

# Work and Energy-01

- Q1 - What is energy of a body? (1 Mark)
- Q2 - Define kinetic energy. (1 Mark)
- Q3 - What is potential energy? (1 Mark)
- Q4 - A constant force of 10N displaces a body through 5 m. Find the work done by the force. (2 Marks)
- Q5 - What will be the work done if a stone of mass 2 kg is raised through a height of 10cm? ( take  $g=10\text{m/s}^2$ ) (2 Marks)
- Q6 - What are the conditions needed for work to be done? (2 Marks)
- Q7 - A body of mass 5 kg is kept on a table. If it is displaced by a force of 10N by 2 m on the table on the same horizontal line, find the work done by the gravitational force. (3 Marks)
- Q8 - A ball of mass 2kg is kept on a tower of height 30m. Find its potential energy at this point. If it is allowed to fall freely, find its kinetic energy when it just touches the ground? (3 Marks)
- Q9 - If in an office, 10 tubes of 40W, 5 fans of 75W and 2 ACs of 1500W are used for 8 hours a day. Calculate the energy consumed per day in commercial units of energy. (5 Marks)