<table>
<thead>
<tr>
<th>CHAPTER NO.</th>
<th>HEADINGS/SUBHEADINGS</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
<td>17-22</td>
</tr>
<tr>
<td>2</td>
<td>AIMS AND OBJECTIVES</td>
<td>23-24</td>
</tr>
<tr>
<td>3</td>
<td>REVIEW OF LITERATURE</td>
<td>25-87</td>
</tr>
</tbody>
</table>

- **PAIN**
  - Definition of Pain
  - The Gate theory of Pain
  - Nociceptive Pain
  - Neuropathic Pain
  - Molecular mechanisms of Spinal sensitization
  - DM and Neuropathic Pain

- **PATHOGENESIS OF PDN**
  - AGEs pathway and PDN
  - Polyol pathway and PDN
  - Hexosamine-pathway and PDN
  - PKC pathway and PDN
  - Growth factor and PDN
  - Oxidative stress and PDN
  - Spleen/ Spleen derived factor (S) and PDN
  - Cytokines and PDN
  - NO and PDN
  - PARP and PDN

- **PHARMACOLOGICAL TREATMENT FOR PDN**
  - Anti-Depressant and PDN
  - Anti-epileptic and PDN
  - NSAIDs and PDN
  - Opioids and PDN
  - Cannabinoids and PDN
  - Neuro-steroids and PDN
DIABETES-INDUCED NEURONAL HYPERSENSITIVITY AND ANALGESIC TOLERANCE
- Opioids-analgesic tolerance in PDN
- Cannabinoids-analgesic tolerance in PDN
- Glial cell and analgesic tolerance
- Proteins kinases and analgesic tolerance
- MAPK and analgesic tolerance
- EAA and analgesic tolerance
- NO/ONOO- and analgesic tolerance

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>MATERIALS AND METHODS</td>
<td>88-103</td>
</tr>
<tr>
<td>5</td>
<td>RESULTS</td>
<td>104-151</td>
</tr>
<tr>
<td>6</td>
<td>DISCUSSION</td>
<td>152-166</td>
</tr>
<tr>
<td>7</td>
<td>SUMMARY AND CONCLUSION</td>
<td>167-169</td>
</tr>
<tr>
<td>8</td>
<td>BIBLIOGRAPHY</td>
<td>170-240</td>
</tr>
</tbody>
</table>