

Hence $F = (11/14) m * c$ ----- (2)

Putting the value of equation (2) in

Equation (1) , It is obtained that

$$W = F * S = (11/14) m * c * S$$

As the body moves in a velocity which is very close to the velocity of light and the distance covered by the body in unit time is the velocity of light = c , So S = c

Hence $W = F * S = (11/14) m * c * S$

$$= (11/14) m * c * c = (11/14) m c^2$$

Here **w = work done = kinetic energy**
= energy =E

The kinetic energy of a body is the energy, possessed by the body by virtue of its motion.

Hence $W = (11/14) m c^2 = \text{Energy}$

This implies that, $E = (11/14) m c^2$

CONCLUSION :

The energy of a mass of matter is directly proportional to the product of its mass and the squared velocity of the light . Mathematically , it can be stated as

$$E \propto m c^2 \Rightarrow E = k * m c^2$$

where **k = constant of proportionality**

Work done = Force * Displacement

and **Work done = Energy**

Hence Energy = Force* Displacement

As $F = (11/14) m * a$ Nrusingh's 3rd law

So **k=constant of proportionality=11/14**

Now $E = k * m c^2 = (11/14) m c^2$

Here E = Energy , c = velocity of light and m = mass of a body

Hence $E = (11/14) m c^2$

Mass of a matter is converted to energy according to the law $E = (11/14) m c^2$ and energy is concentrated to mass by the **Universal Law . 1 part action = (11/14) part reaction + (3/14) part absorption . This implies that , (11/14) part of energy is generated out of 1 part of energy formation when the rest (3/14) part of energy is absorbed in the surrounding . Hence**

$E = (11/14) m c^2$ --Nrusingh's Energy Law

REFERENCES :

The followings are the published papers of the IJSER journal .

1) Nrusingh's 1st law

IJSER , volume 10 , issue 12
December-2019 , ISSN 2229-5518

2) Nrusingh's 2nd law

IJSER , volume 6 , issue 7
July-2015 , ISSN 2229-5518

3) Nrusingh's 3rd law

IJSER , volume 11 , issue 3
March-2020 , ISSN 2229-5518