HEAT ENERGY= PRESSURE * VOLUME

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ABSTRACT :

Creation and Destruction occur in the infinite darkness of the Universe due to the Heat Energy . Heat energy is the life of every thing in the Universe .

The heat of an object is the total energy of all the molecular motion inside that object .Temperature is the measure of the average heat of the molecules in a substance.

The combined relation of volume , pressure and temperature of a given mass of gas can be derived from the combining law of (Boyle's law as well as Charle's law) , (Boyle's law as well as Gay Lussac's law) and (Charle's law as well as Gay Lussac's law). The combined relation of pressure, volume and temperature of a given mass of gas can be derived from the law of motion of a wheel.

Motion is the law of the Universe . Rotation is motion and vice versa. If a force is applied on a wheel and that force simultaneously converts to the centripetal force as well as the centrifugal force then the wheel moves forward. So that every point on the wheel moves vertically on a curved path to cover horizontally on a straight line path.

The following laws are derived from the above facts as follows ,

LAW OF MOTION   ----------------------- Nrusingh's 1st law

(a) INERTIA OF REST : A body is at rest, until the applied force on it , converts to the centripetal force as well as the centrifugal force .

(b) INERTIA OF MOTION : A body is at motion, as long as the applied force on it , converts to the centripetal force as well as the centrifugal force .

The following law is derived from Nrusingh's 1st law

THE FORCE OF ACTION IS ALWAYS EQUAL TO THE SUM OF OPPOSITE REACTION AND ABSORPTION   -------------------- Nrusingh's 2nd law

This implies that ,

14 PARTS ACTION = 11 PARTS REACTION + 3 PARTS ABSORPTION

So **1 PART ACTION = (11/14) PART REACTION +**

(3/14) PART ABSORPTION

The following laws are derived from Nrusingh's 2nd law

Force = (11/14) Mass *Acceleration ----- Nrusingh's 3rd law

Energy = (11/14)mass(velocity of light)^2 ---- Nrusingh's 4th law

Pressure * Volume = (11/14) Temperature ---- Nrusingh's 5th law

Pressure = (11/14) Force / Area ---- Nrusingh's 6th law

Energy = (11/14) Frequency ---- Nrusingh's 7th law

Work = (11/14) Force * Distance ---- Nrusingh's 8th law

APPLIED HEAT = (3/14) ABSORBED HEAT + (11/14) WORK DONE HEAT

This implies that

Q = (3/14) U + (11/14) W ----- Nrusingh's 11th law

The following law is derived from Nrusingh's 5th law of general gas law

HEAT ENERGY = (11/14) TEMPERATURE ----- Nrusingh's 13th law

The following law is derived from Nrusingh's 5th law and Nrusingh's 13th law

HEAT ENERGY= PRESSURE * VOLUME

KEY WORDS :

Heat Energy , Pressure , Volume , Infinite Darkness , Universe , Star , Temperature , Energy, Electron , Proton , Neutron , Force , Constant of proportionality , Absorption , Action , Reaction , Centripetal force , Centrifugal force , Cycloid path , Straight line path
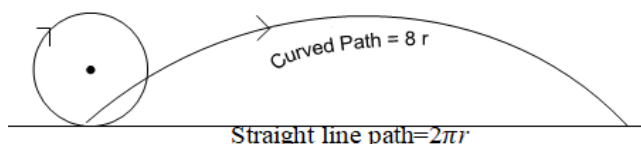
INTRODUCTION :

If a man applies a force to an object by his hands to the forward direction simultaneously he applies the same amount of force to the ground by his legs to the backward direction . In order to stay on his own position ,

He has to apply the same amount force simultaneously to both the opposite directions otherwise he will fall down . But the forward direction force makes the inertia of motion to the body .

If a force is applied to a wheel so that the force is converted to the centripetal force as well as the centrifugal force .

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Then a point of the wheel moves vertically **8r length** in the cycloid path by the centripetal force and Simultaneously the same point covers horizontally **2πr length** on the straight line path by the centrifugal force.

Curved Path = 8 r

Straight line path=$2\pi r$

Suppose s_1= length of the cycloid path and s_2 = length of the straight line path

So $s_1 = 8\ r$ and $s_2 = 2\ \pi\ r$

where r is the radius of the circle ,which generates the cycloid . The cycloid is a curved path, which is traced out by a point on a circle that rolls on a straight line.

Hence $8r > 2\pi r$ => $s_1 > s_2$

As $s_1 > s_2$ => $\dfrac{ds_1}{dt} > \dfrac{ds_2}{dt}$

Here $\dfrac{ds_1}{dt} = v_1$ = Velocity of any point on the cycloid path,

and $\dfrac{ds_2}{dt} = v_2$ = Velocity of the same point on the straight line path

So $v_1 > v_2$ => $mv_1 > mv_2$

=> $m\dfrac{dv_1}{dt} > m\dfrac{dv_2}{dt}$ => $ma_1 > ma_2$

Here $\dfrac{dv_1}{dt} = a_1$ = Acceleration of any point on the cycloid path ,

And $\dfrac{dv_2}{dt} = a_2$ = Acceleration of the same point on the straight line path .

Hence $ma_1 > ma_2$ => $F_1 > F_2$

where $F_1 = ma_1$ and $F_2 = ma_2$

But **the magnitude of the centripetal force is equal to the magnitude of the centrifugal force.**

But here $F_1 > F_2$

=> $F_1 - F_2 =$ SOME ABSORBED FORCE

=> $F_1 = F_2 +$ SOME ABSORBED FORCE

Here $F_1=$ CENTRIPETAL FORCE

= ACTION FORCE

And $F_2 =$ REACTION FORCE

Hence CENTRIFUGAL FORCE

$= F_2 +$ SOME ABSORBED FORCE

= REACTION FORCE +

SOME ABSORBED FORCE

=> ACTION FORCE = REACTION FORCE + ABSORPTION FORCE

This implies that,

ACTION = REACTION + ABSORPTION

SUBJECT MATTER :

The force is applied on a point of the wheel , So the point moves **8r length** on the cycloid path by the centripetal force and simultaneously the same point covers **2πr length** on the straight line path by the centrifugal force . This implies that $F_1\ :\ F_2\ =$

ACTION OF CENTRIPETAL FORCE :

REACTION OF CENTRIFUGAL FORCE

$$F_1 : F_2 = 8r : 2\pi r = 8 : 2\pi =$$

$$8 : (2 * 22/7) = (8 * 7/7) : (2 * 22/7)$$

$$= 56 / 7 : 44 / 7 = 56 : 44 = 14 : 11$$

Hence $F_1 : F_2 = 14 : 11$

This implies that,

" TO EVERY 14 PARTS OF ACTION , THERE IS 11 PARTS OF REACTION "

The magnitude of the centripetal force is equal to the magnitude of the centrifugal force. So each one of centripetal force as well as the centrifugal force must do equal amount of work.

But here centripetal force does more work than the centrifugal force,

This implies that some amount of centrifugal force is absorbed on the road .

Hence **14 PARTS ACTION – 11 PARTS REACTION = 3 PARTS ABSORPTION**

To every 14 parts of action, there is 11 parts of reaction and 3 parts of absorption .

This implies that

14 PARTS ACTION = 11 PARTS REACTION + 3 PARTS ABSORPTION .

So **1 part action = (11/14) part reaction + (3/14) part absorption**

Temperature is the average heat energy of the matter .Temperature is the degree of hotness or coldness of a body.Heat is the sum of the kinetic energy of atoms or molecules.

Heat is the form of energy that transfers from a hot body to a cold body .

The heat energy is derived from the general gas law of volume ,pressure and temperature .

The general gas law is derived from the following various gas laws .

Boyle's law states that ,

The volume of given mass of a gas is inversely proportional to its pressure at constant temperature

Mathematically, Boyle's law can be expressed as follows

Volume $\propto$ 1/ Pressure ------------ -(A)

Charle's law states that,

Pressure remaining constant, the volume of the given mass of a gas is directly proportional to its Kelvin temperature .

Mathematically,

Charle's law can be expressed as follows

Volume $\propto$ Temperature ------------(B)

Gay Lussa's law states that,

The pressure of given mass of a gas is directly proportional to its Kelvin temperature at constant volume

Mathematically, Gay Lussac's law can be expressed as follows

Pressure $\propto$ Temperature -----------(C)

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CASE –I

Combining laws of Boyle and Charle,

Boyle's law states that

Volume ∝ 1/ Pressure --------------(A)

And   Charle's law states that

Volume ∝ Temperature----------(B)

So combining the laws of (A) and (B)

It is obtained that ,

Volume ∝ (Temperature / Pressure)

=>Pressure ∝ (Temperature / Volume)

where **Volume = V** , **Pressure = P**

and **Temperature = T**

Here   Pressure ∝ T / V

=>   Force/Area ∝ T / V

Since Force / Area = Pressure

Now **Force / Area ∝ T / V**

=>   Force ∝ Area (T / V)

=> Force = k * Area (T / V)

Since   (11/14) part of force is used only for the working purpose out of the 1 part of the applied force and the rest (3/14) part of the force is absorbed in the medium .

Hence for the working purpose of force, The constant of proportionality = k

And   k = (11/14)

Hence   **Force = k * Area (T / V)**

=> Force = (11/14) * Area (T / V)

=> Force/Area = (11/14) (T / V)

=> Pressure = (11/14) (T / V)

=> Pressure * V = (11/14) T

=> Pressure * Volume

= (11/14) Temperature

So   the combining law of Boyle and Charle states that

PRESSURE* VOLUME =

(11/14) TEMPERATURE

This implies that   **P V = (11/14) T**

CASE -II

Combining law of Boyle & Gay Lussac .

Boyle's law states that

Volume ∝ 1/ Pressure

The converse of this statement is also true,

So **Pressure ∝ 1/ Volume   -------(A)**

And   Gay lussac's law states that

Pressure ∝ Temperature -----(C)

So combining the laws of (A) and (C)

It is obtained that ,

Pressure ∝ Temperature / Volume

Since   **Pressure = Force/Area**

So (**Force/Area)∝ Temperature/Volume**

=> Force ∝ Area(Temperature /Volume)

This implies that   **Force ∝ Area (T / V)**

=> Force = k * Area (T / V)

Since   (11/14) part of force is used only for the working purpose and the rest (3/14) part of the force is absorbed in the medium out of 1 part of the force.

So constant of proportionality= k=11/14

Hence   **Force = k * Area (T / V)**

=> Force = (11/14) Area (T / V) =>

Force/Area = (11/14) (T / V)

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=> **Pressure = (11/14) (T / V)**

=> **Pressure * Volume**

= (11/14) Temperature

So the Combining law of Boyle and Gay Lussac states that

PRESSURE * VOLUME

= (11/14) TEMPERATURE

This implies that **P V = (11/14) T**

CASE -III

Combining law of Charle and Gay Lussac .

Charle's law states that

Volume ∝ Temperature

The converse of this statement is also true,

So **Temperature ∝ Volume ------(B)**

And Gay Lussac's law states that

Pressure ∝ Temperature

The converse of this statement is also true,

So **Temperature ∝ Pressure -----(C)**

Hence combining the laws of (B) and (C),
it is obtained that

Temperature ∝ Volume * Pressure

The converse of this statement is also true,

So **Pressure * Volume ∝ Temperature**

=>**Pressure ∝ (Temperature/Volume)**

=>**(Force/Area) ∝ Temperature/Volume**

Since Force / Area = Pressure

=>**Force ∝ Area*(Temperature/Volume)**

=> **Force ∝ Area * (T/ V)**

=> **Force = k * Area (T/ V)**

Since (11/14) part of force is used only for the working purpose out of the 1 part of the applied force and Simultaneously the rest (3/14) part of the force is absorbed in the medium. Hence for the working purpose of force k = constant of proportionality = (11/14)

Hence **Force = k * Area (T / V)**

=> **Force = (11/14) Area (T / V)**

=> **(Force/Area) = (11/14) (T / V)**

=> **Pressure =**

(11/14)(Temperature / Volume)

Since Force / Area = Pressure

Hence **Pressure * Volume**

= (11/14) Temperature

So the combining law of Charle and Gay Lussac states that

PRESSURE * VOLUME

= (11/14) TEMPERATURE

This implies that **P V = (11/14) T**

All the three combining laws of (**Boyle's law** as well as **Charle's law) , (Boyle's law** as well as **Gay Lussac's law)**

And (**Charle's law** as well as **Gay Lussac's law)** state that

PRESSURE * VOLUME

= (11/14) TEMPERATURE

This implies that **P V = (11/14) T**

This is the general gas law of volume, pressure and temperature of a given mass of gas .

Nrusingh's 5th law states that

Pressure * Volume

= (11/14) Temperature

$\Rightarrow$ **PV = (11/14) T**

$\Rightarrow$ **P = (11/14) T/ V** = working pressure

Since , **Pressure =**

Working pressure +Absorbing pressure

$\Rightarrow$ **P = (11/14)(T/V) + (3/14)(T/V)**

Hence **(11/14) (T/V) part of Pressure is worked and the rest (3/14) (T/V) part of Pressure is absorbed out of 1 part of pressure .**

$\Rightarrow$ **working pressure=(11/14) T/V** ----(D)

Basically the absorbing pressure

(3/14) T/V is not taken into account .

Multiplying the factor " **Area** " both the sides of the equation (D)

It is obtained that ,

$\Rightarrow$ **Working pressure * Area**

= { (11/14) T/V } * Area

= (11/14) Area * Temperature / Volume

Since **Working pressure * Area**

= Working force

So **Working Force**

= (11/14) Area * Temperature / Volume

Here **Area =(Length * Breadth)** and

Volume =(Length * Breadth * Height)

Hence Length, Breadth and Height are the distances along the X-axis ,Y-axis and

Z – axis respectively .

Suppose

Working Force = Force

Hence **Force**

= (11/14) Area (Temperature / Volume)

= (11/14) (Area *Temperature) / Volume

=(11/14)(Length*Breadth)Temperature

/ (Length * Breadth *Height)

Hence **Force =**

(11/14)(Length*Breadth)Temperature/

(Length * Breadth) * Height -------------(D)

Cancelling the factor (Length*Breadth) from the right hand side numerator and denominator of the equation (D)

it is obtained that,

Force = (11/14) Temperature / Height

$\Rightarrow$ **Force* Height = (11/14) Temperature**

Since **Height is a distance on Z- axis**

i.e. Height = Distance

So **Force*Height = (11/14)Temperature**

$\Rightarrow$**Force * Distance=(11/14) Temperature**

As **Force*Distance=Work done=Energy**

So **Force * Distance = Energy**

Hence **Force * Distance =**

(11/14) Temperature

$\Rightarrow$ **Energy = (11/14) Temperature**

Since **Temperature is the average heat energy of the matter.**

So **Energy = Heat Energy**

Hence **Energy = (11/14) Temperature**

$\Rightarrow$ **HEAT ENERGY**

= (11/14) TEMPERATURE

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So the law **Heat Energy**

= (11/14) Temperature is derived from the following general gas law

PRESSURE * VOLUME =

(11/14) TEMPERATURE

Now **Heat Energy =**

(11/14) Temperature --------- (I)

And **Pressure * Volume =**

(11/14) Temperature ------------ (II)

Combining the equation **(I)** and the equation **(II) ,** It is obtained that

Heat Energy

= (11/14) Temperature

= Pressure * Volume

This implies that

HEAT ENERGY =

PRESSURE * VOLUME

CONCLUSION :

CREATION OF UNIVERSE :

Heat energy is the creator of the Universe . Heat energy is the life of every thing .

NASA says that the Universe was very dark place until around a few hundred million years , there were no stars and galaxies . First the Universe was only infinite of darkness .

Darkness comes to the earth in the night and goes away in the morning .

So the infinite darkness is always in motion , Motion is rotation and vice versa.

Motion occurs due to a force , So the infinite darkness has the force and it has also infinite volume as it has length, breadth and height. Force per Area is Pressure . As the infinite darkness has motion so it has the pressure .

When a volume of a part of the infinite darkness in motion comes under the pressure , then It creates the heat energy. Since ,

HEAT ENERGY =

PRESSURE * VOLUME

Electricity is generated by the heat energy and the electricity is the flow of electrons. This implies that , **when the heat energy moves by rotations in the infinite darkness, then a cloud of electrons are created from that heat energy.**

When a part of the cloud of electrons moves by rotations in the infinite darkness , then the part of the cloud of electrons under rotations goes from higher energy level to the lower energy level, So the part of the cloud of electrons turns to protons of dust particles. The dust particles of protons stay together under the motion with the infinite darkness . **The neutron is formed by an electron and a proton combining together.** The dust particles of protons and the cloud of electrons move together with the infinite darkness .

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Due to their motion ,**the cloud of electrons and the dust particles of protons have pressure and volume .**

The volume of the cloud of electrons and the volume of dust particles of protons come under pressure and generate heat energy in the infinite darkness, Since

HEAT ENERGY =

PRESSURE * VOLUME

The dust particles of protons as well as the cloud of electrons unite together to form Hydrogen atoms in the infinite darkness in presence of heat energy .

The volume of hydrogen atoms move with the infinite darkness and come under pressure, So heat energy is generated, Since

HEAT ENERGY =

PRESSURE * VOLUME

Fusion takes place in the hydrogen atoms due to heat energy , as a result a baby star is created from that .

The sun is radiating heat energy according to the law,

Heat Energy

= (11/14) Temperature

Atomic weight of 5 hydrogen atoms

= 5H = 5(1.008) = 5.040 and

Atomic weight of 1 Helium atom =

1He = 4.002 ≈ 4 = 2 protons + 2 neutrons

So Fusion in Sun takes place according to the following Nrusingh's 2nd law

1 PART ACTION

= (11/14) PART REACTION

+ (3/14) PART ABSORPTION

1 PART ACTION = Atomic weight of 5 Hydrogen atoms .

(11/14) PART REACTION

= 5.040(11/14) = 3.960 ≈ 4 ≈ 4.002

= Atomic weight of 1 Helium atom

And **(3/14) PART ABSORPTION**

= 5.040(3/14) = 1.080

= Absorbed atomic weight in the sun

This implies that, **5.040 atomic weight of 5 hydrogen atoms are fused together in Sun, then 3.960 ≈ 4 = atomic weight of 1 helium atom is produced as light energy and heat energy .**

What happens to a man in the Earth, that happens to the star in the Universe because man and the star are made up of the same things in the Universe .

Man is born in the Earth and lives some years then grows to old and dies .

At last he mingles with the Earth in some years.

Exactly in the same way star takes birth in the infinite darkness,

Then grows and lives for million of years .

At last the star dies and takes million of years to mingle with the infinite darkness of the Universe .

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Exactly in the same way of star , Every celestial body takes birth and lives for million of years in the infinite darkness , Then it dies and takes million of years to mingle with the infinite darkness of the Universe . All the atoms of various elements are formed by electrons , protons and neutrons. .All the celestial bodies are created by various elements in the infinite darkness of the Universe. This process of creation of the UNIVERSE is called ,

NRUSINGH THEORY

CREATION OF RAIN :

Heat energy decomposes the matter into components and unite the components into the matter .When water is heated, the H_2O molecules of water decomposes to hydrogen atoms and oxygen atoms .The birds of same feather flock together, This means, **the same things stay together**, it is law of the Universe .So the hydrogen atoms move together in the atmosphere as dust particles and the oxygen atoms move together in the atmosphere as the cloud. Due to their motion they have the pressures as well as volumes . The product of their pressures and volumes make the heat energy, Since

HEAT ENERGY =

PRESSURE * VOLUME

When the dust particles of hydrogen atoms and the cloud of oxygen atoms come under the influence of heat energy in the atmosphere ,Then they unite together to form H_2O water molecules of the rain drops .

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