular</p> B. <p>Complementary</p> C. <p>Supplementary</p> D. <p>270<sup>o</sup></p>
2	Motion of projectile is.	A. <p>One dimensional</p> B. <p>Two dimensional</p> C. <p>Three dimensional</p> D. <p>None of the above</p>
3	A collision in whcih both K.E. and momentum are conseverd.	A. <p>Elastic collision</p> B. <p>Inelastic collision</p> C. <p>Both elastic and inelastic</p> D. <p>Neither elastic nor inelastic</p>
4	Before launch of any rocket the mass of fuel of the rocket is about	A. <p>60% of rocket mass</p> B. <p>50% of rocket mass</p> C. <p>40% of rocket mass</p> D. <p>80 % of rocket mass</p>
5	When the projectile reaches the highest point of trajectory the vertical component of velocity is.	A. <p>Small</p> B. <p>maximum</p> C. <p>Zero</p> D. <p>V Cos</p>
6	Whcih of the following is a scalar quantity.	A. <p>Torque</p> B. <p>Force</p> C. <p>Energy</p> D. <p>Acceleration</p>
7	The rate of change of momentum is	A. <p>Force</p> B. <p>Impulse</p> C. <p>Acceleration</p> D. <p>Power</p>
8	The scalar product of two vectors A and B is zero when	A. <p>They are perpendicular to each other</p> B. <p>They are equal vector</p> C. <p>They are in same direction</p> D. <p>They are in opposite direction</p>
9	The motion of the rocket is in accordance with law of conservation of	A. <p>Linear momentum</p> B. <p>Energy</p> C. <p>Mass</p> D. <p>Angular momentum</p>
10	Elastic collision involves	A. <p>Loss of energy</p> B. <p>Gain of energy</p> C. <p>No gain, no loss of energy</p> D. <p>No relation between energy and elastic collision</p>
11	The SI unit of momentum is.	A. <p>Kg ms</p> B. <p>Kg ms -2</p> C. <p>kg m2 s</p> D. <p>kg 2 m-1</p>
12	The angle at which dot product becomes equal to cross product.	A. <p>45<sup>o</sup></p> B. <p>65<sup>o</sup></p> C. <p>75<sup>o</sup></p> D. <p>35<sup>o</sup></p>
13	SI Unit of impulse is.	A. <p>kg m s-2</p> B. <p>Ns</p> C. <p>N m</p> D. <p>N m2</p>
14	If A.B =0 when vector A and B are parallel or anti parallel, then either A or B is a	A. <p>Equal</p> B. <p>Null Vector</p> C. <p>Perpendicular</p> D. <p>Not Zero</p>

15	The trajectory of projectile is.	A. <p>Straight line</p> B. <p>Parabola</p> C. <p>Hyperbola</p> D. <p>Circle</p>
16	A scalar is a physical quantity which is completely specified by.	A. <p>Number</p> B. <p>Direction only</p> C. <p>Number with proper unit</p> D. <p>Number with direction&nbsnbsp;</p>
17	The velocity of the projectile is maximum.	A. <p>At half of height</p> B. <p>At highest point</p> C. <p>Just before striking the ground and &nbsnbsp;at the point of projection</p> D. <p>At one fourth of maximum height</p>
18	As rocket moves upwrd during its journey, then its acceleration goes on.	A. <p>Increasing</p> B. <p>Decreasing</p> C. <p>Remains same</p> D. <p>It moves with uniform velocity</p>
19	During the projectile motion the horizontal component of velocity	A. <p>Changes with time</p> B. <p>Becomes zero</p> C. <p>Does not changes</p> D. <p>Increase with time</p>
20	The acceleration at the top of a trajectory of projectile is.	A. <p>g</p> B. <p>zero</p> C. <p>Maximum</p> D. <p>Minimum</p>
21	The scalar product of two vectors will be maximum if they are.	A. <p>Parallel</p> B. <p>Perpedicular</p> C. <p>Anti Parallel</p> D. <p>All of these</p>
22	In projectiel motion horizontal rane depends upon.	A. <p>Angle of projection</p> B. <p>Initial velocity</p> C. <p>Both initial velocity and angle of projection</p> D. <p>Final Velocity</p>
23	A body thrown upward making certain angel with the horizontal and moving freely under the action of gravity is called.	A. <p>Rocket</p> B. <p>Satellite</p> C. <p>Projectile</p> D. <p>Space ship</p>
24	The resultant of two force 3 N and 4 N actign parallel to each other is.	A. <p>4 N</p> B. <p>7 N</p> C. <p>1 N</p> D. <p>6 N</p>
25	Maximum number of rectangular components of a vector in 2- dimenstion may be	A. <p>One</p> B. <p>Two</p> C. <p>Three</p> D. <p>Infinite</p>
26	For what angle of projection projectile has maximum horizontal range	A. <p>45<sup>o</sup></p> B. <p>90<sup>o</sup></p> C. <p>0<sup>o</sup></p> D. <p>30<sup>o</sup></p>
27	If $\mathbf{A} \times \mathbf{B}$ points along positive z-axis, then vector A and B must lie in.	A. <p>y Z -plane</p> B. <p>X y -plane</p> C. <p>X Z -plane</p> D. <p>x 0 - Plane</p>
28	If $\mathbf{A} \times \mathbf{B} = 0$ then it is concluded that.	A. <p>A and B ar e to each other</p> B. <p>A and B are parallel to each other</p> C. <p>A and B are position vectors</p> D. <p>&nbsnbsp;A and B are uni vectors</p>
29	The projectile gains its maximum gh at an angle of.hei	A. <p>0<sup>o</sup></p> B. <p>45<sup>o</sup></p> C. <p>60<sup>o</sup></p> D. <p>90<sup>o</sup></p>
30	The scalar product of two vector is maximum if they are.	A. <p>Perpendicular</p> B. <p>Parallel</p> C. <p>At &nbsnbsp;30<sup>o</sup></p> D. <p>At 45<sup>o</sup></p>

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- 31 The magnituude of cross-proecut and dot product of two vectors are equal, the angle betwene the vectors is.
- A.  $45^\circ$   
B.  $0^\circ$   
C.  $180^\circ$   
D.  $90^\circ$
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- 32 Dimensions of impulse are similar to dimensions of.
- A. Work  
B. Torque  
C. Force  
D. Momentum
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- 33 Rocket ejects the burnt gasses at a speed of over (consuming fuel at rate of 10000kg/s)
- A.  $4000 \text{ m/s}$   
B.  $400 \text{ m/s}$   
C.  $40000 \text{ cm/s}$   
D.  $400 \text{ cm/s}$
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- 34 Name the quantity which is a vector
- A. Power  
B. Density  
C. Impulse  
D. Charge
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- 35 The F<sub>s</sub> of force F of magnitude 30 N making an angle of  $60^\circ$  with x -axis
- A. 7 N  
B. 15 N  
C. 10 N  
D. 5 N
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- 36 The horizontal componet is velocity of projectile moving with initial velocity of 500 ms<sup>-1</sup> at angle of  $60^\circ$  with x-axis is equal to
- A.  $250 \text{ ms}^{-1}$   
B. Zero  
C.  $500 \text{ ms}^{-1}$   
D.  $1000 \text{ ms}^{-1}$
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- 37 The cross product of vector A with itself is equal to.
- A. A  
B. 1  
C. 2 A  
D. Null Vector
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- 38 If a force of 10 N makes an angle of  $30^\circ$  with x-axis its y-component is given by
- A. 8.66 N  
B. 0 N  
C. 0.776 N  
D. 5 N
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