QUIZEN – Work and Energy (9P04)

Learning Level 1	*Learning Level 2*	*Learning Level 3*
Q - Remembering (knowledge-based questions) U - Understanding (comprehension-based questions)	I - Applying (application-based questions) Z - Analyzing (analysis-based questions)	*E - Evaluating (evaluation-based questions)* *N - Creating (creation-based questions)*

1. **Define work in the context of physics.**
2. **State the SI unit of work.**
3. **What is the formula for calculating work?**
4. **Define energy in the context of physics.**
5. **State the SI unit of energy.Explain the relationship between work and energy.**
6. **Describe how work is done when an object is lifted to a certain height.**
7. **Explain the concept of negative work and give an example.**
8. **How does the direction of force applied on an object affect the work done?**
9. **Describe how the amount of work done on an object is related to the displacement of the object.**
10. **A boy pushes a cart with a force of 50 N and moves it for a distance of 10 m. Calculate the work done.**
11. **A person lifts a box weighing 100 kg to a height of 2 m. Calculate the work done against gravity.**
12. **An object is pulled with a force of 20 N and moves a distance of 8 m. Calculate the work done.**
13. **A car accelerates from rest to a speed of 25 m/s in a distance of 50 m. Calculate the work done.**
14. **A machine lifts a load of 5000 N to a height of 20 m in 10 seconds. Calculate the power of the machine.**
15. **A car travels a distance of 100 km in 2 hours. Calculate the average power of the car.**