INTRODUCTION

Nature has broadened its horizon with diverse array of natural products with number of scaffolds and unique structures with specific activity. Heterocyclic scaffolds are ubiquitous in pharmaceuticals which constitute privileged substructures with remarkable biological activity. In up to date circumstances heterocyclic play a vital role in drug synthesis. In that respect 3,4 dihydro pyrimidones play a significant role among other heterocycles. From the literature survey, in recent years 3,4-dihydropyrimidin-2(1H)-ones have fascinated substantial curiosity because of their therapeutic and pharmacological properties. It has been found to exhibit a wide spectrum of biological effects including antimicrobial, antitumor, antiviral, anti inflammatory, antihypertensive, calcium channel blocker, alpha-1a adrenergic antagonist and neuropeptide antagonist (23).

Dihyro pyrimidine is a bioisoster of dihydro pyridine which shows very good calcium channel blocking activity and antihypertensive activity. In 1893 Biginelli reported synthesis of dihydro pyrimidinones, however, the synthetic potential of this heterocyclic synthesis remained unexplored for quite sometime. In the 1970s attention gradually increased. The search for new and efficient methods for the synthesis of pure compounds had been an active area of research in organic synthesis. From a modern point of view, Biginelli protocol is obviously very attractive for combinatorial chemistry and has been rarely used for parallel synthesis, a new avenue could be connected with an elaboration of catalytic procedures.

Cancer is a disease characterised by uncontrolled multiplication and spread of abnormal forms of the body's own cells. Colon cancer is a cancer of the large intestine which develops as a result of the pathological transformation of normal colonic epithelium to an adenomatous polyp and ultimately an invasive cancer. Colon is the last part of the intestine
consisting of cecum, ascending, transverse, descending and sigmoid colon and the rectum. The mucosa, sub mucosa, muscularis externa and serosa are the four major tissue layers, from the lumen outward form the large intestine. The colorectal cancer is a major cause of morbidity throughout the world. It is the most common cancer worldwide and the fourth most common cause for death.

It accounts for over 9% of all cancer incidences. It represents 9.4% of all incidence in men and 10.1% in women. It is mainly a disease of the developed countries with western culture. In India the increasing rate of incidence is due to the migration of rural population to the cities, increase in life expectancy and change in life style, western type of high fat, high protein, low carbohydrate and less fibre content food are the risk factors for the increase in colon cancer incidence.