

## CONTENTS

	PAGE
Title Page	i
Certificate	ii
Acknowledgements	iii
Contents	iv
List of Figures	vii
Notations	xiii
Chapter I Introduction	1
Chapter II Literature Survey	7
Chapter III Linear Vibration Analysis of an Elastic Plate Resting on a Visco- elastic Foundation	18
Chapter IV Linear Vibration Analysis of an Elastic Plate Resting on a Visco- elastic Foundation with a Shear Layer Interposed between the Plate and the Foundation	41
Chapter V Linear Vibration Analysis of an Elastic Plate Resting on a Small Depth Continuous Viscoelastic Foundation Laid over a Kelvin type Viscoelastic Half-space	56

	PAGE
Chapter VI    Non-linear Transverse Vibration Analysis of a Rectangular Elastic Plate Resting on a Viscoelastic Foundation	80
Chapter VII    Non-linear Transverse Vibration Analysis of a Rectangular Elastic Plate Resting on a Viscoelastic Foundation using von Karman Type Plate Equations.	114
Chapter VIII    Non-linear Transverse Vibration Analysis of a Circular Elastic Plate Resting on a Viscoelastic Foundation	138
Chapter IX    Non-linear Transverse Vibration Analysis of a Circular Elastic Plate Resting on a Viscoelastic Foundation using von Karman Type Plate Equations	159
Chapter X    Non-linear Transverse Vibration Analysis of a Rectangular Orthotropic Elastic Plate Resting on a Viscoelastic Foundation	177

		PAGE
Chapter XI	Non-linear Transverse Vibration Analysis of Rectangular Orthotropic Elastic Plate Resting on a Visco- elastic Foundation using von Karman type Plate Equations,	202
Chapter XII	The Effect of Transverse Shear on Non-linear Transverse Vibrations of an Elastic Plate Resting on a Visco- elastic Foundation	225
Chapter XIII	Conclusions and Scope of Future Work	255
Chapter XIV	References and Bibliography	259