PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	If a force of 10 N makes an angle of 30 ^{o} with x-axis its component is given by	A. 1.866 N B. 8.66 N C. 0.89 N D. 0.866 N
2	If there are no frictional effects, the mechanical energy of a system executing simple harmonic motion.	A. Changes with time B. Is variable C. Is constant D. Is not conserved
3	92.65 is round off as	A. 92.6 B. 93.00 C. 92.7 D. None of these
4	One radian is equl to	A. 57.3 ^o B. 67.3 ^o C. 60 ^o D. 87.3 ^o
5	The value of 'g' is maximum	A. Above the earth's surface B. Below the earth's surface C. At the earth's surface D. At the centre of earth
6	If a body a moving with constant acceleration the velocity time graph will be a	A. zig zag B. Straight line C. Constant value D. zero value
7	An object falls freely under gravity the vertical equilibrium of the body inside is	A. Stable B. Unstable C. Neutral D. Unknown
8	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
9	When the lift is moving upward with an acceleration then weight of the object will be.	A. w = ma B. w - ma C. w D. 2 w
10	When a body is taken out of the earth's gravitational field, the P.E. with respect to earth is	A. Zero B. Minimum C. Maximum D. geothermal
11	A force applied at centre of mass of a body	A. Does not produce any torque B. Produces torque C. Produces acceleration D. Produce couple
12	A mason of 9.8 N weight is climbing on a 20 m high ladder The P.E. of mason at the middle of the ladder is.	A. 98 J B. 196 J C. 960 .4 J D. 1920 .8 J
13	Work has the same dimensions as that of	A. Power B. Liner momentum C. Angular momentum D. Torque
14	Two forces act together on an object the magnitude of their resultant force is minimum when they act at	A. 0 ^o B. 45^oC C. 90^o D. 180 ^o
15	When an unbalanced external force acts on a body for a short interval of time.	A. The body will experience an impulse. B. The momentum of the body increases

		C. The velocity of the body increase D. The body is not effected
16	A man of mass 100 kg is standing in an elevator. The net force acting on the man reads its weight when the elevator is going up with acceleration 4 m s-2 would be.	A. 100 N B. 590 N C. 490 N D. 980 N
17	Absolute P.E. of a body can be calculated	A. At centre of the earth B. Below centre of the earth C. From surface of the earth D. Below surface of the earth
18	If the K.E. of a body becomes 4 times of its initial value, the new momentum will be	A. half B. Same C. Double D. 4 times
19	The magnitude of the resultant of two forces may be increased by	A. Increasing the angle between them B. Decreasing the angle between them C. Drawing the parallelogram to represent them D. Drawing the force perpendicularly
20	Which of the following statements concerning G and g is true.	A. g is scalar white g is a vector B. g is inversely proportional to the mass of the planet C. g is independent of the mass of the planet D. both G and g have the same units