	Pege No. Dete
	Subject Name-Basic Mechanical Engineering Subject code-MEE105B Name - Shreerang Mhatro Division - 11 Roll no - 111056 Batch - K3
	Experiment No-6
*	Name of the experiment-Trial on reciprocating compressor.
*	Aim-To calculate the compression vatio for the air-compressor.
*	objective-To understand the different parts and working of air-compressor and calculate the pressure vatio.

	Page No.			
	(Date			
	Sommary			
	The short of the same of the s			
	About the compressor +			
X	An Air compressor is a device,			
	which sucks the air from the atmosphere			
	and compresses it and delivers it to a			
	reservoir tank. It compresses the air by			
	the means of a recipromating piston,			
	the realist of the inside a calied of the			
<u> </u>	which reciprocentes inside a cylinder It-can			
	be single stage or multistage. It can be single acting or double acting. Two-stage			
91	air compressor test rig consists of two			
	cylinders and pistons and a reservoir			
0.00	tank An A C motor drives it Thermometers			
	are provided at inlets and outlets. To find			
	out the inlet volume of air an orifice is			
	amided. To atream line the intake a			
	1. Junion have manifold is provided.			
	Drock was carried to provided at reger voir land.			
	safety valve and auto power switch is provided for the safety factor.			
	avoyided for the eafety factor.			
	Provided			
X	specifications -			
A.				
	Motor 3.H.P			
	Type AB 7.75			
	compressor Double stage single acting			
	cylinder Not Diameter 93.5mm, Stroke 78mm			
	Energymeter 3200 Pulses/KWh constant(EMC)			

Page No. Date * Troony-In two stages compressor air is partfally compressed in low-pressure cylinder this air is passed through between the first stage and the second stage so that air at the inlet of the second stage is at lower temperature than the first stage outlet. This is done to reduce the work of compressor in second stage. Final compression in the second stage Also the compressors are provided with deavour volume, two stage compressors can achieve higher volumetric officiency than a single stage compressor because of lower compression per stage. As the compressed domestic, aevonautics, Fields, etc. so compressors are applied in a wide range. compressors are used where the air is required at high presure, of apprilacio Reserve agua e la provided at reservoi softer value and auto power switch is provided for the cafety factor * specifications Motor compressor pooble stage single acting

Page No Date Suestions! s) How the air compressors are classified? Ans Air compressors are classified as-Positive Displacementon Dynamic (Torbo) Compovessovery anno compressors. (Impellar rotates at (Air is trapped between two sets of engaging higher speed to compressed gir surface which results nigher profair) which results rise in Profair due to amamic effects) Rotary Reciprocrating Lobe Type MUH single Centrifuga 1 Axial stage. (Rooks Blower) stage single > Vane Type Mouble Screw Type Acting Acting (32) what is volumetric officiency of air-compressor? Ans > The volumetric officiency represents the efficiency of a compressor cylinder to compress gas. It may be defined as the ratio of the volume of gas actually delivered to the piston displacement, corrected to suction temperature and pressure

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(33)	what is isothermal efficiency of air
	comparessor?
	Manual System and the work of
Ans	Trothermal officiency-
	It is the ratio of work (or power)
	required to compress the air isothermally
1	to the actual work required to compress
	the air for the same pressure ratio.
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