

CONTENT

SECTION - I : THEORY

Chapter 1: Introduction to Exercise Therapy 1

Movement as the foundation of physiotherapy practice

1.1	Definition and Scope of Exercise Therapy	2
1.2	Aims of Exercise Therapy	6
1.3	Principles and Techniques of Exercise Therapy	9
1.4	Approach to Patient Problems	14
1.5	Assessment and Vital Parameters	18

Chapter- 2: Starting and Derived Positions 27

The foundation upon which every exercise is built

2.1	Introduction	27
2.2	The Mechanical Basis of Position	28
2.3	Equilibrium and the Factors Determining Stability	29
2.4	The Five Fundamental Positions	30
2.5	Derived Positions	35
2.6	Choosing and Progressing a Position in Practice	39

Chapter -3: Manual Muscle Testing 43

Grading the strength of muscles by hand

3.1	Introduction	43
3.2	A Short History	44
3.3	Aims and Principles	44
3.4	Indications and Limitations	45
3.5	The Grading System	45
3.6	The Principles of Testing	46
3.7	Group Testing and Individual Testing	48
3.8	The Testing Procedure	48
3.9	Region-by-Region Testing	49
3.10	Substitution and Sources of Error	53
3.11	Recording the Result	54
3.12	Reliability, Validity and Dynamometry	54

Chapter - 4: Classification of Therapeutic Exercise 59

The full spectrum — active, assisted, resisted & passive exercise

Part 1 : Classification & Foundations of Active Movement 59

4.1	The Classification of Therapeutic Exercise	59
4.2	Active Movement	62
4.3	The Foundations of Muscle Performance	62
4.4	Physiological Adaptation to Training	67

Part 2 : Free, Assisted & Assisted-Resisted Exercise 73

4.1	Free Exercise	73
4.6	Active-Assisted Exercise	75
4.7	Assisted-Resisted Exercise	78
4.8	The Progression Continuum	79

Part 3 : Resisted Exercise 84

4.8	Resisted Exercise	84
-----	-------------------------	----

Part 4 : Passive Movements 95

4.9	Passive Movements	95
-----	-------------------------	----

Chapter -5 : Soft Tissue Manipulation 107

The full unit — classification, effects & techniques of massage

Part 1 : Classification & Physiological Basis 107

5.1	Classification of Soft Tissue Manipulation	107
5.2	Physiological Effects	109
5.3	Therapeutic Effects	112
5.4	Indications	113
5.5	Contraindications and Precautions	114
5.6	Preparation and Documentation	115

Part 2 : Massage Techniques & Regional Application 120

5.7	Effleurage	121
5.8	Stroking	122
5.9	Kneading	122
5.10	Pétrissage	122
5.11	Deep Transverse Friction	123
5.12	Vibration	124
5.13	Shaking	125
5.14	Regional Massage Sequences	126
5.15	Frequency, Duration and Progression	128
5.16	Massage Within the Treatment Plan	129

SECTION - II: PRACTICAL

Chapter- 6.1: Types of Muscle Contraction, Muscle Work, Group Action & Co-ordinated Movements 135

Demonstrated on self

A. Types of Muscle Contraction	136
B. Types of Muscle Work	138
C. Group Action of Muscles	140
D. Co-ordinated Movements	143

Chapter- 6.2: Fundamental & Derived Positions Muscle Work and Uses 146

Demonstrated on self

A. The Five Fundamental Positions	147
B. Derived Positions	149
C. Muscle Work in the Positions	151
D. Uses of the Positions	152

Chapter -6.3: Goniometry - Measuring Joint Range of Motion 157

Upper limb, lower limb & trunk, on a human model

A. Upper Limb	159
B. Lower Limb	160
C. Trunk & Cervical Spine	162

Chapter -6.4: Relaxed Passive Movements 168

Relaxed passive movement of the joints of the upper & lower limb

Part 1 : Principles of Relaxed Passive Movement 168

6.4.1 What is Relaxed Passive Movement?	168
6.4.2 Aims and Effects	170
6.4.3 Indications, Contraindications & Precautions	172
6.4.4 Principles of Technique	173

Part 2 : The Upper Limb 176

6.4.5 The Shoulder	176
6.4.6 The Elbow and Forearm	178
6.4.7 The Wrist and Hand	179

Part 3 : The Lower Limb 181

6.4.8 The Hip and Knee	181
6.4.9 The Knee	183
6.4.10 The Ankle and Foot	184

6.4.11	Dosage, Sequence & Progression	185
6.4.12	Common Faults & How to Correct Them	186
6.4.13	Recording the Treatment	186

Chapter- 6.5: Active Mobilisation 191

Active mobilisation of the joints of the upper & lower limb

Part 1 : Principles of Active Mobilisation	191
6.5.1 What is Active Mobilisation?	191
6.5.2 Indications & Contraindications	194
6.5.3 The Art of Instruction	194
6.5.4 Dosage, Sequence & Progression	196
Part 2 : The Upper Limb	199
6.5.5 The Shoulder	199
6.5.6 The Elbow and Forearm	201
6.5.7 The Wrist and Hand	202
Part 3 : The Lower Limb	205
6.5.8 The Hip and Knee	205
6.5.9 The Ankle and Foot (Fig. 6.5.17)	207
6.5.10 Common Faults & How to Correct Them	208
6.5.11 Recording the Exercise	209

Chapter - 6.6: Passive Mobilisation 214

Passive mobilisation of the joints of the upper & lower limb, region by region

Part 1 : Principles of Passive Mobilisation	214
6.6.1 What is Passive Mobilisation?	214
6.6.2 Indications & Contraindications	217
6.6.3 The Principles of Handling	218
6.6.4 Dosage, Sequence & Progression	219
Part 2 : The Upper Limb Region	222
6.6.5 The Shoulder	222
6.6.6 The Elbow and Forearm (Fig. 6.6.10)	223
6.6.7 The Wrist and Hand	225
Part 3 : The Lower Limb Region	226
6.6.8 The Hip and Knee	226
6.6.9 The Ankle and Foot	227
6.6.10 Common Faults & How to Correct Them	228
6.6.11 Recording the Treatment	229

Chapter -6.7: Manual Muscle Testing 234

Testing muscle strength region by region — upper limb, lower limb and trunk

Part 1 : Principles of Manual Muscle Testing 234

6.7.1	What is Manual Muscle Testing?	234
6.7.2	Indications & Contraindications	237
6.7.3	The Method of Testing	238
6.7.4	Sequence & Recording	239

Part 2 : The Upper Limb 240

6.7.5	The Shoulder	240
6.7.6	The Elbow, Forearm and Wrist	241

Part 3 : The Lower Limb & Trunk 243

6.7.7	The Knee and Hip	243
6.7.8	The Trunk	244
6.7.9	Common Faults & How to Correct Them	245
6.7.10	Recording the Test	245

Chapter -6.8: Soft-Tissue Manipulation 250

Massage techniques region by region - upper limb, lower limb, neck, back and face

Part 1 : Principles of Massage 250

6.8.1	What is Massage?	250
6.8.2	Indications & Contraindications	252
6.8.3	The Art of Giving Massage	253
6.8.4	Dosage & Recording	253

Part 2 : The Upper and Lower Limb 255

6.8.5	The Lower Limb	255
-------	----------------------	-----

Part 3 : The Neck, Back and Face..... 257

6.8.6	The Back	257
6.8.7	The Neck and Shoulders	259
6.8.8	The Face	260
6.8.9	Common Faults & How to Correct Them	260
6.8.10	Recording the Treatment	260

Chapter -6.9: Demonstration of Measurement 265

Digital goniometry, pelvic inclinometry, dynamometry, accessory passive

Part 1 : The Demonstration & its Purpose 265

6.9.1	A Demonstration Practical	265
6.9.2	The Observation Logbook	268