

TABLE OF CONTENTS

Acknowledgement	v
List of Tables	xiv
List of Figures	xvi
CHAPTER I INTRODUCTION	1-43
1.1 Physical Education	2
1.1.1 Definition of Physical Education	4
1.2 Importance of Physical Education	5
1.3 Sports	6
1.4 Physical Fitness in Schools/College	8
1.5 Needs of Research in Physical Education	9
1.6 Sports Training	10
1.7 Methods of Training	12
1.8 Effects of Training	13
1.9 Intensity	14
1.10 Intensity of Training	16
1.11 The Selection of Exercise Intensities	18
1.12 Intensities of Training and its Effect	19
1.13 Frequencies of Training	20
1.14 Strength Training	21
1.15 Resistance Training	22
1.16 Sub-Maximal Resistance Training	26
1.17 Progressive Sub-Maximal Resistance Training	26
1.18 Progressive-Regressive Sub-Maximal Resistance Training	27
1.19 Adaptations to Resistance Training	27
1.20 Physical Variables	28
1.20.1 Strength	29
1.20.2 Muscular Endurance	29

TABLE OF CONTENTS (Continued)

1.20.3	Speed	30
1.20.4	Muscular Power	31
1.21	Physiological Variables	31
1.21.1	Body Fat	31
1.21.2	Pulse Rate	32
1.21.3	Blood Pressure	33
1.21.4	Vital Capacity	33
1.25	Reason for the Selection of the Study	34
1.26	Statement of the Problem	36
1.27	Hypothesis	36
1.28	Significance of the Study	37
1.29	Limitation	38
1.30	Delimitation	39
1.31	Definition of Terms	39
1.31.1	Training	39
1.31.2	Pulse Rate	40
1.31.3	Systolic Blood Pressure	40
1.31.4	Diastolic Blood Pressure	40
1.31.5	Mean Arterial Pressure	40
1.31.6	Vital Capacity	41
1.31.7	Percent Body Fat	41
1.31.8	Speed	41
1.31.9	Strength	41
1.31.10	Leg Explosive Power	42
1.31.11	Resistance Training	42
1.31.12	Progressive Resistance Training	42
1.31.13	Sub-Maximal Resistance Training	43
1.31.14	Progressive Sub-Maximal Resistance Training	43
1.31.15	Progressive-Regressive Sub-Maximal Resistance Training	43

TABLE OF CONTENTS (Continued)

CHAPTER II	REVIEW OF RELATED LITERATURE	44-80
2.1	Studies on Progressive Resistance Training	44
2.2	Studies on Progressive Submaximal Resistance Training	58
2.3	Studies on Resistance Training	66
2.4	Summary OF Related Literature	77
CHAPTER III	METHODOLOGY	81-130
3.1	Selection of Subjects	81
3.2	Selection of Variables	82
3.2.1	Dependent Variables	82
3.2.2	Independent Variables	83
3.3	Experimental Design	83
3.4	Pilot Study	84
3.5	Criterion Measures	85
3.6	Reliability of Data	86
3.7	Reliability of Instruments	86
3.8	Tester's Reliability	85
3.9	Subject Reliability	87
3.10	Training Programme	88
3.10.1	Determination of One Repetition Maximum (1 Rm)	88
3.11	Description of Weight Lifting Exercises	89
3.11.1	Military Press	90
3.11.2	Barbell Curls	91
3.11.3	Bench Press	94
3.11.4	Lying Tricep Extension	95
3.11.5	Barbell Rows	98
3.11.6	Squats	99
3.11.7	Standing Calf Raises	102

3.11.8	Leg Press	104
3.12	Progressive Sub -Maximal Resistance Training	106
3.12. 1	Training Schedule	106
3.12.2	Progressive Sub Maximal Resistance Training	107
3.12.3	Progressive Regressive Sub-Maximal Resistance Training	108
3.13	Test Administration	109
3.13.1	Speed	109
3.13.2	Sit Ups	111
3.13.3	Standing Broad Jump	113
3.13. 4	Pull-Ups	115
3.14	Measurement of Physiological Variables	118
3.14.1	Pulse Rate	118
3.14.2	Vital Capacity	119
3.14.3	Percent Body Fat	121
3.14.3.1	Measuring Weight	122
3.14.3.2	Measuring Height	123
3.14.3.3	Percent Body Fat Measurement	125
3.14.4	Mean Arterial Blood Pressure	127
3.12	Collection of Data	129
3.13	Statistical Technique	129

CHAPTER IV RESULTS AND DISCUSSIONS **131-194**

4.1	Overview	131
4.2	Test of Significance	133
4.2.1	Level of Significance	133
4.3	Computation of Analysis of Covariance And Post	134
4.3.1	Results on Speed	134
4.3.1.1	Discussions on the findings of speed	140
4.3.2	Results on Abdominal Strength	142
4.3.2.1	Discussions on the findings of abdominal strength	148
4.3.3	Results on Leg Strength	150

TABLE OF CONTENTS (Continued)

4.3.3.1	Discussions on the findings of leg strength	156
4.3.4	Results on Shoulder Strength	158
4.3.4.1	Discussions on the findings of shoulder strength	164
4.3.5	Results on Pulse Rate	166
4.3.6	Results on Percent Body Fat	173
4.3.7	Results on Vital Capacity	180
4.3.8	Results on Mean Arterial Blood Pressure	186
4.3.8.1	Discussions on the findings of mean arterial blood pressure	191
4.4	Discussion on Hypotheses	193
CHAPTER V SUMMARY CONCLUSIONS AND RECOMMENDATIONS		195-201
5.1	Summary	195
5.1.1	Level of Significance	197
5.2	Conclusions	198
5.3	Recommendations of this Study	199
5.4	Suggestions for Further Research	200
BIBLIOGRAPHY		202-207
	Books	202
	Journals	204
	Website Visited	207
APPENDICES		208-215