

PPSC Physics Full Book

Sr	Questions	Answers Choice
1	when a body accelerates.	A. Its direction always changes B. Its mass always changes C. Its velocity always changes D. It falls towards the earth
2	A force of 100 N acts on body of mass 5 kg for 10 s. The velocity of the body will be.	A. 2 ms ⁻¹ B. 20 m s ⁻¹ C. 200 ms ⁻¹ D. 2.000 m s ⁻¹
3	The action and reaction forces	A. Must act upon the same body B. Must act upon different bodies C. Must be equal in magnitude but need not have the same line of action. D. Different speed at the different height during ascent and during descent.
4	Newton's first law of motion provides the definition of.	A. Distance B. Force C. Vector D. Acceleration
5	The reluctance of a body to start moving is called.	A. Mass B. Weight C. Force D. Inertia
6	If a ball was thrown out of a rocket in free space, then it would.	A. Accelerate away from the rocket B. Remain motionless after leaving the rocket C. Travel rectilinearly with constant speed D. Move always parallel to the rocket
7	When a man jumps off the ground, the reaction force of the ground is.	A. Equal to the weight of the man. B. Smaller than the weight of the man C. Greater than the weight of the man D. Zero
8	Inertial mass and gravitational mass are	A. Opposite B. Proportional C. Weights D. Inversely proportional
9	The mass that appears in Newton's second law is known as.	A. Rest mass B. Gravitational mass C. Inertial mass D. Weight
10	If the force acting on a body is doubled its acceleration becomes.	A. Half B. Constant C. Double D. One fourth
11	If a body is moving with constant velocity then	A. Its acceleration is zero B. Its direction may be changing C. Its speed may be changing D. Its acceleration is constant
12	If slope of velocity time graph gradually decreases, then a body is said to have	A. Negative acceleration B. Positive acceleration C. Uniform velocity D. Variable velocity
13	The cross product of two vectors is magnitude when	A. Vectors are parallel B. Vectors are antiparallel C. Vectors are perpendicular D. They are rotated through 270°
14		A. Vectors are parallel B. Vectors are antiparallel

14	The scalar product of two vectors is negative when	C. Vectors are perpendicular D. Vectors are parallel with same magnitude
15	Which pair of the following forces has a resultant force of 2 N.	A. 1 N and 1 N B. 1 N and 3 N C. 1 N and 2 N D. 2 N and 2 N
16	The reverse process of vector addition is called	A. Negative of a vector B. Subtraction of vectors C. Resolution of vectors D. Multiplication of vector
17	If the resultant of two forces, each of magnitude F have the magnitude F, angle between the forces will be.	A. 30° B. 80° C. 90° D. 120°
18	The magnitude of resultant of three force is 3. If its x-component is 2, Y component is 1. Its z-component will be.	A. 1 B. 2 C. 3 D. 4
19	Which one of the following is not true.	A. velocity can be negative B. velocity is a vector C. Speed is a scalar D. Speed can be negative
20	The resultant magnitude of two vectors	A. Is always positive B. Can never be zero C. Can be negative positive or zero D. Is usually zero
21	Which vector gives the displacement from one point to another in space.	A. Position vector B. Unit vector C. Null vector D. Distance vector
22	Vectors are often split into two or more orthogonal components what is true of these components.	A. they are perpendicular B. They are parallel C. They are antiparallel D. They have same magnitude
23	Which are the two basic properties of a vector.	A. Curvature and direction B. Magnitude and direction C. Magnitude and sign D. Curvature and sign
24	When two vectors have opposite directions we say that they are	A. Parallel B. Antiparallel C. Perpendicular D. Out of phase
25	If two non zero vectors are perpendicular to each other then their scalar product is equal to	A. 1 B. -1 C. 0 D. infinity
26	Two vectors of magnitudes 5 N and 7 N respectively are acting on a body if the angle between them is a right angle, their resultant vector will be.	A. 2 N B. 4 N C. 6 N D. 8 N
27	A force of 10 N is acting along z-axis, its component along x -axis and y-axis is	A. 2 N, 8 N B. 3 N, 7 N C. 5 N each D. Zero
28	If a force of 50 N is acting along x axis , then its component along y-axis will be.	A. Zero B. The same C. Of the half magnitude D. Of the double magnitude
29	The magnitude of resultant of three forces is 3. Its x -component is 2 and y component is 1, then its z-component will be.	A. 1 B. 2 C. 3 D. 4
30	If two non zero vectors are perpendicular to each other then their scalar product is equal to.	A. -1 B. 1 C. 0 D. Infinity