

## Table of Contents

<b>1 Introduction</b> .....	<b>5</b>
<b>2 Definition of Tabeled Quantities</b> .....	<b>7</b>
<b>3 Properties of Concretes Under Normal Conditions</b> .....	<b>12</b>
3.1 Composition of Concretes and Cements .....	12
3.2 Phase diagram $C_aO-SiO_2$ (i.e. $C_3S$ a $C_2S$ ) .....	18
3.3 Texture of Hardenet Cement Gels .....	19
3.4 Hydrological Properties of Concretes .....	21
3.5 Thermophysical Properties of Concretes .....	22
3.6 Mechanical Properties of Concretes .....	23
<b>4 Effect of Moisture on Concrete Properties</b> .....	<b>24</b>
<b>5 Effect of Temperature on Concrete Properties</b> .....	<b>35</b>
<b>6 Effect of Accelerated Ageing on Concrete Properties</b> .....	<b>52</b>
<b>Conclusion</b> .....	<b>65</b>
<b>References</b> .....	<b>66</b>

