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SUBJECT:- PHYSICS

CLASS:- IXTH

DATE:17/07/XX

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 4. (WORK, ENERGY & POWER)(BASED ON NCERT PATTERN)

Question 1: How much work is done when a body of mass m is raised to a height h above the ground ?

ANSWER: We can calculate the work done against gravity in moving a body of mass (m) by a height (h) as, Work done in lifting a body = (Weight of body) \times (Vertical distance)
So, $W = (m) (g) (h)$

Question 2: State the SI unit of work.

ANSWER: Joule is the SI unit of work. It is denoted by 'J'.

Question 3: Is work a scalar or a vector quantity?

ANSWER: Work is a scalar quantity as it has only magnitude.

Question 4: Define 1 joule of work.

ANSWER: Joule is the SI unit of work. Work done is said to be of 1 Joule when a force of 1 Newton moves a body by 1 m along the direction of the force applied.

Question 5: What is the condition for a force to do work on a body?

ANSWER: The necessary condition for force to do work is that the applied force should produce motion in the body in any direction except the direction perpendicular to the force applied.

Question 6: Is energy a vector quantity?

ANSWER: No, energy is a scalar quantity as it has only magnitude.
