

## Physics ICS Part 1 Chapter 2 Online Test

| Sr | Questions  | Answers Choice  |
|----|--|---|
| 1  | As rocket moves upwrd during its journey, then its acceleration goes on.                     | <p>A. <b>&lt;p&gt;Increasing&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Decreasing&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Remains same&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;It moves with uniform velocity&lt;/p&gt;</b></p>   |
| 2  | In projectiel motion horizontal rane depends upon.   | <p>A. <b>&lt;p&gt;Angle of projection&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Initial velocity&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Both initial velocity and angle of projection&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Final Velocity&lt;/p&gt;</b></p>                                       |
| 3  | A collision in whcih both K.E. and momentum are conseverd.                                   | <p>A. <b>&lt;p&gt;Elastic collision&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Inelastic ollision&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Both elasic and inclastic&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Norther elastic nor inclastic&lt;/p&gt;</b></p>  |
| 4  | Elastic collision involoves  | <p>A. <b>&lt;p&gt;Loss of energy&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Gain of energy&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;No gain, no loss of energy&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;No relation between energy and elastic collision&amp;nbsp;&lt;/p&gt;</b></p>                     |
| 5  | The resultant of two forece 3 N and 4 N actign parallel to each other is.                    | <p>A. <b>&lt;p&gt;4 N&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;7 N&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;1 N&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;6 N&lt;/p&gt;</b></p>   |
| 6  | Motion of projectile is.   | <p>A. <b>&lt;p&gt;One dimensional&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Two dimensional&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Three dimensional&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;None of the above&lt;/p&gt;</b></p>   |
| 7  | If $A \times B = 0$ then it is concluded that.   | <p>A. <b>&lt;p&gt;A and B ar e to each other&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;A and B are parallel to each other&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;A and B are position vectors&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;&amp;nbsp;&lt;/p&gt;</b>A and B are unti vectors&lt;/p&gt;</p> |
| 8  | If $A \times B$ points along positive z-axis, then vector A and B must lie in.               | <p>A. <b>&lt;p&gt;y Z -plane&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;X y -plane&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;X Z -plane&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;x 0 - Plane&lt;/p&gt;</b></p>  |
| 9  | If $A \cdot B = 0$ when vector A and B are parallel or anti paralld, then either A or B is a | <p>A. <b>&lt;p&gt;Equal&amp;nbsp;&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Null Vector&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Perpendicular&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Not Zero&lt;/p&gt;</b></p>  |
| 10 | The rate of change of momentum is  | <p>A. <b>&lt;p&gt;Force&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Impulse&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Acceleration&amp;nbsp;&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Power&lt;/p&gt;</b></p>  |
| 11 | The acceleration at the top of a trajectory of projectile is.                                | <p>A. <b>&lt;p&gt;g&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;zero&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Maximum&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Minimum&lt;/p&gt;</b></p>  |
| 12 | Name the quantity which is a vector  | <p>A. <b>&lt;p&gt;Power&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Density&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Impulse&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Charge&lt;/p&gt;</b></p>  |
| 13 | The motion of the rocket is in accordance with law of conservaion of                         | <p>A. <b>&lt;p&gt;Linear momentum&amp;nbsp;&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;Energy&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;Mass&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;Angular momentum&lt;/p&gt;</b></p>  |
| 14 | The projectile gains its maximum gh at an angle of.hei                                       | <p>A. <b>&lt;p&gt;0&lt;sup&gt;o&lt;/sup&gt;&lt;/p&gt;</b><br/>           B. <b>&lt;p&gt;45&lt;sup&gt;o&lt;/sup&gt;&lt;/p&gt;</b><br/>           C. <b>&lt;p&gt;60&lt;sup&gt;o&lt;/sup&gt;&lt;/p&gt;</b><br/>           D. <b>&lt;p&gt;90&lt;sup&gt;o&lt;/sup&gt;&lt;/p&gt;</b></p>                              |

D.  $10\sqrt{3}$  N

15 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

16 The scalar product of two vectors will be maximum if they are.

- A. Parallel
- B. Perpendicular
- C. Anti Parallel
- D. All of these

17 SI Unit of impulse is.

- A.  $\text{kg m s}^{-2}$
- B. Ns
- C. N m
- D.  $\text{N m}^2$

18 The cross product of vector A with itself is equal to.

- A. A
- B. 1
- C.  $2A$
- D. Null Vector

19 The scalar product of two vectors is maximum if they are.

- A. Perpendicular
- B. Parallel
- C. At  $30^\circ$
- D. At  $45^\circ$

20 The horizontal component of velocity of a projectile moving with an initial velocity of  $500 \text{ ms}^{-1}$  at an angle of  $60^\circ$  with the x-axis is equal to

- A.  $250 \text{ ms}^{-1}$
- B. Zero
- C.  $500 \text{ ms}^{-1}$
- D.  $1000 \text{ ms}^{-1}$