ECAT Pre General Science Physics Chapter 4 Work and Energy Online Test

Sr	Questions	Answers Choice
1	A body moves a distance of 10 m along a straight line under the action of a force of 5 N. If the work done is 25 J, the angle which force makes with the direction of motion of a body is:	A. 0° B. 30° C. 60° D. 90°
2	A 100 kg car is moving at a speed of 10 m/sec and comes to rest after covering a distance of 50 m. the amount of work done against 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
3	When a body 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
4	In the force applied to parallel to the direction of motion, then the work done is:	A. Positive B. Negative C. Zero D. None of these
5	A 2 kg block is held 1 m above floor for 50 seconds. The work done is:	A. Zero B. 10.2 J C. 100 J D. 980 J
6	Work done in lower and bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
7	A field in which the work done is moving a body along closed path is zero is called:	A. Nuclear filed B. Conservative field C. Gravitational field D. Non-conservative field
8	When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is:	A. 2 J B. 0.25 J C. 1 J D. 0.5 J
9	The work done in 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. P

		D. Power
10	Which of the following type of force can do no work on the particle on which it acts:	A. Frictional force B. Gravitational force C. Electric force D. Centripetal force
11	The field in which work done is moving body between two points depends upon the path followed is called:	A. Conservative filed B. Non-conservative field C. Electric field D. None of these
12	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
13	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 with the direction of motion will be:	A. $60°$ B. $90°$ C. $30°$ D. $0°$
14	The space around the earth within which it expects a force of attraction on other bodies is known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
15	Work done is maximum when angle between force and displacement is:	A. $0°$ B. $90°$ C. $180°$ D. None of these
		A. Torque B. Angular momentum

16	Work has a dimension as that of:	B. Angular momentum C. Linear momentum D. Power
17	If force and displacement are in opposite direction, the work done is taken as:	A. Positive work B. Negative work C. Zero work D. Infinte work
18	The work performed on an object does not depend on:	A. Force applied B. Angle at which force is inclined to the displacement C. Initial velocity of the object D. Displacement
19	Work is always done on a body when:	A. A force acts on it B. It moves through certain distance C. None of A and B is correct D. Both A and B is correct
20	Work is a:	A. Scalar quantity B. Vector quantity C. Base quantity D. None of these
21	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
22	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
23	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
24	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
25	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
26	Which force is not a conservative force:	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
27	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
28	A body moves a distance of 10 m among a straight line under the action of a force of 5 N. If the work done is 25 J, the angle which the force makes with the direction of motion of a body	A. $0°$ B. $30°$ C. $60°$

is:

C. (green) °

D. 90°

| 29 | 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 |
| 30 | 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 |