

# TABLE OF CONTENTS

	Page no.
Preface .....	<i>I-III</i>
List of figures & Tables.....	<i>IV-VIII</i>
Abbreviations.....	<i>IX-X</i>
<b>CHAPTER-1:</b>	
Review of Literature.....	<i>1-52</i>
• <i>Acute Myocardial Infarction</i> .....	<i>2-7</i>
• <i>Stroke</i> .....	<i>8-11</i>
• <i>Platelet</i> .....	<i>11-13</i>
• <i>Atherosclerosis</i> .....	<i>13-14</i>
• <i>Aspirin</i> .....	<i>14-16</i>
• <i>Nitric Oxide and Nitric Oxide Synthase</i> .....	<i>17-22</i>
• <i>Nitroglycerin in Cardiovascular Disease</i> .....	<i>22-23</i>
• <i>Dermcidin isoform-2</i> .....	<i>24-28</i>
• <i>Insulin</i> .....	<i>28-33</i>
• <i>GLUT-4</i> .....	<i>34-40</i>
• <i>Protein di-sulfide isomerase</i> .....	<i>40-41</i>
• <i>Triad effect in acute myocardial infarction</i> .....	<i>42-43</i>
• <i>Synthesis of dermcidin in low partial pressure of oxygen</i> .....	<i>44-45</i>
• <i>Fluorescence resonance energy transfer (fret)</i> .....	<i>45-47</i>
• <i>Diabetes</i> .....	<i>47-48</i>
• <i>Hypoxia</i> .....	<i>50-52</i>
Aims & Objective And Study Design.....	<i>53-55</i>
<b>CHAPTER-2:</b>	
Methodology.....	<i>56-70</i>

**CHAPTER-3:.....71-84**

*Acetyl Salicylic Acid induced inhibitory effect on platelet aggregation in acute myocardial infarction is nullified by dermcidin protein*

- *Introduction.....72-73*
- *Results.....74-82*
- *Discussion.....83-84*

**CHAPTER-4.....85-96**

*Studies on the role of insulin on platelet aggregation in vascular disease*

- *Introduction.....86*
- *Results.....87-95*
- *Discussion.....96*

**CHAPTER-5.....97-107**

*The anti-anginal compounds regulate nitric oxide production in endothelial cells in acute coronary syndromes*

- *Introduction.....98*
- *Results.....99-105*
- *Discussion.....106-107*

**CHAPTER-6.....108-134**

*Aqueous extract of tobacco leaves (AETL) and hypoxia actuated hyperglycemia induced by dermcidin protein through the impediment of GLUT4 translocation and NO production*

- *Introduction.....109-110*
- *Results.....111-128*
- *Discussion.....129-134*

**CHAPTER-7.....135-144**

*Trypsin resistant oral insulin helps higher and sustained bioavailability of insulin in alloxan induced hyperglycemic mice*

- *Introduction*.....136
- *Results*.....137-142
- *Discussion*.....143-144

**Summary & Discussion**.....145-148

**References**.....149-173

**Publications**.....174-179