

## PPSC Physics Full Book

Sr	Questions	Answers Choice
1	When net force acting on a system is zero which of the following will be constant.	A. Force B. Linear momentum C. Angular momentum D. Linear impulse
2	The magnitude of the resultant of two equal forces is equal to either to the force What is the angle between the two forces	A. 0 B. 120 C. 60 D. 180
3	The dimensional formula for torque is identical to.	A. Kinetic energy B. Pressure energy C. Moment of force D. All of the above
4	In rotational motion, the analogue of force is.	A. moment of inertia B. Moment of force C. Torque D. Rotational inertia
5	Conventionally antilock wise torque is taken as.	A. Zero B. Positive C. Infinity D. Negative
6	The SI unit of torque.	A. kg m <sup>2</sup> B. kg ms <sup>-2</sup> C. kg m <sup>2</sup> s <sup>-2</sup> D. kg ms <sup>-1</sup>
7	The equal and opposite forces acting on a body form	A. Angular momentum B. Linear momentum C. Torque D. Couple
8	if the line of action of force passes through the axis of rotation of origin, then torque is.	A. Maximum B. Negative C. Zero D. 1
9	The perpendicular distance between the line of action of forces and the axis of rotation	A. Torque B. Moment arm C. Moment of force D. Momentum
10	If 'p' is the momentum of an object of mass 'm' the expression p <sup>2</sup> /m has base units identical to.	A. Power B. Force C. Velocity D. Energy
11	Torque is equal to.	A. The product of magnitude of force and acceleration B. The product of magnitude of force and momentum C. The product of magnitude of force and displacement D. The product of magnitude of force and angular velocity
12	A physical quantity which produces rotation in a body is called.	A. Force B. Torque C. Momentum D. accelerate
13	When a body acceeatres.	A. Its direction always chances B. It mass always changes C. It velocity always changes D. It falls towards the earth
14	A force of 50 N acts on a body for 10 s What will be change in momentum.	A. 5 Ns B. 500 Ns C. 200 Ns D. 800 Ns

15	The rate of change of momentum of a body falling under gravity is equal to its.	A. P.E. B. K.E <b>C. Weight</b> D. Density
16	A rocket propulsion is based on the principle of.	<b>A. Conservation of momentum</b> B. Conservation of mass C. Conservation of energy D. Floatation
17	The period of a geostationary satellite is.	A. 32 hours <b>B. 72 hours</b> C. 48 hours D. 96 hours
18	The escape velocity	A. Is independent of mas of the body B. Increases with the increases of mass of the body C. Decreases with the decreases of mass of the body <b>D. Depends upon the type of body used</b>
19	The term radius of gyration relates to.	A. Moment of force <b>B. Moment of inertia</b> C. Law of gravitation D. simple harmonic motion
20	The force of gravity between two objects does not depend upon the.	A. Constant of gravitation B. Separation C. Product of their masses <b>D. Sum of their masses</b>
21	If the earth stopped rotating the weight of objects at either pole would.	A. Be grater B. Be less C. Vary with altitude <b>D. Be the same before</b>
22	Where should be the centre of gravity of a body.	A. It must be within the body B. It must be outside the body <b>C. It may be near but not essentially within the body</b> D. It changes its position after sometime
23	Which of the following quantity is zero about the centre of mass of baody.	A. Mass B. Acceleration <b>C. Moment</b> D. Angular momentum
24	The working of the rocket is based on the principle of.	A. Electromagnetism B. Conservation of momentum C. Floatation <b>D. Hydraulic system</b>
25	A bomb dropped from an aeroplane explodes in air, its total.	A. Momentum decreases B. Momentum increases <b>C. K.E. Increases</b> D. K.E. Decreases
26	If a car is to gain momentum it must.	A. Lose inertia <b>B. accelerate</b> C. Move rapidly D. Lose weight
27	The SI unit of impulse is.	A. N m B. N s C. Kg ms <sup>-1</sup> <b>D. Both b and c</b>
28	In any collision between two bodies there need nor the conservation of	A. Linear momentum B. Angular momentum <b>C. Total energy</b> <b>D. Kinetic energy</b>
29	The product of force and duration of impact is called.	A. Density B. Momentum C. Torque <b>D. Impulse</b>
30	Rate of change of momentum is called.	A. Torque <b>B. Force</b> C. Impulse D. Inertia