

# CONTENTS

<b>Chapter No.</b>	<b>Chapter Title</b>	<b>Page No.</b>
	<b>Synopsis</b>	i - xiv
<b>Chapter 1</b>	<b>Unsteady MHD free convection flow past an infinite vertical plate with viscous dissipation and heat absorption</b>	<b>1 - 22</b>
	1.1 Introduction	1
	1.2 Formulation of the problem	3
	1.3 Method of Solution	5
	1.4 Discussion of the Results	9
	1.5 References	14
	Graphs	
<b>Chapter 2</b>	<b>Chemical reaction and radiation effects on unsteady MHD natural convection flow of a rotating fluid past a vertical porous flat plate in the presence of viscous dissipation</b>	<b>23 - 43</b>
	2.1 Introduction	23
	2.2 Formulation of the problem	25
	2.3 Method of Solution	27
	2.4 Discussion of the Results	30
	2.5 References	34
	Graphs	

**Chapter 3 Thermal radiation and rotation effect on an unsteady MHD mixed convection flow through a porous medium with Hall current and heat absorption 44 - 68**

3.1	Introduction	44
3.2	Formulation of the problem	48
3.3	Method of Solution	51
3.4	Discussion of the Results	54
3.5	References	59
	Graphs	

**Chapter 4 Effects of heat source and radiation on an unsteady MHD free convection flow past an infinite heated vertical plate in a porous medium in the presence of thermal diffusion 69 - 89**

4.1	Introduction	69
4.2	Formulation of the problem	70
4.3	Method of Solution	73
4.4	Discussion of the Results	76
4.5	References	80
	Graphs	

**Chapter 5 The effect of Hall current on an unsteady MHD flow along a flat plate with viscous dissipation and heat absorption** 90 - 119

5.1	Introduction	90
5.2	Formulation of the problem	92
5.3	Method of Solution	95
5.4	Discussion of the Results	99
5.5	References	105
	Graphs	

**RESEARCH PUBLICATIONS**

---