

## TABLE OF CONTENTS

	Contents	Page No.
	Acknowledgements	
	List of Tables	
	List of Figures	
	List of Appendices	
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	<b>1 - 36</b>
1.1.	Concept of Basketball	
1.2.	Concept of Volleyball	
1.3.	Concept of Football	
1.4.	Body Composition	
1.4.1.	Factors Affecting Body Composition	
1.4.2.	Body Composition Assessment	
1.4.3.	Body Composition and Sport Performance	
1.4.4.	Modifying Body Composition	
1.4.5.	Importance of Body Composition	
1.5.	Somatotype	
1.5.1.	Endomorphy	
1.5.2.	Mesomorphy	
1.5.3.	Ectomorphy	
1.6.	Body Fat	
1.7.	Skinfold	
1.7.1.	Skinfold Thickness	
1.7.2.	Skinfold Pattern (or) Profile	
1.7.3.	Fat	
1.7.4.	Lean Body Mass	
1.8.	Anthropometric Measurements and its Uses	
1.9.	Importance of Anthropometric Variables	
1.10.	Kinanthropometry	
1.11.	Physical Fitness	
1.12.	Importance of Physical Fitness for Basketball, Volleyball and Football Players Performance	
1.13.	Physiological Variable and its Importance	
1.14.	Physiological Benefits	
1.15.	Reasons for the Selection of the Topic and Variables	
1.16.	Statement of the Problem	
1.17.	Significance of the Study	
1.18.	Hypothesis	
1.19.	Delimitations	
1.20.	Limitations	
1.21.	Definitions of the Terms	
1.21.1.	Anthropometry	
1.21.1.1.	Age	

## TABLE OF CONTENTS (Continued)

	Contents	Page No.
1.21.1.2.	Weight	
1.21.1.3.	Height	
1.21.1.3.1.	Sitting Height	
1.21.1.4.	Length	
1.21.1.4.1.	Lower Limb Length	
1.21.1.4.1.	Upper Limb Length	
1.21.1.5.	Width	
1.21.1.5.1.	Humerus Width	
1.21.1.5.2.	Femur Width	
1.21.1.6.	Circumferences	
1.21.1.6.1.	Chest Circumference	
1.21.1.6.2.	Abdominal Circumference	
1.21.1.6.3.	Relaxed Arm Circumference	
1.21.1.6.4.	Flexed Arm Circumference	
1.21.1.6.5.	Calf Circumference	
1.21.1.7.	Skinfold Measurements	
1.21.1.8.	Index	
1.21.1.8.1.	Ponderal Index	
1.21.1.8.2.	Skelic Index	
1.21.1.9.	Somatotype	
1.21.1.9.1.	Endomorphy	
1.21.1.9.2.	Mesomorphy	
1.21.1.9.3.	Ectomorphy	
1.21.2.	Body Composition	
1.21.2.1.	Percent Fat	
1.21.2.2.	Absolute Body Fat	
1.21.2.3.	Lean Body Weight	
1.21.3.	Physiological Variables	
1.21.3.1.	Anaerobic Power	
1.21.3.2.	Resting Pulse Rate	
1.21.3.3.	Cardiorespiratory Endurance	
1.21.4.	Basketball	
1.21.5.	Volleyball	
1.21.6.	Football	
1.21.7.	Physical Fitness	
<b>CHAPTER II</b>	<b>REVIEW OF RELATED LITERATURE</b>	<b>37 - 70</b>
<b>CHAPTER III</b>	<b>MATERIALS AND METHODS</b>	<b>71 - 87</b>
3.1.	Selection of Subjects	
3.2.	Selection of Variables	
3.2.1.	Anthropometric Variables	
3.2.2.	Body Composition	
3.2.3.	Physiological Variables	

## TABLE OF CONTENTS (Continued)

Contents	Page No.
3.3.	Criterion Measures
3.3.1.	Anthropometric Variables
3.3.2.	Body Composition Variables
3.3.3.	Physiological Variables
3.4.	Reliability of Data
3.4.1.	Instruments Reliability
3.4.2.	Subject Reliability
3.4.3.	Tester's Reliability
3.4.4.	Orientation of the Subjects
3.4.5.	Pilot Study
3.5.	Test Administration
3.5.1.	Anthropometric Variables
3.5.1.1.	Age
3.5.1.2.	Weight
3.5.1.3.	Height
3.5.1.3.1.	Sitting Height
3.5.1.4.	Length
3.5.1.4.1.	Lower Limb Length
3.5.1.4.2.	Upper Limb Length
3.5.1.5.	Width
3.5.1.5.1.	Humerus Width
3.5.1.5.2.	Femur Width
3.5.1.6.	Circumferences
3.5.1.6.1.	Chest Circumference
3.5.1.6.2.	Abdominal Circumference
3.5.1.6.3.	Relaxed Arm Circumference
3.5.1.6.4.	Flexed Arm Circumference
3.5.1.6.5.	Calf Circumference
3.5.1.7.	Skinfolds
3.5.1.7.1.	Biceps Skinfold
3.5.1.7.2.	Triceps Skinfold
3.5.1.7.3.	Subscapular Skinfold
3.5.1.7.4.	Anterior Thigh Skinfold
3.5.1.7.5.	Suprailiac Skinfold
3.5.1.7.6.	Medial Calf Skinfold
3.5.1.7.7.	Sum of Six Skinfolde
3.5.1.8.	Index
3.5.1.8.1.	Ponderal Index
3.5.1.8.2.	Skeletal Index
3.5.1.9.	Somatotype
3.5.1.9.1.	Endomorphy
3.5.1.9.2.	Mesomorphy
3.5.1.9.3.	Ectomorphy
3.5.2.	Body Composition
3.5.2.1.	Percent Fat
3.5.2.2.	Absolute Body Fat
3.5.2.3.	Lean Body Weight

## TABLE OF CONTENTS (Continued)

	Contents	Page No.
3.5.3.	Physiological Variables	
3.5.3.1.	Anaerobic Power	
3.5.3.2.	Resting Pulse Rate	
3.5.3.3.	Cardiorespiratory Endurance	
3.6.	Statistical Analysis	
3.6.1.	Post-Hoc Test of Significance	
<b>CHAPTER IV</b>	<b>RESULTS AND DISCUSSIONS</b>	<b>88 -183</b>
4.1.	Overview	
4.2.	Test of Significance	
4.2.1.	Level of Significance	
4.3.	Computation of One Way Analysis of Variance and Post-Hoc Tests	
4.3.1.	Discussion on the Findings of Age	
4.3.2.	Discussion on the Findings of Body Weight	
4.3.3.	Discussion on the Findings of Height	
4.3.4.	Discussion on the Findings of Sitting Height	
4.3.5.	Discussion on the Findings of Lower Limb Length	
4.3.6.	Discussion on the Findings of Upper Limb Length	
4.3.7.	Discussion on the Findings of Humerus Width	
4.3.8.	Discussion on the Findings of Femur Width	
4.3.9.	Discussion on the Findings of Chest Circumference	
4.3.10.	Discussion on the Findings of Abdominal Circumference	
4.3.11.	Discussion on the Findings of Relaxed Arm Circumference	
4.3.12.	Discussion on the Findings of Flexed Arm Circumference	
4.3.13.	Discussion on the Findings of Calf Circumference	
4.3.14.	Discussion on the Findings of Sum of Six Skinfolts	
4.3.15.	Discussion on the Findings of Ponderal Index	
4.3.16.	Discussion on the Findings of Skelic Index	
4.3.17.	Discussion on the Findings of Endomorphy	
4.3.18.	Discussion on the Findings of Mesomorphy	
4.3.19.	Discussion on the Findings of Ectomorphy	
4.3.20.	Discussion on the Findings of Percent Fat	

## TABLE OF CONTENTS (Continued)

	Contents	Page No.
4.3.21.	Discussion on the Findings of Absolute Fat	
4.3.22.	Discussion on the Findings of Lean Body Weight	
4.3.23.	Discussion on the Findings of Anaerobic Power	
4.3.24.	Discussion on the Findings of Resting Pulse Rate	
4.3.25	Discussion on the Findings of Cardiorespiratory Endurance	
4.4.	Discussion on Hypothesis	
<b>CHAPTER V</b>	<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS</b>	<b>184-188</b>
5.1.	Summary	
5.2.	Conclusion	
5.3.	Recommendations	
<b>BIBLIOGRAPHY</b>		<b>189-195</b>
	Books	
	Journals and Periodicals	
<b>APPENDICES</b>		<b>196-225</b>