3. OBJECTIVES OF THE PRESENT WORK

The current prevalence is 150 million persons worldwide and projected increase to 220 million by 2010 and to 300 million by 2025. India leads the world with the largest number of diabetic patients earning the dubious distinction of being termed the “diabetes capital of the world”. According to the Diabetes Atlas 2006 published by the International Diabetes Federation, the number of people with diabetes in India currently around 40.9 million is expected to rise to 69.9 million by 2025 unless urgent preventive steps are taken.

Hypertension is an extremely common condition in diabetes affecting approximately 20-60% of patients with diabetes. It substantially increases the risk of both macrovascular and microvascular complications. Macrovascular complications include coronary artery disease, peripheral vascular disease, atherosclerosis, myocardial infarction, stroke and gangrene whereas microvascular complications include small vessel diseases such as retinopathy, neuropathy and nephropathy.

In the epidemiological UK Prospective Diabetes Study (UKPDS 1998), each 10 mmHg reduction in mean systolic blood pressure was associated with reductions in risk of 12% for any complication related to diabetes, 11% for myocardial infarction and 13% for microvascular complications. In light of these facts, it is clear that the control of blood pressure in diabetics is positively more beneficial for the progression of diabetic complications. But many antihypertensive drugs adversely affect glycemic control in diabetes. So the choice of anti-hypertensive therapy in the diabetic population needs to be considered in the context of reducing the blood glucose, blood pressure, microvascular and macrovascular complications.

Therefore, the present study has been planned to study the effects of various antihypertensive drugs such as beta blockers, calcium channel blockers, ACE inhibitors etc. on diabetes mellitus and associated complications such as cardiovascular, nephropathy, retinopathy etc. and interaction of selective antihypertensive drugs with oral hypoglycemic drugs.