PPSC Physics Chapter 1 MECHANICS

Sr	Questions	Answers Choice
1	A stone is whirled in a vertical circle at the and of a string when the stone is at the highest position, tension in the string is	A. Maximum B. Zero C. Equal to weight of the stone D. Less than weight of the stone.
2	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
3	Acceleration due to gravity is not affected by which one of the following	A. Latitude B. Attitude C. Longitude D. Depth
4	The ratio of inertial mass to gravitational mass is.	A. 1 B. 0.5 C. 2 D. 3
5	The acceleration due to gravity	A. Has the same value everywhere in space B. Has the same value every where on the earth C. varix with altitude on the earth D. Is great her on the moon owing to its smaller diameter
6	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
7	The gravitational force between two bodies does not depends upon.	A. The product of their masses B. Their separation C. The sum of their masses D. The constant of gravitation
8	The moment of linear momentum is equal to	A. Implies B. Torque C. Angular momentum D. Couple
9	The rate of change of angular momentum of a body is equal to.	A. Applied force B. Moment of inertial C. Applied torque D. Impulsive force
10	The moment of inertia depends upon	A. Mass of the body and its radius B. Mass of the body and its angular speed C. Mass and angular momentum D. Mass as well as the distribution w.r.t axis of rotation
11	For the angular momentum of a system to remains constant, the external torque should be	A. small B. Large C. Neither small nor large D. zero
12	Angular momentum of a body under a central force is	A. Zero B. Maximum C. Minimum D. Constant
13	One radian is equl to	A. 57.3 ^o B. 67.3 ^o C. 60 ^o D. 87.3 ^o
14	Angular acceleration is produced due to	A. Centripetal force B. Torque C. Force

		D. Mass
15	The moment of inertia of a body comes in action in	A. Circular motion B. Straight line motion C. Curved path D. zig zag motion
16	A physical quantity not directly involved in rotating motion is.	A. Moment of inertia B. Mass C. Angular velocity D. Torque
17	The gravitational field strength at a point p on the earth's surfae is numerically equal to.	A. The acceleration of free fail at p B. The change in P.E. per unit distance at P C. The change in P.E. per unit distance at P D. The work done in bringing unit mass from infinity to P
18	If a body of mass 'm' was released in a vacuum just above the surface of a planet of mass M and radius R what will be the gravitational acceleration.	A. GmM/R B. GM/R² C. GM/R D. GM/2R
19	Which of the following is a properly of a uniform gravitational field.	A. If acts equally in all directions. B. Its field strength is the same at all points with in it C. the gravitational potential has the same value of all points with in it D. It produces zero force on a stationary test mass placed in it.
20	If a planet of mass double than that of the earth and radius three times greater than the earth a 10 kg mass on its surface will weight.	A. 2.2 N B. 4.4 N C. 6.7 N D. 13.2 N