ECAT Pre General Science Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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 X 10¹J B. +5 X 10²J C. +5 X 10³J D. +5 X 10⁴J
2	The Space around the Earth within which it exerts a force of attraction on other bodies is known as	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
3	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<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 30<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. 0<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°
4	A field in which the work done in moving a body along closed path is zero is called	A. Nuclear Field B. Conservative field C. Gravitational field D. Non-conservative field
5	Which force is not a conservative force:	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
6	A laborer carrying a load on his head moves from the 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
7	The unit of work in CGS system is	A. Joule B. Erg C. Dyne D. Watt
8	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
9	Escape velocity from surface of Moon as compared to that from Earth surface is:	A. Greater B. Smaller C. Equal

		D. None of thes
10	If force and displacement are in opposite direction, the work done is taken as:	A. Positive work B. Negative work C. Zero work D. Infinite work
11	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
12	Work is a	A. Scalar quantity B. Vector quantity C. Base quantity D. None of these
13	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
14	The types of mechanical energy is/are:	A. Kinetic energy B. Potential energy C. Both of these D. None of these
15	When two protons are brought are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
16	SI Unit of work is	A. Nm⁻¹ B. Joule C. Nms D. Both a and b
17	The angle between centripetal force and displacement of the body moving in a circle is:	A. 0<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 180<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. None of these
18	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
19	Work is a:	A. Scalar quantity B. Vector quantity C. Base quantity D. None of these
20	Work done on a body by gravity in lifting it up to certain height is	A. Maximum B. Minimum C. Zero D. Negative