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EXPERIMENT PROOF OF KURI LAW OF BUOYANCY FORCE

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Abstract: In a fluid statics, buoyancy force has made on two laws, one is Archimedes principal of buoyancy force and another one kuri law of buoyancy force. Kuri Law of buoyancy force state that as "buoyancy force is reciprocal to specific gravity of body, but mass of body and acceleration due to gravity is always remains constant" or "buoyancy force is reciprocal to specific gravity of body on fluid, but weight of the body is always opposition direction and magnitude to buoyancy force".

This paper will shows about how can made of kuri law of buoyancy force. our experiments allows for checking whether buoyancy force was upward pushed the bodies a high or low force on fluid as depends on specific gravity of body. Buoyancy force is up pushed the upward direction on body in fluid. We see that body is move up direction in water. In experiment in a fluid, Specific gravity of body was less, body was came the high force to reached on fluid. Otherwise, specific gravity of body was more; body was slow force to reach on fluid. But, specific gravity of body was more than one; defiantly it's tending to sink in a fluid. It shows the relationship between with buoyancy force and specific gravity of body.
Keywords: - buoyancy, buoyancy force, specific gravity of body, density of bodies, floating bodies.

I. INTRODUCTION

Unexpected this author was found this law in buoyancy force [1]. He is tried work in lab to conduct some experiments to assume this law. These experiments are proving the kuri law of buoyancy force [1, 2, 3]. We trying the pushing down on a floating body in fluid or water, and we feel the buoyance force was pushed upwards on fluid. The buoyancy force is vertically upwards to partially or fully submerged body on fluid at rest [4, 5]. The rest of body on fluid as called the buoyanceof body.

We try to force down on body, it will going on sinking in water or fluid, Immediately, buoyancy force was pushed this body on water or fluid. This body will came with highly or low force as depends on the density of this body. Specific gravity of body will more; it's going the low force or slow forcibly to reach on water or fluid. Otherwise, specific gravity of body will low. It will going the high force or more forcibly to reached on water or fluid. We have seen that's buoyancy force variance in water. It's explained by the kuri law of buoyancy force.

II. EXPERIMENTS CONDUCT TO PROVE LAW OF BUOYANCY FORCE.

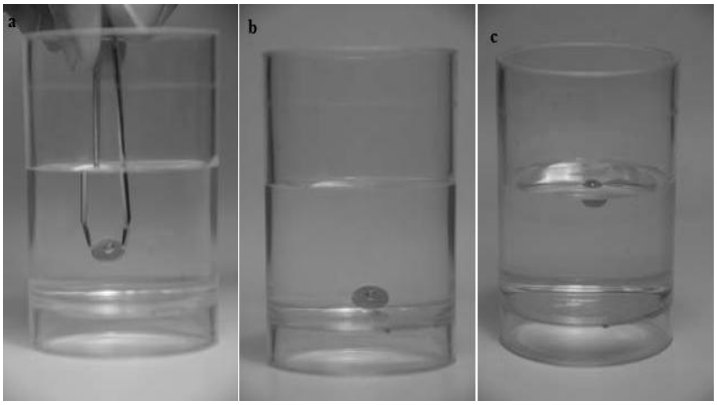

Figure 1 Buoyancy force was upward plastic ball.

We have studied buoyancy force to make developed a simple, low cost experiment to investigate the buoyancy force relationship between with specific gravity of body. We have considered the plastic ball (density of plastic ball 0.82g/cc, mass of plastic ball is 6 gram, volume of ball is 7.3cc). In experiment we are taking plastic ball and glass water. Next, we slightly press down the plastic ball in water by using external instrument, ball will reached on below surface. Immediately, we removed the external instrument. We have seen the plastic ball is going the upward on water at high force to reach on water. It rest to floating on water. May we knew that density of plastic ball is lower than density of water. Specific gravity is less. That's buoyancy force is highly upward pushed on water. In this simple experiment to make understand as buoyancy force is reciprocal the specific gravity of plastic ball.


Figure 2. Buoyancy force was upward pushed the wood and plastic in water bottle.

We conduct another simple experiment in laboratory. We consider two bodies as one wood material(density of wood is a 0.7g/cc, mass of wood is a 10gram, volume of wood is

14.2cc, specific gravity of wood is 0.7) and another one plastic material(density of plastic is a0.92g/cc, mass of plastic 6gram, volume of plastic is 6.52cc, specific gravity of plastic is 0.92). We conduct in simple experiment as using the water bottle. First we filled water on bottle, and then let us taking two bodies too dropped on water bottle. Just we see as two bodies floating on water bottle surface. Next we will turn bottle in reciprocating to rotation bottle. We seeing plastic and wood has going on upward direction in bottle are caused by buoyancy force. Buoyancy force was up pushed to two bodies, it are goes on upwards directions. We see as wood body was high velocity with more forced to reach on water, then plastic body will later to reach on water. We can see in as wood is very firstly reached on water than plastic body. Then, Plasticis later to reach at slow force on water. Two bodies are submerging to come up on upward the floating on water. In this simple experiment to make understanding the specific gravity of wood is less or low, immediately buoyancy force is high force to push on water that buoyancy force is increased. Specific gravity of plastic is more or high as compared the specific gravity of wood. That's buoyancy force is push the plastic body, it's also come up on upward later reached on water as compared the wood body in bottle. This simple experiment is conduct to make understand that as law of buoyancy force. "Buoyancy force is reciprocal to specific gravity of body. But weight of body is opposition directions and magnitude of the buoyancy force". Or "buoyancy force is always reciprocal to specific gravity of body, but mass of body and acceleration due to gravity is remains constant in fluid".

Figure 3, Buoyancy force was upward pushed the capsicum and apple body in glass.

We considered the capsicum and apple for conducting experiment. Now, we filled water in glass tube, saliently we took two bodies. These are dropped on glass tube. We slightly press down the apple and capsicum in water by using external instrument. These are go down the below surface at rest on down. Immediately we removed the external instrument. We have seen the apple and capsicumare going the upward directions. We have seeing that capsicum is going the high forcibly to reach on water. But apple is low forcibly or slow motion in glass. May we know that law of buoyancy force, as specific gravity of capsicum is low or lesser than specific gravity of apple. That was buoyancy force is pressed the high forcibly to capsicum. Then it's going the high forcibly to reach on water. Specific gravity is high, that's buoyancy force was pushed on upwards as low or slow forcibly to apple. We has seen that's apple is low or slowly to later reached than capsicum on water. This simple experiment was proved the kuri law of buoyancy force.

III. DIFFERENCE BETWEEN ARCHIMEDES' PRINCIPLE OF BUOYANCY FORCE AND KURI LAW OF BUOYANCY OF FORCE.

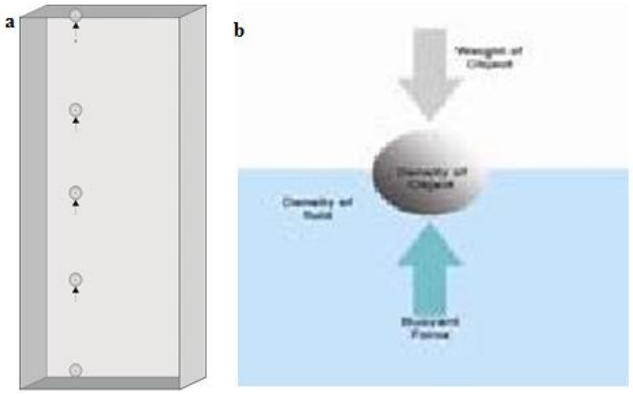

Figure 4, the Difference between Archimedes' principle of buoyancy force and kuri law of buoyancy of force.

Law of buoyancy force state that as "buoyancy force is reciprocal to specific gravity of body, but mass of body and acceleration due to gravity is always remains constant". Shows an image that's buoyancy force is up pushed on upward direction of body in fluid. Its high or low force reached on fluid. It does depend on specific gravity of body. We see that body is move up direction in water. It's given the relationship between with buoyancy force and specific gravity of body. According to Archimedes' law of buoyancy [6, 7, 8, 9, 10, 11], "the Mass of liquid displaced by an object is equal to the mass of that object". When a body was rest on a fluid, it was partially or totally floating on a fluid that's we known as buoyancy of body. This force is directed upwardand has a magnitude equal to the mass of the fluid displaced by the body.We have conducted this simple experiment to making proved kuri law of buoyancy force. These Two laws are variable with different statement.According to Archimedes' law, "the Mass of liquid displaced by an object is equal to the mass of that object". When a body was rest on a fluid, it was partially or totally floating on a fluid that's we known as buoyancy of body.

This force is direction upward and has a magnitude equal tothe mass of the fluid displaced by the body. And Archimedes law of buoyancy forceisdownward direction and magnitude in fluid. Kuri Law of buoyancy force is upward direction and

Magnitude of forces to body. Two laws are opposite direction and also opposite magnitude in fluid.

Archimedes' law and kuri law of buoyancy force do not consider the surface tension [12, 13, 14] (capillarity) acting on the body.

IV. RESULT

Our experiments allows for checking whether buoyancy force was upward pushed the bodies a high or low force on fluid as depends on specific gravity of body. In experiment in a fluid, Specific gravity of body was less, body was came the high force to reached on fluid. Otherwise, specific gravity of body was more; body was slow force to reach on fluid. But, specific gravity of body was more than one; defiantly it's tending to sink in a fluid. This law is correct with shows relationship between buoyancy force and specific gravity of body.

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