

TABLE OF CONTENTS

	Page No.
CERTIFICATE OF SUPERVISOR	ii
DECLARATION BY THE SCHOLAR	iii
ACKNOWLEDGEMENT	iv
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF APPENDICES	xiv
I INTRODUCTION	1-54
1.1 HISTORY OF CRICKET	1
1.1.1 Early Cricket Origin	2
1.1.2 Derivation of the Name of Cricket	2
1.1.3 Cricket Moves out of England	3
1.1.4 Development of the Laws	3
1.1.5 Growth of Test Cricket	4
1.1.6 World Series Cricket	5
1.1.7 Limited-Over Cricket	5
1.2 CRICKET IN INDIA	7
1.2.1 History of Cricket in India to 1918	7
1.2.2 Cricket in India from 1918-19 to 1945	8
1.3 CRICKET	9
1.4 FITNESS FOR CRICKET	15
1.5 CRICKET BATTING	16
1.6 CRICKET: THE PHYSICS OF HOW THE BALL IS BOWLED	20
1.7 FIELDING	23
1.7.1 Strength	24

	Page No.
1.7.2 Stamina and Endurance	24
1.7.3 Speed	25
1.7.4 Coordination and Agility	25
1.7.5 Accuracy and Power	25
1.7.6 Flexibility	25
1.8 THE PHYSICAL DEMANDS OF PROFESSIONAL CRICKET	27
1.9 CRICKET STRENGTH TRAINING AND EXERCISES	27
1.9.1 Bowler	28
1.9.2 Fielder	28
1.9.3 Batsman	29
1.9.4 Cricket Fitness	30
1.9.5 Physical Demands of Cricket	31
1.9.6 Demands of Fast Bowlers	31
1.9.7 Demands for Batsmen	32
1.9.8 Demands for Spin Bowlers	32
1.9.9 Demands of Wicket Keeping	32
1.9.10 Physical Fitness and Cricket	33
1.9.11 Ten Principles of Cricket Fitness	37
1.9.12 Cricket and Speed	39
1.9.13 Cricket and Strength	40
1.9.14 Cricket and Flexibility	41
1.9.15 Aims of Sports Training	42
1.9.16 Weight Training	42
1.9.17 Circuit Training	43
1.9.18 Interval Strength Training	45
1.9.19 High Intensity Interval Training / Metabolic Resistance Training	45
1.9.20 Tabata Intervals	46

	Page No.
1.9.21 Rationale of the Study	47
1.9.22 Statement of the Problem	48
1.9.23 Hypotheses	49
1.9.24 Significance of the Study	49
1.9.25 Delimitations	50
1.9.26 Independent Variables	51
1.9.27 Dependent Variables	51
1.9.28 Physical Variables	51
1.9.29 Performance Variables	51
1.9.30 Limitations	52
1.9.31 Definitions and Explanation of Important Terms	52
1.9.31.1 Speed	53
1.9.31.2 Strength	53
1.9.31.3 Explosive Power	53
1.9.31.4 Agility	53
1.9.31.5 Endurance	53
1.9.31.6 Batting	53
1.9.31.7 Bowling	54
1.9.31.8 Fielding	54
II REVIEWS OF RELATED LITERATURE	55-98
2.1 REVIEWS ON PHYSICAL VARIABLES	55
2.2 REVIEWS ON PERFORMANCE VARIABLES	86
2.3 OVERVIEW ON THE REVIEWS	98
III METHODOLOGY	99-116
3.1 INTRODUCTION	99
3.2 SELECTION OF SUBJECTS	99
3.3 EXPERIMENTAL DESIGN	99
3.4 SELECTION OF VARIABLES	101
3.4.1 Physical Fitness Variables	101
3.4.2 Cricket Skill Performance Variables	101

	Page No.	
3.5	ORIENTATION OF SUBJECTS	102
3.6	RELIABILITY OF DATA	102
3.7	INSTRUMENT RELIABILITY	102
3.8	TESTER'S RELIABILITY	103
3.9	SUBJECT RELIABILITY	104
3.10	COLLECTION OF DATA	104
3.11	PILOT STUDY	104
3.12	TESTING PROTOCOLS	104
3.13	ADMINISTRATION OF TESTS	105
3.14	STRENGTH (PUSH – UPS)	106
3.15	LEG EXPLOSIVE POWER	106
3.16	AGILITY TEST (T – TEST)	107
3.17	ENDURANCE: (12 MINUTES COOPER RUN / WALK TEST)	108
3.18	PERFORMANCE VARIABLE (CRICKET PLAYING ABILITY)	109
	3.18.1 Batting	109
	3.18.2 Bowling	109
	3.18.3 Fielding and Wicket Keeping	110
3.19	TRAINING PROTOCOL	110
3.20	WEIGHT TRAINING PROGRAMME	113
3.21	CIRCUIT TRAINING PROGRAMME	114
3.22	INTERVAL STRENGTH TRAINING PROGRAMME	115
3.23	STATISTICAL ANALYSIS OF DATA	116
IV	RESULTS AND DISCUSSION	117-147
4.1	OVERVIEW	117
4.2	LEVEL OF SIGNIFICANCE	118
4.3	DISCUSSION ON PHYSICAL VARIABLES	138

	Page No.
4.4 DISCUSSION ON THE PERFORMANCE VARIABLES	142
4.5 DISCUSSION ON HYPOTHESES	145
V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	148-152
5.1 SUMMARY	148
5.2 CONCLUSIONS	150
5.3 RECOMMENDATIONS	151
BIBLIOGRAPHY	153-158
APPENDICES	159-184