	Page No.	
	Date	
-	Name: Shreering Mhatre	
	class: Machanics Practical	
	Roll po: 111056	
-	Division: K3	
	sobmitted to: Arunabh, Panday Sir.	
	102 that the properties of the soft	
13/4	Experiment No-3	
	pourovan es bellos à troito-livre de	
	To Find The law of Machine	
	Of A Simple Lifting Machine	
	9 1,014	
	Ottos utrolov (d	
0	te ratio of the velocity of files it	
	ine velocity of Local a defined on the	
	Crital patonap other Alimon	
	Velocity vation exclodly of Effect 20th - 20	
	19 The books of color	
		-
	epidoom and your of the south on the south of the south o	
214	offe gut to git to your out of gartion	
200	delined as the officiently of the next	_
4700	and a color of the color of the color	_
	Efficiency well-war to the company of the	
	VCIX DOE IN DIETERY LINE	
	V.9 _ 109 _ 109 _ 0.0	
-4		

Paga No.		
Onto		

* Questions -

(31) befine the following terms: a) Mechanical Advantage b) velocity Ratio c) efficiency of the machine in a characteristic and most hadden into

lubbithean? Jakradobak.

Ans - a) Mechanical Advantage-The ratio of Load upon Effort for overcoming a large resistance by application of small offort is called as Mechanical Advantage. Wall of bain

Machanical Advantage = Load i.e. w

b) Velocity Ratio

The ratio of the velocity of Effort to the velocity of Load is defined as the velocity ratio denoted by(v)

velocity vatro - velocity of Effort - b/t - b

c) Efficiency of a Machine

The ratio of useful work got out of machine to the work jout in by the effort is defined as the efficiency (h) of the machine. and is usually expressed as a perentage efficiency.

Efficiency - useful work got out of makine - autput work put in by Effort Input

Page	No.		
1180			
Date			
er min			

= W/P - Machanical Advantage

Velocity Ratio

· Percentage efficiency (n%)= w x 100

(32) what is the difference between veversible and irreversible machines?

Ans DReversible machine:

A machine which is capable of doing work in the reverse direction even after the removal of effort, load get lifted is called Reversible machine.

2 Irreversible machine:

A machine which is not capable of being work in the reverse direction is called irreversible machine or also known as solf-locking machine.

03) what is the law of a mochine?

Ans) If efforts (P) corresponding to various loads we care plotted, it will generally be found that the relation ship between the two is a linear one, which can be expressed as P=mw+C, where m = slope of the load offort, graph and C = Intercept on effort axis.

Page No.	
Date	

34) State the practical applications where simple lifting machines are commonly used.

Ans > The practical applications are -

- D Lever- It is a rigid bar that can rotate around a fixed point, the following.

 Used to lift heavy objects.
- 2) Pulley The pulley is rosed to lift hear objects
 to a certain height. It is a wheel
 through which a rope passes through
 its external part.
- 3 Inclined plane Here, the force of the weight is broken down into two components to this way, the offort required to lift the load is less.
- 05) why is the efficiency of the machine less than one?

Ans > Since a machine does not contain a source of energy, now can it store energy, from conservation of energy the power output of a machine can never be greater than its input, so the officiency of the machine is always less than one.