# CONTENTS

<table>
<thead>
<tr>
<th>Statement</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>iii</td>
</tr>
<tr>
<td>Contents</td>
<td>vi</td>
</tr>
<tr>
<td>List of figures</td>
<td>vii</td>
</tr>
<tr>
<td>List of tables</td>
<td>xi</td>
</tr>
<tr>
<td>Preface</td>
<td>xii</td>
</tr>
</tbody>
</table>

## CHAPTER 1 — GENERAL BACKGROUND

1.1 Introduction  
1.2 Study area  
1.3 Objective and scope of the study  
1.4 Main features of the Western Indian Ocean  
   1.4.1 Mid-oceanic ridge system  
   1.4.2 Submarine plateaus and aseismic ridges  
   1.4.3 Seamounts  
   1.4.4 Deep sea basins  
1.5 Broad evolutionary history of the Western Indian Ocean  

## CHAPTER 2 - GEOLOGICAL FRAMEWORK

2.1 Introduction  
2.2 Prominent features in and around the study area  
   2.2.1 Features on the western part of the Indian mainland.  
   2.2.2 Continental shelf and slope  
   2.2.3 Laccadive-Chagos Ridge  
   2.2.4 Laxmi Ridge  
   2.2.5 Laccadive Basin  
   2.2.6 Laxmi Basin  
   2.2.7 Arabian Basin  
   2.2.8 Offshore Indus Basin  
2.3 Sedimentation source in and around the study area  
2.4 Inferred subsidence of the region  
2.5 Dated volcanism around the study area  
2.6 Concept of passive continental margin  

## CHAPTER 3 – DATA AND METHODOLOGY

3.1 Introduction  
3.2 Types and sources of data  
3.3 Methodology used for data acquisition  
   3.3.1 Conventional and swath bathymetry data  
   3.3.2 Seismic reflection data