Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	The types of mechanical energy is/are:	A. Kinetic energy B. Potential energy C. Both of these D. None of these
2	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
3	Work has the dimensions as that of	A. Torque B. Angular momentum C. Linear momentum D. Power
4	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
5	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
6	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
7	Energy stored in the spring of a watch is called	A. Potential energy B. Kinetic energy C. Nuclear energy D. Elastic potential
8	Work is a Quantity	A. Vector B. Scalar C. Non-physical D. None of these
9	The dimensions of work	A. [MLT⁻¹] B. [MLT⁻²] C. [ML²T⁻²] D. [MLT]
10	Work is always done on a body when:	A. A force acts on it B. It moves through certain distance C. None of A or B is correct D. Both A and B is correct
11	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
12	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
13	SI Unit of work is	A. Nm⁻¹ B. Joule C. Nms D. Both a and b
14	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
15	Which of the following types 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

16	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
17	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
18	The value of escape velocity of Earth planet comes out to be:	A. 11 m/sec B. 11 km/sec C. 11 km/hour D. 11 cm/sec
19	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
20	Power is a :	A. Vector quantity B. Base quantity C. Scalar quantity D. None of these