

Unit 5

Work, Energy And Power

Sr. No.	Questions	A	B	C	D
1	Work done is maximum when the angle between the force F and the displacement d is:	0° ✓	30°	60°	90°
2	A joule can also be written as:	$kg\ ms^{-2}$	$kg\ ms^{-1}$	$kg\ m^2s^{-3}$	$kg\ m^2s^{-2}$ ✓
3	The SI unit of power is:	joule	newton	watt ✓	second
4	The power of a water pump is $2\ kW$. The amount of water it can raise in one minute to a height of $5\ metres$ is:	1000 litres	1200 litres	2000 litres	2400 litres ✓
5	A bullet of mass $0.05\ kg$ has a speed of $300\ ms^{-1}$. Its kinetic energy will be:	2250 J ✓	4500 J	1500 J	1125 J
6	If a car doubles its speed, its kinetic energy will be:	the same	doubled	increased to three times	increased to four times ✓
7	The energy possessed by a body by virtue of its position is:	kinetic energy	potential energy ✓	chemical energy	solar energy
8	The magnitude of momentum of an object is doubled, the kinetic energy of the object will:	double	increase to four times ✓	reduce to one-half	remain the same
9	Which of the following is not renewable energy source?	Hydroelectric energy	Fossil fuels ✓	Wind energy	Solar energy