

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590 018**



**PROJECT REPORT ON
(10CH85)**

“EXTRACTION OF ESSENTIAL OILS”

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**BACHELOR OF ENGINEERING
IN
CHEMICAL ENGINEERING**

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ABSTRACT

A large number of plant materials contain Essential Oils with extensive bioactivities. Acknowledging the importance of plants and its medicinal value, extraction of Essential Oil had been done using Steam Distillation method. In this project Steam Distillation was used to extract oil from different plant materials like eucalyptus leaves, fresh citrus limetta peels and dried citrus limetta peels. The distillation was conducted in Steam distillation apparatus in which boiling, condensing and decantation was done. Steam distillation method was found to be one of the promising techniques for the extraction of essential oil from plants as reputable distiller will preserve the original qualities of the plant. The recovery of Essential Oil (the value added product) from the raw botanical starting material is very important since the quality of the oil is greatly influenced during this step. Analysis of Essential oil was done using Gas Chromatography- Mass Spectrometer apparatus and Thin layer chromatography method which gives evaluates Essential Oil qualitatively and quantitatively. Research has confirmed centuries of practical use of essential oils, and we now know that the 'fragrant pharmacy' contains compounds with an extremely broad range of biochemical effects. Essential oils are so termed as they are believed to represent the very essence of odour and flavour.