This study was undertaken to investigate the serum levels of lipoprotein(a), apolipoprotein A-I, apolipoprotein B and comprehensive lipid tetrad index in patients having risk factors for coronary artery disease and evaluate their significance as markers. To substantiate this, two studies were carried out.

**Objectives of the Study I:**

1. To compare the clinical and biochemical characteristics in subjects with coronary artery disease and its risk factors with healthy controls.
2. To determine the levels of the serum level of Lp (a), ApoA-I, Apo B & comprehensive lipid tetrad index (CLTI) in subjects with risk factors for CAD.
3. To determine the levels of the serum levels of Lp (a), ApoA1Apo B & CLTI in subjects with CAD.
4. To find out the degree of association of Lp (a), ApoA1Apo B & CLTI with CAD.

**Objectives of the Study II:**

1. To find the prevalence (%) of metabolic syndrome components in all participants of the study.
2. To compare the clinical and biochemical characteristics in subjects with metabolic syndrome and those without it.
3. To compare the levels of lipid components as atherogenic factors in subjects with and without metabolic syndrome.
4. To find out the association between Lp(a), Apo A-I, Apo B100 and CLTI with metabolic syndrome.
5. To find out the specificity and sensitivity of Lp(a), Apo A-I, Apo B and CLTI.