

CONTENTS

		Page No.
GENERAL INTRODUCTION		i - v
<u>PART 1 : VISCOSITY B COEFFICIENT STUDIES</u>		1 - 76
1.1	Introduction	1
1.2	Brief Review of Previous Investigations	4
1.3	Experimental Details	19
1.4	Results	25
1.5	Estimation of Errors	37
1.6	Discussion	42
1.7	References	68
<u>PART 2 : EXTENSION OF THE PRINCIPLE OF ADDITIVITY OF VISCOSITY B COEFFICIENT TO MIXTURES OF WEAK ACIDS AND THEIR SALTS</u>		77-90
2.1	Introduction	77
2.2	Theory and Working Formulae	78
2.3	Experimental Details	82
2.4	Results	84
2.5	Discussion	89
2.6	References	90

CONTENTS (Contd.)

	<u>Page No.</u>
<u>PART 3</u> : <u>SHAPE OF HUMIC SUBSTANCES ISOLATED FROM</u> <u>SOIL FROM VISCOMETRY</u>	91 - 116
3.1 Introduction	91
3.2 Review of Literature	92
3.3 Theoretical Relations	93
3.4 Experimental Details	94
3.5 Results	99
3.6 Discussion	103
3.7 References	114
<u>PART 4</u> : <u>DIFFUSION STUDIES</u>	117-135
4.1 Introduction	117
} 4.2 Experimental Details	119
4.3 Results	124
4.4 Estimation of Errors	129
4.5 Discussion	130
4.6 References	134
<u>SUMMARY</u>	135