Physics ICS Part 1 Chapter 5 Online Test

Sr	Questions	Answers Choice
1	When a body is moving along a circular path, then such a motion is called	A. Vibratory motion B. Rotatory motion C. Linear motion D. None of these
2	Angular displacement is	A. Scalar quantity B. Vector quantity C. Basic quantity D. None of these
3	If the are of a circle equals its radius, then the angle subtended at the center will be	A. 1 degree B. One rotation C. One radian D. Half rotation
4	Question Image	
5	Time rate of change of angular displacement is called	A. Linear velocity B. Angular velocity C. Rotational velocity D. Vibrational velocity
6	Angular velocity determines, How fast or, How slow a body is	A. Accelerating B. Vibrating C. Rotating D. Oscillating
7	The angular acceleration a =	
8	The direction of angular acceleration is	A. Along the axis of rotation B. Perpendicular to the axis of rotation C. Opposite to axis of rotation D. None of these
9	The relation between linear and angular velocity is	
10	The equations of angular motion hold only in case when the axis of rotation is	A. Moving B. Fixed C. Both a and b D. None of these
11	The formula of centripetal acceleration is	
12	The angle between circumference of a circle and center is	
13	The moment of inertia is analogue to	A. Mass B. Weight C. Torque D. Force
14	The work done by centripetal force is	A. (-)ve B. (+)ve C. Maximum D. Zero
15	In case of planets centripetal force is provided by	A. Coulomb's force B. Electrostatic force C. Gravitational force D. Magnetic force
16	The orbital angular momentum is associated with the motion of a body along	A. Straight path B. Circular path C. Curved path D. Along any path
17	The artificial satellites are held in orbits by	A. Gravitational force B. Electric force C. Magnetic force D. All of these
18	The motion of a body moving along a circular path is called.	A. Translational motion B. Angular motion C. Vibratory motion

		D. Linear motion
19	One radian is equal to.	A. 75.3^o B. 57.3^o C. 35.7^o D. 73.3^o
20	Pi radian is equal to.	A. 0^o B. 90^o C. 180^o D. 57.3^o
21	One revolution is equal to.	A. 90^o B. 180^o C. 360^o D. 270^o
22	100 radians are equal to.	A. 57.3^o B. 75.3^o C. 573^o D. 5730^o
23	The SI unit of angular displacement is.	A. Degree B. Revolution C. Radian D. Rotation
24	All point of the rigid body rotating about a fixed axis do not have same.	A. Angular acceleration B. Angular speed C. speed D. Angular displacement
25	Which quantity of the following is dimensionless.	A. Angular velocity B. Centripetal force C. Angular acceleration D. Angular displacement
26	2 radian = ____	A. 2 m B. 4 m C. 57.3 m D. 114.6 m
27	A wheel of radius 50 cm having an angular speed of a rad /s have linear speed.	A. 1.5 m/s B. 3.5 m/s C. 2.5 m/s D. 4.5 m/s
28	The dimensions of angular velocity are	A. [LT-1] B. [LT-2] C. [T-1] D. [L-1T-1]
29	The direction of angular velocity of along the	A. Tangent at that point B. Axis of rotation C. Radius towards the centre D. Radius away from the centre
30	When a particle is moving along a circular path its projection along the diameter executes	A. Linear motion B. Vibratory motion C. Rotatory motion D. SHM
31	The direction of angular velocity is determined.	A. Left hands rule B. Head to tail rule C. Right hand rule D. General rule
32	The time rate of change of angular displacements called.	A. Linear velocity B. Linear speed C. Angular velocity D. Angular speed
33	If a body is moving in the counter clockwise direction the direction of angular velocity will be	A. Toward the centre B. Away from the centre C. along the linear velocity D. Perpendicular to both radius and linear velocity
34	Angular acceleration is produced by	A. Power B. Torque C. Pressure D. Force
35	The rate of change of angular velocity is called	A. Angular velocity B. Angular acceleration C. Angular displacement D. Angular speed
		A. x-axis

36	Direction of angular acceleration is always along	B. y -axis C. z-axis D. The axis of rotation
37	A body starting from rest attains angular acceleration of 5 rad s-2 in 2 second final angular velocity will be.	A. 10 rad s-1 B. 7 rad s-1 C. 3 rad s-1 D. 2 rad s-1
38	When a body moves in circular motion, the angle between linear and angular velocity is.	A. 180^o B. 90^o C. 60^o D. 75.3^o
39	A body rotating with angular velocity of 2 radian/s and linear velocity is also 2 ms-1, then radius of circle is.	A. 1 m B. 0.5 m C. 4 m D. 2 m
40	When a body is whirled in a horizontal circle by means of string, the centripetal force is supplied by	A. Mass of body B. Velocity of a body C. Tension in the string D. Centripetal acceleration
41	Centripetal force perform	A. Maximum work B. Minimum work C. Negative work D. No work
42	The centripetal force is always directed	A. Away from the centre along the radius B. Along the direction of motion C. Opposite to the motion of the body D. Towards the centre along the radius
43	Which one of the following is into directed along the axis of rotation	A. Angular acceleration B. Angular momentum C. Centripetal acceleration D. Angular displacement
44	Which one of the following force cannot do any work on the particle on which it acts.	A. Fractional force B. Gravitational force C. Electrostatic force D. Centripetal force
45	Which of the following is not directed along the fixed axis of rotation.	A. Angular displacement B. Angular momentum C. Centripetal acceleration D. Angular acceleration
46	If a body revolves under centripetal force its angular acceleration is	A. Non zero B. Variable C. Increasing D. Zero
47	the angular version of F= ma is	A. L = 1w B. pi = 1a C. I = pi a D. f = mv/t
48	Moment of inertia is measure din	A. Kg m2 B. Kg m-2 C. Rad s-1 D. Joule second
49	The diver spin faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Equal
50	In rotational motion the analogous of mass is	A. Angular acceleration B. Torque C. Moment of inertia D. Angular momentum
51	The SI unit of angular momentum is	A. J.S-2 B. J.S-1 C. J.S D. J.m
52	For angular momentum of system to remain constant, external torque should be.	A. Small B. Large C. Zero D. None
53	The value of angular momentum is maximum when 0 is	A. 90^o B. 60^o C. 75^o

		C. 75^o</sup> D. 45^o</sup>
54	The product of rotational inertial 'I' and angular velocity ' w' is equal to.	A. Torque B. Linear momentum C. Angular momentum D. Force
55	In rotational motion the torque is equal to rate of change of	A. Angular velocity B. Linear momentum C. Angular momentum D. Angular acceleration
56	Angular momentum has the same unit as	A. Impulse x distance B. Power x time C. Linear x time D. work x frequency
57	The amount of inertia of 10 kg hoop about the axis of rotation perpendicular to its plane having radius 5 m is	A. 50 kgm2 B. 100 K gm2 C. 150 K gm2 D. 250 K gm2
58	The diver spins faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Zero
59	The relation between the speed and hoop can be written as	A. 2 B. 4 C. 1/2 D. 1/4
60	The unit of rotational K.E. is	A. rAD/SEC B. Js C. J D. Kgm2
61	Close orbiting satellites orbit the earth at a height of about	A. 400 km B. 4000 km C. 400 m D. 400 cm
62	Which is unimportant in describing the satellites orbit.	A. Distance of satellite from earth's center B. Gravitational constant G C. Mass of satellite D. Mass of earth
63	Satellites are the objects that orbit around the	A. Moon B. Sun C. Earth D. Star
64	The maximum velocity necessary to put a satellite into orbit is	A. 7.1 kms-1 B. 7.3 kms-1 C. 7.9 kms-1 D. 8,9 kms-1
65	The value of a time period of allow flying satellite is	A. 1 year B. 84 minutes C. 28 hours D. 1 day
66	The value of of 'g' at the centre of the earth is	A. Infinite B. 2 g C. 3 g D. zero
67	A man of mass 5 kg is falling freely, the fore acting on it will be	A. 5 N B. 9.8 N C. 19.6 N D. 49 N
68	Weight of a 60 kg man in moving elevator with constant acceleration of 1/2 f	A. Zero B. 300 N C. 600 N D. 200 N
69	Apparent weight of a man is in upward accelerated lift will	A. Increases B. Decreases C. Remain same D. Increases then decrees
70	The weight of the body at the centre of earth is	A. Maximum B. Minimum C. Zero D. Infinite

71	A man of 1 kg is freefalling. The force of gravity is	A. 1 N B. 9.8 N C. 0.5 N D. Zero
72	If a rocket is accelerating upward with an acceleration of 2 g, an astronaut of weight, mg in the rocket shows apparent weight.	A. Zero B. Mg C. 2 mg D. 3 mg
73	A 60 kg man in an elevator is moving upward with an acceleration of 9.8 ms-2. The apparent weight of the man.	A. Increase B. Decreases C. Remain constant D. Becomes zero
74	An elevator is moving up with an acceleration equal to 'g' An apparent weight of the body in an elevator is.	A. Zero B. Equal to real weight C. 2 mg D. 3 mg
75	The weight of an object an elevator moving down with an acceleration of 9.8 m/s2 will becomes	A. Half B. Double C. Unchanged D. Zero
76	A man weight 1000 N in a stationary lift. If the lift moves up with an acceleration of 10 ms-2. then its weight becomes.	A. 1000 N B. 2000 N C. 3000 N D. 0 N
77	Artificial gravity can be created in the space ship by	A. Revolving around the earth B. Spinning around its own axis C. Increasing its velocity D. Decreasing it svelocity
78	the height of the geostationary satellite above the equator is.	A. 35000 km B. 36000 km C. 34000 km D. 33000 km
79	Height of geo stationary orbit of the satellite above the earth is.	A. 300 km B. 250 km C. 400 km D. None of these
80	As we go from pole to equator of earth, the value of 'g'	A. Increase B. Decrease C. Remain constant D. Zero
81	The minimum number of correctly positioned communication satellites to cover whole populated earth is.	A. 2 B. 3 C. 100 D. 200
82	The largest satellite system is managed by	A. 116 countries B. 126 countries C. 136 countries D. 140 countries
83	INTELSAT VI satellite operates at microwave frequencies of.	A. 2,4,6,10 GHz B. 4,6,11 and 14 MHz C. 4,6,11 and 14 GHz D. 2,4,6 AND 14 GHz
84	International Telecommunication satellite	A. 4,6,8 and 10 Hz B. 4,6,11 and 14 GHz C. 4,6,8 and 12 Hz D. 4,8,11 and 16 GHz
85	Time period of geostationary satellite of radius 'R' is	A. 1 hour B. 48 min C. 1 day D. 1 month
86	A communication satellite is used ot reflect the signal of.	A. Microwaves B. Radio waves C. y rays D. x -rays
87	How many orbiting satellites from the Global positing system.	A. 3 B. 12 C. 24 D. 22
88	Einstein's theory gives us the physical picture of how the	A. Body moves B. Gravity works C. Moment of inertia produced D. Weightlessness creates