

**VISVESWARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**



**A Project Report on**

**“HYDRAULIC ACTUATION OF VALVES”**

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## 1 ABSTRACT

HYDRAULIC ACTUATION OF VALVE is a mechanism to replace the mechanical actuation of valve in the 4 stroke IC engine presently in use.

To overcome the disadvantages of the present system i.e. engine noise, oil leak at interfaces etc, hydraulic actuation mechanism is used, which eliminates some moving parts of 4 strokes engine like rocker arm, push rod tappet arrangement, cam chain, as well as some stationary parts like chain tensioner and, tension adjuster, thereby reducing the cost of production as well as weight of the engine and making the engine more compact.

This mechanism has more advantages for two wheeler engine, especially for the engines having two spark plug for single cylinder as it reduces the engine weight.due to less number of parts used.

Heat transfer between the engine and atmosphere will be at a uniform rate at the cylinder block and cylinder head surface.

Due to elimination of some moving parts of the engine, casting of cylinder head and cylinder block is easier.