ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
2	Direction of motion_____ in circular of motion:	A. Changes off and on B. Changes continuously C. Does not change D. None of them
3	Conventionally the angular velocity is directed to an angle of:	A. 90° to the axis of rotation B. 30° to the axis of rotation C. 0° to the axis of rotation D. None of the above
4	A point on the rim of a wheel moves 0.2 m when the wheel turns through an angle of 14.3 degrees. The radius of the wheel is:	A. 0.05 m B. 0.08 m C. 0.8 m D. 0.008 m
5	Einstein's theory about gravity if better than Newton's because it gave explanation of:	A. Inverse square law B. Bending of light C. Both A and B D. None of above
6	INTELSAT operates at frequencies 4, 6, 11, 14 having unit of:	A. KHz B. MHz C. GHz D. BHz
7	The number of "Earth stations" which transmit signals to satellites and receive signals from them are:	A. 3 B. 24 C. 126 D. 200
8	The net force acting on a 100 kg man standing in an elevator accelerating downward with a = 0.8 m sec^{-2} comes out to:	A. 980 N B. 580 N C. 1380 N D. Zero
9	If a gymnast is sitting on a rotating stool with his arms outstretched, brings his arms towards the chest, then its angular velocity will:	A. Increase B. Decrease C. Remains constant D. None of these
		A. 90

#	Question	Options
10	Conventional the angular Velocity is Directed at an angle of:	A. ...° to the axis of rotation B. 30° to the axis of rotation C. 0° to the axis of rotation D. None of above
11	The work done on the body will be zero if:	A. No force is applied on the body B. Force is applied but no displacement C. Angle between F(force) and d(displacement) is 90° D. All of these are correct
12	A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, which makes and angle of 60° with the horizontal. The work done by the boy is:	A. 1.25 J B. 12.5 J C. 125 J D. None of these
13	If we draw a graph between d (along x-axis) and F (along y-axis) and get a straight line horizontal to x-axis, then area under this straight line represents:	A. Power B. Work C. Pressure D. None of these
14	When a wall is pushed by a person very strongly, he has done:	A. Maximum work B. Zero work C. Positive work D. Negative work
15	The work done by a force keeping an object in circular motion with constant speed is:	A. Zero J. B. 0.1 J C. 1 J D. 0.01 J
16	Which force is not a conservative force:	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
17	A labourer carrying a distance a load on his head moves from rest on a horizontal road to another point where he comes to rest. He has done:`	A. Minimum work B. Maximum work C. Zero work D. Negative work
18	A body moves a distance of 10 m among a straight line under the action of a force of 5 N. If	A. 0° B. 30°

18	the work done is 25 J, the angle which the force makes with the direction of motion of a body is:	C. 60° D. 90°
19	A 100 Kg car is moving at the speed of 10 m/sec and comes to rest after covering a distance of 50 m. The amount of work done against the friction is:	A. $+5 \times 10^1$ J B. $+5 \times 10^2$ J C. $+5 \times 10^3$ J D. $+5 \times 10^4$ J
20	The total work done in moving the body up and then down through the same height in a gravitational field is equal to:	A. mgh B. Its wight C. Weight X height D. Zero
21	When the body is moves against the force of friction on a horizontal plane, the work done by the body is:	A. Positive B. Negative C. Zero D. None of these
22	In the force applied is parallel to the direction of motion, then work done is:	A. Maximum B. Minimum C. Zero D. None of these
23	A two Kg block is held 1 m above the floor for 50 seconds, the work done is:	A. Zero B. 10.2 J C. 100 J D. 980 J
24	Work done is lowering the bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
25	The angle between centripetal force and displacement of the body moving in a circle is:	A. 0° B. 90° C. 180° D. None of these
26	Tick the conservation force:	A. Tension in a string B. Air resistance force C. Elastic spring D. Frictional force
27	The work done moving a body between two points in a conservation field is independent of the:	A. Direction B. Force applied C. Path followed by the body ` D. Power

28	The field in which work done in moving a body between two points depends upon the path followed is called:	A. Conservative field B. Non-conservative field C. Electric field D. None of these
29	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done is 25J. The angle which the force makes the direction of motion will be:	A. $60°$ B. $90°$ C. $30°$ D. $0°$
30	The space around the earth within it exerts a force of attraction on other bodies of known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field